









# ENGINEER LIAISON LETTER



# UBIQUE



THE CORPS OF  
ROYAL NEW ZEALAND ENGINEERS



COLONEL IN CHIEF

Her Majesty Queen Elizabeth the Second

COLONEL COMMANDANT

Col K. Christie, MBE, ED, RNZE

CHIEF ENGINEER

Lt Col S.D. Jameson, RNZE





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## PREFACE

The RNZE Liaison Letter has not been published for nearly two years owing to a number of factors which have caused the journal to be temporarily out of print. However it is the aim of the editor and editorial staff(?) to try to produce a journal which will contain items of interest, professional status, humour, a quiz to test your brain, and provide a means of keeping in contact with each other.

To assist with this aim articles will be printed (if you send them to us) bearing in mind the simple courtesys of not publicly criticising your OC, keeping language reasonably above board and not lampooning the Minister of Defence more than the major newspapers. Most articles will be accepted however some may need to be edited.

Finally this journal can only survive if you, the readers are prepared to do your bit. Without your comments, articles or other contribution, the magazine will soon disappear from the recreation rooms within your units probably not to re-emerge again.

H.E. Chamberlain  
Editor

## NOTE

Articles accepted for publication are not necessarily the opinion of the editor or the accepted doctrine of the Corps.

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M. J. Campbell  
Editor

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# EDITORIAL

"To every thing there is a season, and a  
 time to every purpose under the heaven"

Ecclesiastes 3:1

The restructure of the Corps of Royal New Zealand Engineers has once again been a time for upheaval and change. This time the changes have been somewhat longer arriving and the effects considerably greater on a wider number of those serving in the Corps. Although a large number have had to move not only location but also within job it is to be hoped that there will not be another such upheaval for some longer period of time. Some sympathy can be extended to a number of personnel who have seen their lives again disturbed in a way that they never thought would happen. It is hoped that we in the Corps will be allowed to settle down and get on with our jobs without further disruption. Trade structures, providing manpower for other Corps (from the losses our Corps has had to sustain) disestablishment and diminution of our corps has been a hard burden to accept. However we must face it with equanimity, goodwill, and forbearance and show those outside the Corps that we have the will, the sense of duty and purpose, and the skills to carry on the high traditions of the ROYAL NEW ZEALAND ENGINEERS.

QUO FAS ET GLORIA DUCUNT



# EDITORIAL

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 "time to every purpose under the heaven."

## Reconstruction II

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 However we must face it with equanimity, goodwill, and fortitude  
 and show those outside the Corps that we have the will,  
 the spirit of unity and purpose, and the skills to carry on the  
 high traditions of the Royal New Zealand Engineers.

FOR THE ST. GEORGE SOCIETY

\*\*\*\*\* HONOURS AND AWARDS \*\*\*\*\*

\*\*\*\*\*

Honours and Awards recently bestowed upon RNZE Personnel recognises service they have given which is beyond the ordinary daily duty and tasking. The Corps is pleased to see these personnel so honoured.

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WO 1 I.E. LAMB (Ian). Awarded the Meritorious Service Medal in December 1984.

WO 1 D.H. ROBERTS (Doug). Awarded the Members badge of the Order of the British Empire (MBE) in the 1985 New Year's Honours List.

SSgt K. Featherstone (Kevin). Awarded LS&GCM at a parade in Linton on 3 April 1985.

\*\*\*\*\* RECENT PROMOTIONS \*\*\*\*\*

With the effect this Liaison Letter only the officer and senior NCO promotions will be published. This is designed to give wider notice of those promotions which may have greater effect through the Corps, not to diminish the efforts of those who have recently been promoted as junior ranks.

Capt P. Howard	To be sub Capt	wef	20 Dec 84
Lt N.K. Gattsche	T/Capt	wef	06 Dec 84
Lt B.D. Kenning	T/Capt	wef	01 Dec 84
2Lt P.G. Curran	Lt	wef	20 Dec 84
2Lt C.J. Faulls	Lt	wef	20 Dec 84
WO 2 G.B. McDonald	T/WO 1	wef	20 Dec 84
WO 2 D.L. Berry	T/WO 1	wef	12 Jan 85
WO 2 G. Mitten	T/WO 1	wef	05 Jan 85
WO 2 A.J. Brown BEM	T/WO 1	wef	09 Feb 85
SSgt R.B. Bulman	T/WO 2	wef	19 Dec 84
Sgt W.D. Toia	T/SSgt	wef	26 Nov 84
Sgt D.L. Blomfield	T/SSgt	wef	06 Jan 85
Cpl D.P. Walton	T/Sgt	wef	16 Oct 84
Cpl P.G. Hutson	T/Sgt	wef	26 Nov 84
Cpl M.J. Dew	T/Sgt	wef	26 Nov 84
Cpl R.B. Scott	T/Sgt	wef	26 Nov 84
Cpl H.M. Shields	T/Sgt	wef	26 Nov 84
Cpl S.W. Kirkland	T/Sgt	wef	28 Jan 85

\*\*\*\*\* RECENT ARRIVALS \*\*\*\*\*

The following have recently joined the Corps after having completed officer training courses either in Australia or in Waiouru. We welcome them and trust that they will have a long and fruitful association with the Corps.

2Lt A.R. Frizzell  
2Lt C.D. Birch

2Lt R.A. Lloyd  
2Lt D.B. Vautier

POSTINGS

The following persons have been posted the appointments shown:-

WO 1 D.L. Berry to Works WO Burnham Camp (New post within establishment.) vice WO1 C Walsh  
WO 2 A.J. Brown, BEM to Army GS Works vice WO1 T.N. Archer MBE

SSgt V.M.J. Hubner to 3TF Property NCO vice SSgt N.E. Foley  
SSgt M.P. Shelford to 3 Fd Sqn Dunedin, Vice SSgt Hubner  
SSgt B.A. Cosford to Base Supply Battalion (RNZE Adviser)  
SSgt R.L. Maber to NZWSU Singapore vice SSgt B.J. Clark, 14 Dec 84  
SSgt B.J. Clark to 1 Fd Sqn vice SSgt R.L. Maber, Dec 84  
SSgt D.J. Blomfield to 6 Ind Fd Sqn, Petone, SQMS, 7 Jan 85

Sgt S. Koko to 3 Fd Sqn, Tp Sgt, wef 3 Sep 84  
Sgt G.E. Corlett to 25 ESS, Spvr PRA, wef 3 Sep 84  
Sgt P. Te Nana to SME, Instr, wef 3 Sep 84  
Sgt R.I. Sinclair to 25 ESS, Spvr Tpt, wef 12 Nov 84  
Sgt C.J. Wilson to ATG Plant Team, Storeman wef 16 Nov 84  
Sgt S.P. Pantham to 3 Fd Sqn, Tp Sgt, wef 17 Dec 84  
Sgt R.J. Fels to 1 Fd Sqn, Chief Clerk, wef 17 Dec 84

Cpl M.S. Beal to 4 O'South, Tpt NCO wef 17 Jan 85 (Terminal)  
Cpl S.W. Kirkland to Burnham Fire Stn wef 28 Jan 85

\*\*\*\*\* DEPARTURES \*\*\*\*\*

On occasion the Corps must say farewell to some long serving officers and soldiers. It is unfortunate that since the last LIAISON LETTER and this issue a considerable number of personnel have departed from the Army without a mention in these lines. However the following have recently left the service or will depart before the issue of the next LIAISON LETTER.

Lt Col D.A. Cormack	28/08/84	(Now TF)
WO 1 D.H. Roberts MBE	12/03/85	
WO 1 I.E. Lamb	14/12/84	
WO 1 R.O. Wills MBE	08/02/05	
WO 1 C Walsh	12/01/85	
WO 1 T.N. Archer MBE	11/12/84	
WO 2 T.E. Gilbert	26/02/85	
WO 2 B.J. Hefferen	17/11/84	



WO 2 C.J. Oliver	09/02/85
Ssgt G.E. Callaghan	11/04/85
SSgt N.E. Foley	12/01/85
Cpl J.P. Moon	18/11/84

The above servicemen will all receive a Corps Twenty Year Certificate when they become available (Draughting Office note).

We also say farewell to the following RNZE units with the implementation of the new structure of the Corps.

HQ Force Engineer (although Maj Hollander is still in residence at Takapuna.)

2 Field Squadron - now no more than a memory. RNZAOC have taken over their headquarters building.

One wonders how long it will be before the next re-organisation and 2 Field Squadron will be restored to the RNZE.

\*\*\*\*\*

Perhaps it is appropriate to place here WO 1 Doug Robert's final comment to those assembled at a farewell dinner in his honour. His comment was not directed to the junior sergeants of the Army as is often the case when a long serving Warrant Officer reaches the twilight of his career. It was with regard to the succession of "Reorganisations" and "Restructurings" of the Army and how on each occasion there has been a reduction of OR appointments within the Army. His comment was directed towards the hierarchy of the Army and was simply a message to say -

"Be careful gentlemen. The way you're going you will soon be on your own."

\*\*\*\*\*

#### STOP PRESS

#### THE GIFT OF A STAINED GLASS WINDOW FROM THE CORPS OF ROYAL ENGINEERS

The stained glass window presented to the Corps of Royal New Zealand Engineers by the Corps of Royal Engineers has arrived in Linton. It is a handsome reproduction of the RE badge in full colour nearly a metre in diameter. It will shortly be installed in the Corps Chapel in the roof above the altar where it is expected to shed coloured diffused light. This is a further bond which strengthens the fraternal links between the RNZE and the RE.

fortification, construction, communication, electrical and mechanical engineering, etc.

In November 1917, shortly after the victory of the Great October Socialist Revolution, classes were resumed at the Academy, with radical restructuring of the latter being effected simultaneously. Figuratively speaking, it was going through a second birth. The doors of the institution were flung wide open for workers and peasants. During the Civil War (1918-1920) the Academy's graduates held leading military engineering posts in the Red Army. They guided the construction of field fortified areas, and directed military engineering activities during the preparation for and in the course of combat operations at all battlefronts.

During the years of peaceful socialist construction the Academy's scholars, besides tackling military problems, took an active part in designing and building numerous important national economic projects.

The Great Patriotic War inscribed a new brilliant page in the history of the Academy. Nearly 5,000 of its pupils participated in battles against Nazi Germany and militarist Japan, organising engineering and topographic support of combat operations at all levels of command.

Among the outstanding military leaders who made a tangible contribution to achieving victory over the enemy I can cite Marshals of Engineer Troops M. P. Vorobyov and P. I. Proshlyakov, Colonel-Generals of Engineer Troops L. Z. Kotlyar, K. S. Nazarov, A. F. Khrenov, and many other military engineers.

In fighting for freedom and independence of their Motherland, the Academy's graduates displayed high proficiency, courage and valour. The CPSU and the Soviet Government assessed their merits at their true worth, awarding them numerous Orders and medals, forty five men being honoured with the title of Hero of the Soviet Union. Among the latter was Dmitry M. Karbyshov, an inflexible fighter against fascism, who died the death of a hero in Mauthausen concentration camp.

Many former students of the Academy in our day hold responsible posts in the central agencies of the USSR Ministry of Defence, involving the leadership of engineer troops of military districts. They are, first and foremost, Marshal of the Soviet Union N. V. Ogarkov, Chief of the General Staff of the Armed Forces—First Deputy Minister of Defence of the USSR, and Marshal of Engineer

Troops N. F. Shestopalov, Deputy Minister of Defence of the USSR for Construction and Quartering of the Personnel.

As previously, the Academy's staff and students today are faithful to the glorious combat traditions. Day by day strenuous work is going on on training fields, in laboratories and training classes to train highly qualified military engineers, unit and subunit commanders of engineer troops.

Extensive work is being done to expand the training base and improve the process of instruction.

**Could you please give us more details in this respect?**

The teachers, students and scholars of the Academy have put a lot of effort into establishing a computer centre, method classes and classes for program instruction. The laboratories are provided with modern equipment, enabling the personnel not only to familiarise themselves with the existing engineering facilities, but also to conduct serious research work.

It is noteworthy that the majority of the test stands, operating models and installations have been developed and manufactured by the Academy's innovators. Thus, Colonel Engineer A. Martsinchik and Major Engineer V. Maistrenko have evolved a laboratory unit for impregnating porous building materials with polymers. The unit is used advantageously not only for teaching purposes, but also in research work.

Of invariable interest among the students is a model of a bridge-laying tank made to scale and with due account of the design features of its parts and units. The model has been developed by Colonel Engineers Ye. Sukhorukov and A. Ponomaryov.

Technical instruction facilities are widely used at the lessons. Expounding theoretical matters, the teachers make extensive use of motion-picture units, diascopes, epidiascopes, magnetic boards, electrified stands, tape recordings, etc. The students develop practical skills in equipment handling in the course of drills at autodromes and special classrooms provided with simulators.



The Academy's leading scholars — Generals Yu. P. Dorofeyev, N. F. Fedotov, T. M. Salama-khin, M. A. Kozlov, Colonels B. M. Balin, V. S. Gavrilin, M. M. Mashimov, V. I. Kornev, A. A. Soskov, Yu. V. Sushkov, B. N. Yurkov and many others — direct research activity aimed at improving the effectiveness of instruction and developing the students' engineering outlook.

The students' participation in the military scientific society is closely tied up with their everyday duties, for it enables them to keep continually abreast of engineering innovations. Not infrequently students make their contribution to solving new theoretical and applied problems.

**Would you mind telling us a few words about the subjects studied at the Academy and about its teaching staff?**

The Academy has always regarded as its main task the training of highly proficient military engineers, boundlessly devoted to their Socialist Motherland, the Communist Party and the Soviet Government, well conversant with Marxist-Leninist theory, educated in the spirit of lofty communist convictions, having profound theoretical knowledge and practical skills in their respective specialities, capable of competently organising and directing combat activities and of effectively and competently handling weapons and combat equipment, and skilled in instructing their subordinates.

Proceeding from this task, the Academy has worked out four principal areas of instruction: social sciences (Marxist-Leninist philosophy, political economy, scientific communism, history of the CPSU), general technical disciplines (mathematics, physics, theoretical mechanics), military subjects (operational art, tactics, history of wars and military art, Armed Forces manuals and regulations) and special subjects indispensable for officers of engineer troops (construction of obstacles, roads, bridges, crossings, fortifications).

The fundamentals of scientific knowledge are provided at lectures and are developed upon during discussions at seminars and in the course of independent studies.

The practical aspect of instruction is given special attention. Much time is allotted to developing and improving the students' practical skills in resolving operational and tactical problems and

to handling engineering equipment. These skills are acquired during drills and in fulfilling the assigned missions during command and staff exercises. Lessons are frequently held in the field, in complicated dynamic situations.

Officers perfect their knowledge and skills in the forces and at training centres, which helps them to better discharge their functions. Studies at the Academy end in writing diploma papers and taking state examinations at which the students confirm their right to respective qualifications.

The high level of the students' instruction and education is maintained by experienced teachers, many of whom are professors and assistant professors, candidates or doctors of science, widely known in the engineer troops and the country's academic quarters.

**And what conditions have been provided for expanding officers' outlook and for their leisure?**

Placed at student's disposal are libraries with a unique stock of political, scientific and technical literature and fiction, and a magnificent club, which is a centre of cultural work. The concert hall is used for performances by artistes, amateur groups and composers, and for meetings with writers, scientists, labour and war veterans, and with prominent military leaders.

Besides, it should be kept in mind that the Academy is in Moscow, the capital of the Soviet Union, known the world over as a major cultural centre with its numerous theatres, museums and architectural monuments.

The Academy offers vast opportunities for officers to strengthen themselves physically. There are different athletic sections where they can develop and improve their sportsmanship. The Academy has well-equipped gymnasiums and open sports grounds.

**To conclude our talk, could you tell us something about the Academy's links with the forces and its graduates?**

The high results of the Academy's academic and pedagogical activity are largely determined by its close ties with the engineer troops and



their central agencies, which enables the teaching staff operatively to solve modern tasks with due account of the demands made on the engineer troops' combat training.

The Academy's pupils are invariable participants in all major exercises and manoeuvres, organising their engineering and topographic support. Along with this, they direct the demining of large areas abroad — former theatres of military operations — and also rehabilitation of destroyed industrial enterprises, transport junctions and passages across water barriers, and of other national economic objectives in a number of countries.

One cannot forget the merits of the Academy's graduates in 1962, when, committed to their internationalist duty, they helped the freedom-lov-

ing Algerian people clear their land of minefields, ammunition depots and various obstacles left over after their seven-year struggle for independence. They also rendered fraternal assistance to the population of Yugoslavia, when the town of Skopje and its suburbs were destroyed by the 1963 earthquake.

Our pupils maintain ties with the Academy which has brought them up. Officers of engineer service periodically take refresher courses at the Academy, getting information and consultations in the matters of interest to them. All of them are very grateful to their alma mater for everything it has given them. In its turn, the Academy is proud of their pupils, constantly receiving good references about them from the forces.

At one of the Academy's laboratories

Photo by N. Aryayev



2 СВО № 6 англ.

## FOOD FOR THOUGHT

WO 1 P.A. McKEANY

"There is over 2000 years of experience to tell us the only thing harder than getting a new idea into the military mind, is getting the old one out."

Capt the Hon B. Liddel-Hart

The old New Zealand syndrome of "When there is a problem form another committee" is well known. The Army is no exception from this rather general rule, however our variation is "when there is a problem - run another course". In other words we train for the sake of training instead of training for a perceived need.

By the time a soldier has climbed to the top of his/her trade bands he/she could have done upwards of twenty courses. Compare this to the three courses most civilian top management may have to do. There is no doubt in my mind that our soldiers are over trained - especially on formal courses.

If we adopt some of the principles used in SYSTEMS training (which is a logical and well researched programme) we would find that our soldiers would be on the job 80% of the time rather than on formal courses.

SYSTEMS training seems to scare the "hell" out of some people, when there is no need for it. I would like to point out that we have not changed our training principles for 40 years. The only minor difference is that training is "systemised" to produce effective and efficient training. You should always remember that systems training is only an aid to training. It is not the be all to end all - but it helps.

Looking at engineer training within the Army, I am quite convinced that if units spent more time planning and designing their training, the School of Military Engineering would not have to conduct as many formal courses as at present. This would give them more time to spend on advanced engineering subjects. We seem to forget that one of the best ways to train sappers is "hands on" or "on the job" training. This leads to job satisfaction, and is probably the most vital element in the retention of our soldiers.

If units conducted training as outlined below, the need for some formal training and most revision training could be shortened considerably. I would suggest we should at least consider the following points when planning our training.

- a. Training should have a specific purpose and must be relevant to the doctrine and overall tactical concepts.
- b. Training should be progressive.
- c. Training should be realistic and demanding.

.../d. Training



- d. Training progress and exercises should be imaginative.
- e. Training should make maximum use of the latest developments and equipment.

I would now like to mention about levels of training and how they relate to SME training:

- a. Level One (Familiarisation teaching only.) Three questions should be asked:
- (i) How important is the task?
  - (ii) How soon after leaving SME is the task done again?
  - (iii) How often is the task done?
- Comment. If the task is not important it should not be taught at all.
- b. Level Two - Training which is tested but not under conditions of less than job standards.
- c. Level Three - Training tested under job conditions and to job standards. This should be the level of most training undertaken at the SME.
- d. Level Four - Training which is tested several times during a course to produce a higher retention of learning. The question to be asked here is 'How soon after leaving the course is the task performed?' If the period is greater than three months and the task is important it should be taught to Level 4.

The SME normally teaches and tests to Level 3 as most Combat Engineer subjects are important and some are indeed critical. If a student is not going to perform a task for a year or more after leaving SME I submit that we should not teach beyond Level 1. As few people in the squadrons would agree with that it must be up to the units to conduct more training so that skills gained are not lost.

We should look towards unit training as a means of maintaining the military engineering arts once student have left the school. I am not pointing the bone at anyone or any unit. We have a difficult road to travel with two priority one roles to perform within the Army which are often in conflict. However we must maintain both the art of construction and the skills required for field engineering. Perhaps only time (and a shift in Government policy) will tell which way we are to follow.

[illegible]

DEFINITION - TEWT is a military abbreviation which stands for Tactical Exercise Without Truth.



Here and There Here and There Here and There Here and There Here  
 ere and There Here and There Here and There Here and There Here a  
 re and There Here and There Here and There Here and There Here an  
 e and There Here and There Here and There Here and There Here and

## MILITARY SNIPPETS FROM HERE AND THERE

● North Korean troops have intensified tunnel-digging works all along the front line, a former north Korean Army sergeant, Cho Byong-chan, disclosed recently.

Cho, 24, defected to South Korea on July 28, swimming across the Han River estuary to Kanghwa Island off the western coast.

At a press conference in Seoul Cho said he was a member of a construction battalion under the 15th Mechanized Division located on the western front. He said North Korea in September last year began establishing a 'construction battalion' in each combat division to accelerate the tunnel construction. He said that his battalion has dug in the division sector about 260 tunnels and caves through which tanks, guns, ammunition and troops could move freely.

Cho said that his battalion was composed of 400 men. South Korean authorities have discovered 'three of the tunnels. They believe that another 15 exist.'

● Noise emanating from computers, communications centres, avionic, and other electronic equipment can provide Soviet and Warsaw Pact nations with valuable clues about US and NATO military and intelligence operations.

● Australia will contribute \$340,000 to the appeal by the UN's High Commissioner for Refugees for funds for an anti-piracy program during 1984 in the Gulf of Thailand.

● The Cuban Air Force now consists of more than 270 jet combat aircraft, receiving in 1983 four Mi-14 helicopters, 16 Mi-17 transport helicopters and two Mi-2 utility helicopters. In addition two An-26 transports were supplied, together with seven MiG-21's and three MiG-23's.

### RING THE DIFFERENCES

The first two entries drawn from a hat with ten correct differences, and the correct answer to the question below will receive a free leather ID card holder with embossed Corps badge.

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● The RAAF is attempting to recover three World War II Boston bomber aircraft from the jungles of Papua New Guinea.

One aircraft is destined for the RAAF Museum at Point Cook, Victoria; another will go to the Papua New Guinea National Museum, and the third aircraft will be returned to its old unit, No 22 City of Sydney Squadron. In honor of Flight-Lieutenant V.E. Newton, who won a Victoria Cross flying a No 22 Squadron Boston.

Many navies are showing a growing interest in the use of film/video material as a vital part of their training programs.

The UK-based specialist distributor Video Marine International (VMI), which has a substantial library of marine training films, believes that navies will increasingly adopt this medium, particularly for instruction and refresher courses in such general areas as seamanship, navigation, lifesaving and rescue etc.

● The Royal Ordnance Factories have reopened their assembly line to produce 15 Government with the expectation of a further order for 40 or more.

The CET has been a great success in the British Army, where it is used extensively by the field engineers. The ROF hopes for further export orders now that the assembly line has been reopened.

● The standardization organization of the NATO alliance is attempting to develop an agreed 'computer language' in order that computers will be programmed so that those of all the nations can interrelate directly.

● The second in command of Singapore's armed forces, Brigadier-General Lee Hsien Loong, has resigned to contest a seat for the ruling People's Action Party in this year's elections expected late this year.

Brigadier-General Lee, 32, is the elder son of Prime Minister Lee Kuan Yew.

Who is the immediate past  
 Colonel Commandant of our Corps?

The following observations were made by an RNZE corporal some time ago and were to have been included in the LIAISON LETTER of December 1983. Seeing that issue was not printed and only now is some of that material being published you can try to guess who the people were and where the action took place. Unfortunately the Corporal who was to have remained a corporal for the rest of his military service is now a sergeant. What went wrong?

#### OBSERVATIONS

In the absence of certain members of this office the following observations were made concerning phone calls;

- a. most of the call were non business oriented
- b. most of the calls for the CE were about money
- c. most of the calls for the SORE 2 were about firemen
- d. most of the calls for the SORE 3/WO Tech were about luncheon dates (the liquid variety)
- e. most of the calls for the WO RNZE were from women

Careful study of the above observations would lead one to believe that the "Ruling Body" of the RNZE is a money hungry, gin-soaking lecherous bunch of people who associate with firemen.

WOULD YOU TRUST YOUR DAUGHTER WITH ONE OF THEM

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## THE ENGINEER CORPS MEMORIAL ASSOCIATION INCORPORATED



I have no doubt that there are a large number of serving sappers who have heard of this "Mystical" association but have very little idea what it is all about. Furthermore few apart from the small number who are intimately concerned with the organisation would have any idea what the aims of the association represent.

The ECMA (saves me typing long names) was an organisation set up nearly twenty years ago during an annual camp. It was primarily the brainchild of a certain number of World War 2 senior officers who wished to preserve the history of the Corps and preserve some of its artifacts. To achieve this end an organisation was founded which was called the ECMA, and a set of rules were written for the proper management of that club. These rules were deposited with the Registrar of Incorporated Societies and the ECMA became a properly constituted body.

Over the years considerable effort was made to try and raise funds with which the ECMA could erect its own building to house both its artifacts and preserve documents of a historical nature. The early efforts were not particularly successful and the ECMA barely struggled along. Oh there were times that produced short bursts of effort but this was seldom sustained for long. Then came the advent of a Chapel for Linton Camp. The previous chapel which was part of the old YMCA building (now the JRs Mess) was deemed too small (apart from other things) to serve the needs of the camp.

Several ideas were tossed round but the outcome was that a small chapel which was no longer used at Makutuku had been offered free to the camp as long as it was taken away. The RNZE were called in and became part of the project. Some of the funds of the ECMA were used for the transport and re-erection of the Chapel in Linton Camp. This was the first tangible step for a memorial for the Corps. This was to become known as the RNZE Chapel and was named St Martins.

However the chapel was only part of the dream which had been the basis of the ECMA. Part of the project as first envisaged was a complex which contained a Chapel, a Memorial Hall, a couple of Lecture rooms and a small Museum and Library. The chapel alone was only part of the dream.

There was to be a further period in which seemingly little was

### AIM OF PROJECT

To recognise the contributions made by engineers who served in the army in times of peace and war by establishing a Memorial Centre which contains:

- \* a home for the Corps of Royal NZ Engineers
- \* the Engineer Rolls of Honour
- \* engineer historical records and equipment
- \* the engineer library



done. However in the back rooms and at meetings progress was being argued over and the need to try and raise funds became a priority task. We needed that other part of the dream - and by some effort the Corps was going to get that final part. A nation wide raffle was run, and by hard salesmanship and talking a sufficient number of tickets were sold which gave the required boost to the funds. At last work could commence on a building of our own. Unfortunately the plans as first devised were now no longer feasible and had been redrawn. We were to have a MUSUEM and LIBRARY of our own.

In January 1982 this Museum Library was officially opened. Both retired sappers and serving sappers were in Linton in considerable numbers for the opening and the dream was almost complete.

Now we have our Corps Memorial Centre. Although we are not as large as either the Royal Engineers or the Australian Engineers we do have a place of which we can be rightly proud. But it must

not be allowed to remain stagnant in either the presentation of our historic relics or preservation of the valuable documents owned by the Corps. To prevent stagnation the Corps Memorial requires the life blood of both INTEREST and FINANCIAL support from not only serving sappers but also retired sappers.

Where do you come into this picture? For several years now there has been a system whereby allotments can be made directly by Defence to the ECMA account. Currently there is only a small portion of the corps who support this scheme (about 12.5% of all up strength) with a pledged fortnightly donation. This support is greatly appreciated but as these members leave the army new members must be found to take their places. The annual total of this pledged donation scheme accounts for nearly \$1 800 per year.

#### HISTORY OF PROJECT

- 1962 memorial idea mooted
- 1966 Memorial Assn formed
- 1973 Memorial Chapel commenced
- 1974 Memorial Chapel opened
- 1977 foundation stone laid for museum/library
- 1980 museum/library construction completed
- 1981 Oct - projected date for opening Memorial Centre



Museum/Library & Chapel

warning devices in the building.

which we have are in need of rebinding, we need more displays set up (we have most of the artifacts for these but a manekin for instance costs \$750) and we need funds in reserve to enable us to purchase some very important part of our history if it ever became available.

This sum is not enough to take care of all the things which need attending to in the centre. The Golf Raffle is also one of the most vital means of adding to the ECMA funds. You may ask where does this money go - what happens to it? The answer is simple. We have to look after most of the maintainance of the building ourselves. Insurance is now nearing some \$1400 annually and we have yet to install smoke and fire

Furthermore some of the books

I would like to ask each of you to consider just what the addition of just another 12% of the Corps to the fortnightly donation scheme would do for the ECMA funds. Even better to have both your support financially and with interest. I am very sure that there are few in the Corps who could not afford \$2.00 a pay (a dollar a week) to assist in building the ECMA funds. One less jug in the mess per week or perhaps one less pie/milkshake. The result would be considerable. You would then not be faced so often with endless raffles and other fund raising efforts. Also I would hope that you would become personally involved in the promotion and furtherance of the aims and aspirations of the Engineer Corps Memorial Association.

Why not go to your orderly room today and make your allotment? You will find that it is a painless way supporting the Memorial and the funds will be well used. In the years to come our Corps Memorial will be further enhanced by artifacts which may have come as a result of your efforts.



## RNZE CORPS MEMORIAL - LINTON

QUO FAS ET GLORIA DUCUNT

WHERE DUTY AND GLORY LEAD

### Accident

Nature of Ammunition:

Thunderflash MK 8

Attributed Cause:

Tampering

A CSM advised a Sgt to dispose of three Thunderflashes by cutting them open and igniting the contents.

As a result of this advice the Sgt sustained burns to his face and hands.

### CHRISTMAS CARD

#### COMPETITION

#### CHRISTMAS CARD

#### COMPETITION

The Corps Funds Committee has opened a competition for a new Christmas card design to be used on the 1986 Christmas card. Entry is free. The prize for the winning entry is a Corps Jersey, Jacket or cash equivalent.

Entries are to be forwarded  
to the editor.

Competition closes

31 July 1986.



Army 247/16/3/MPA

23 Dec 73

See Distribution List:

HAIRPIECES - RF SOLDIERS

1. The wearing of hairpieces by soldiers is now prevalent within the Service. Whilst the CGS has no real objection to the sparsely haired Serviceman taking remedial measures, he is however concerned at the possible ramifications of this practice.
2. Recently a Padre at Burnham was invited to say prayers at a Ceremonial Parade. The order "Remove Headdress" was given. In the ensuing silence the words, "Holy Christ" and "Queer Bastard" did little to enhance this solemn occasion.
3. Some weeks ago an Engineer SNCO was engaged, with his gang, erecting a Chapel in Linton Camp. Unfortunately the strong wind not only blew his beret, but also his hairpiece from his head. On viewing his seniors bald pate a fellow Engineer became convulsed with laughter. He fell from his ladder and dislocated his hip.
4. An incident of considerable embarrassment, not only to the Service, but indeed the ANZUK Force took place some two years ago in Vietnam. Two dark-skinned New Zealand soldiers were attached to an Australian Infantry Section, the 2IC of which was an Aboriginal. During a mortar attack the Section IC was slightly wounded in the head. A blast ripped his helmet, hairpiece and adhesive from his head. A small portion of skin also became detached causing blood to flow. In the heat of the battle the Aboriginal soldier accused the two New Zealanders of dastardly deeds reminiscent of an Indian era. Only medical evidence at the subsequent Court of Inquiry absolved the New Zealanders and in fact saved our good name with our Australian Allies.
5. The three incidents quoted are but a few that have reached Defence HQ. The CGS has stated that whilst he condones the wearing of hairpieces in civilian attire, they will no longer be worn in uniform and in particular on Active Service.

*A.B. Clays*

Major  
ACDS Support (Pers)

Distribution:

List A

Information:

5 Spt Sqn



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 ## REFLECTIONS ON BECOMING A PRISONER OF WAR ##  
 ## #####

Some readers may recall a short article in the Liaison Letter No 28 (June 1982) regarding the travels of Spr NATUSCH who was taken POW during WW 2. The article included the citation for the award of the Military Medal and a map of his travels in Europe.

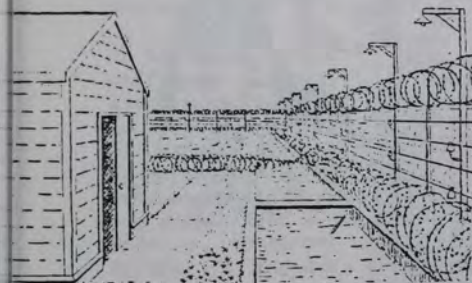
The article below was written expressly for this Liaison Letter by Mr NATUSCH.

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It is a very real honour to be asked to write an article for the RNZE LIAISON LETTER. Forty three years is a long time ago to try and remember what it was like becoming a prisoner of war.

Even now I remember the waterfront buildings of Kalamata in Southern Greece shining whitely in the sun; a grey German army truck turning onto the waterfront, the dust rising from its wheels as it moved slowly past the street where the German troops who had surrendered to us the night before were waiting.

We looked at it not yet properly comprehending the rumour which had first reached us at dawn at the barricade on the road from the north was true. It had not seemed true then. There seemed to be a lack of reality about it. One might die, or be wounded, but most of us had not even thought of surrender. What would it mean - and what would one do now in the time that was left?



Serveral of us collected six or seven Bren guns and boarded a Greek caique. Two hundred yards out to sea a breeze rippled the water. We could not start the diesel motor and the breeze stayed exasperatingly away from our sails. The sun rose higher and the air became still. The German truck showed on the waterfront. I slipped the Brens into the sea and walked ashore.

I have been asked what I learned from my time in the army. There are several things which come to mind. Some of these are:

- a. Make sure you know how to use the weapons of your own army and those of the enemy also. It is no use being a specialist when you are retreating and the enemy is dictating the events. You will be glad to use whatever comes to hand. I was fortunate that I had been an instructor of NCOs at Trentham and also in 6th Squadron, Divisional Reconnaissance before it was disbanded, as well as being an engineer.

- b. After seeing the brutality of the Italian Carabinieri and the German Gestapo I am sure that before resorting to this level of behaviour, it is better to loose honourably than to win dishonourably. Your morale will be much stronger and after the battle is over you can still hold your head high.
- c. Keep an open mind on military intelligence. It may not be right. The disaster at KALAMATA (where 8000 troops including 800 New Zealanders were taken POW) would possibly have been avoided if the officer commanding a road block had not accepted military intelligence that the Germans would not get into the town until the next day.

There is a dry humour in what preceeded the Battle for Kalamata with which the pundits could have had a field day. Two of us were having a late lunch near the road block when a machine-gun up the road fired. It had a different note to our guns and when we saw no one doing anything about it we went to the officer and said that we thought it could be a german gun. When he said 'no' we asked him if we could borrow his motor-bike and go up the road and have a look. It was then that he told us about his intelligenc report. When we said we would still like to have a look he became most indignant. So we left him and continued our way through to the main body of the New Zealand soldiers.

Twenty minutes later the Germans motored down the road and took the officer and his men prisoner without a shot. This was what the officer told me next day when I asked him what happened. So never, never entirely trust Military Intelligence.

It has been said that "in war truth is the first casualty". I have just looked up the Official War History account of Kalamata and how the Germans entered the town at 4.30 pm and surrendered to three Australians. Unfortunately for the Australians I know damn well that they did not surrender to three Australians. I suppose I should also say that one should not always believe the Official War Histories (Compare the Official History of Gallipoli with Maj Pugsley's Book, "Gallipoli the New Zealand Story".)

It happened that a Sergeant and a Private came along the water-front from the east to the street which held the German CO and a considerable number of his troops. Another New Zealander also

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came to this street from the west along the waterfront from the Custom House which had been the German H.Q. The last firing came from a Spandau up this street. The German CO shouted out that he was the Commanding Officer and he was coming down the street to the corner because he wanted to surrender. At one time the surrender got a little out of hand when the German kept saying that he wanted an officer so he could surrender his sword as between gentlemen. He didn't seem to understand when we said we did not have an officer - just as he did not have a sword - and that he would have to surrender there and then. He said he would then go back to his troops and arrange the surrender but he was told he could not go back. He was allowed to call out for his 2ic. He did so and a very tall German came marching down with his hands held high. He stood like that while he received his orders, and then before he went back up the street he dropped his arms and held out a stick grenade. He seemed pleased to get rid of it. By then more troops were arriving amongst whom were Australians.

I understand that the Germans in their account of this incident said that we roared like "angry bulls". That is quite wrong. We were scrupulously correct and the only chap who shouted was the German C.O. because we could not always understand him. As so often happens he tried to make up for a lack of vocabulary by raising his voice.

Shortly after the main body of Germans were marched away another incident occurred which still brings a smile. Some more Germans had been winkled out of a cupboard. When they came marching down the street with their hands held high they were literally walking on top of a small red haired German with a snub nose who repeated in a steady monotone "Don't shoot comrade! I've been in Liverpool". It was like a record stuck in a groove. When someone said that we had never been to Liverpool you could have seen him wilt.

Some hours later a brigadier, on instructions from the Navy, surrendered us in our turn to the Germans.

In hindsight it is difficult to say exactly why some of us adopted a policy of escape at any opportunity, while others argued that one should wait and plan a foolproof escape. I suppose temperament comes into it. There is one thing of which I am sure, you will have to think it out for yourself. There is no one who will do it for you. Finally, I think that one should escape as soon as possible when the first opportunity offers.



Roy Natusch



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TTroop

The Trade Training Troop of apprentice trainees has recently been established at the School of Military Engineering, Linton Camp as a direct result of the Corps Restructure late last year. It comprises...

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The Army Schools  
Waiouru NZ

During 1885 the first Army School of Instruction was established at Mount Cook Barracks (close to the present location of the Buckle Street buildings) in order that the military skills of the defence forces could be improved. In these early days the Armed Constabulary was taught "big gun drills and torpedo work". Other subjects in the curriculum were electricity and instruction in fortifications and works. The students were closely examined at the conclusion of each course before

receiving a certificate of proficiency in whatever field they were being taught. The Armed Constabulary and the Torpedo Corps were in part fore-runners of our Corps and thus we have had a close link with the earliest training schools in the New Zealand Army.

Several times in the past the Schools of Instruction have been established and dis-established as the need for a certain type of training was required or dispensed with. Colonel Penton after a long struggle was able to report to Parliament in 1902 that "at last a School of Instruction has been established in the colony.....there are two permanent NCOs attached to the School - one from the School of Musketry at Hythe and one from the School of Military Engineering at Chatham."

In 1910 when Lord Kitchiner (our first Colonel-in-Chief) visited New Zealand he recommended that a School of Military Engineering be established. Further research is necessary to see if this advice was acted upon in any way apart from the 'district' schools.

During the Second World War an Engineer Wing was established at the Army Schools of Instruction in Trentham to teach military engineering skills. This existed right through the war and became the foundation of the present SME. At the end of the Second World War there was a need to provide a training venue for both a permanent force of engineers and to enable suitable training for the Territorial Force to be undertaken.

Considerable discussions took place as to where the 'permanent' site of the Army Schools of Instruction should be located. The former POW camp at Featherston was a strong contender but Waiouru was to become the home of the Army Schools. In the meantime the Engineer Wing at Trentham would remain the main engineer training

As early as 1948 senior officers at Army General Staff foresaw the need for the future Army Schools of Instruction to be located at a place other than Trentham which was rapidly becoming closed in with housing estates as dormitory suburbs of Wellington city. By 1953 these plans had been finalised and the various Corps Schools were then set up in their present locations nearly the same as we now know them. It was appreciated that some of the moves would take some time to accomplish and thus no firm dates can be given for some relocations. The move from Trentham Camp to Linton Camp unfortunately cannot be given an exact date however documents show that the heavy machinery was moved between 15-17 June 1953. One could say that the move was "completed with as little fuss and bother as possible."

Apparently at the time of the move of the Army Schools to Waiouru the R.F. Cadets were separated from the School of Military Engineering. Whilst the SME went to Linton in 1953 the Cadets had been pared away a little earlier and with their instructors been established at the R.F. Cadet School. There the apprentices formed B Company and carried on with their trade training. Later the B Company became responsible for the trade testing of tradesmen who had completed their apprenticeships and were requiring upgrading in their "star" classification. (The forerunner of the "bands" system.) This requirement was dropped about five or six years ago as a result of more tradesmen becoming better qualified through the Trades Certification Board examinations. No doubt there are quite a number of senior members of our Corps who completed their 3 and 4 star courses at the R.F. Cadet School B Company.



SSgt M. Vincent, Maj Gen R.G. Williams, and Maj A.T. Beaver discuss a training aspect in the Trade Training workshop.



centre. In late 1948 Cabinet gave approval for apprentices to be enlisted into the army and shortly after the first class of RF cadets some of whom were apprentices entered camp.

On 1 September 1950 the School of Military Engineering became a unit of the New Zealand Army and was located in Trentham Camp in the same buildings as the former Engineer Wing. The Engineer Wings at Papakura and at Burnham were busy training personnel for service in Korea and Compulsory Military Trainees. So it appears as though the School was left to look after the Regular Force personnel and the apprentices. A paper produced in August 1950 noted that the Army Engineering school was quite inadequate and that a

"new school would provide, in addition to its Corps training responsibilities, a detachment for Camp Maintenance and instructors for the RF Cadet trades training."

The establishment of the school at that time was quite different to the present structure.

Even before the School was formally approved there was an amount of correspondence requesting a further look at the establishment of the school. Trade trainees were left to the tender mercies of two sergeants who carried out all the carpentry instruction. The other six members of the staff covered the remainder of the training. Quite a different picture to the present SME.



The Chief Instructor of the School of Military Engineering Major A.T. Beaver with the Chief of General Staff, Major General R.G. Williams C.B., M.B.E. who unveiled the plaque in the Trade Training Wing on 13 November 1984.



wing has returned as part of the establishment. From a wing that formerly had only two trade instructors and students, the present establishment has fourteen instructors and thirty-three students. In the third year of operation i.e. January 1986, the Trade Training Troop will have approximately 47 to 50 apprentices. In addition the Wing has a responsibility for twenty or so Mutual Aid Programme students from Fiji and Tonga. This number will also be increased in 1986 when the SME will be hosting, for a short period, two troops under the MAP scheme.

The School of Military Engineering, and the Trade Training Troop have much to look forward to in the future. The Corps now has a facility which is unsurpassed in the New Zealand Army. We can but hope that in the future the SME (with regard to this training function) will produce for the Army a fine band of tradesmen capable of handling the many a varied tasks which come their way.

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#### Apprentice Training Staff 1950

If any reader has the detail please forward to the Editor.

#### Apprentice Training Staff 1984

Capt J.W. Lock	WO 1 M.G. Holt
SSgt M. Vincent	Sgt G.M. Abernethy
SSgt C.D. Brickell	Sgt W.J. Bryce
Cpl M.K. Anderson	Cpl M.J. Dew
Cpl P.F. Lepou	Cpl B.C. Powell
Cpl P.J. Schofield	Cpl R.J. Kirton
Lcpl B.R. Newton	Spr A.W. Hanna

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#### Quote

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Tactical exercises should be such that they can be described in several pages of bad prose. The Enemy Forces should always be described as performing with ease tasks which are very difficult if not impossible for our own forces. A narrative should be accompanied by at least three annexes and a map overlay, with co-ordinates about three inches wider than the standard map board. It is also quite acceptable to use the only map you have in your office - which has a different scale to any issue map.

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NUCLEAR, BIOLOGICAL AND CHEMICAL DEFENCE  
TRAINING IN NEW ZEALAND

Lt G.E. Pullen RNZE

Nuclear, Biological and Chemical Warfare (NBCW) is gaining recognition within the New Zealand Army. The existence of NBCW can not be totally ignored, so some form of Nuclear, Biological and Chemical Defence (NBCD) training must be instigated. This instigation of NBCD Training will enable the NZ Army to fulfil its obligations to allied armies.

The NZ Army is concerned with the defensive aspects of NBCW. The NBCD policy (not yet approved by Government) for the NZ Army reflects this tendency. Provided approval is granted, NBCD will have to be incorporated into all forms of training, and at all levels. It must be considered in the same light as basic soldier training.

Recent publicity on television ("Threads" and "The Day After") has made the public more aware of the power of nuclear weapons. Protection against their effects is vital to survival. However these cannot be considered in isolation. Biological and chemical weapons are equally important.

Neither biological nor chemical weapons are new to warfare. The potency of biological weapons in medieval times was recognised and chemical warfare was used on a large scale during the first World War when large numbers of casualties were sustained by both sides. Currently, intelligence sources suspect that the Soviets are using both weapons in Afghanistan and Kampuchea, and napalm bombing the areas afterwards to destroy evidence.

NBCD training is vital for the survivability of soldiers in the NBC environment. The operational ability of units must be maintained so that our personnel can operate alongside our allies. NBCW compounds tasks associated with conventional warfare and physical stress is increased through wearing NBC protective clothing. Time is required to acclimatise personnel for conducting otherwise normal tasks and thus physical fitness becomes paramount. Physical fitness coupled with an understanding of heat stress can prevent serious degradation of both unit and personal performance.

Soldier skills, which under normal conditions are relatively easy to perform become more difficult in an NBC environment. The senses are limited by wearing NBC protective equipment, making it difficult for individuals to carry out their primary function in the course of battle. The basic senses are dulled and timings for tasks must be extended to accommodate a slower work rate. To overcome these problems personnel and unit must be trained to operate in a hostile NBC environment.

Currently NBC training in the NZ Army is limited to a small group of personnel who have undergone courses of instruction outside New Zealand. These selected RNZE officers and senior NCOs provide the nucleus of the training cadre for the whole of the NZ Army. It is unfortunate that the training has neither been continuous nor has the content covered the same ground. A few other personnel have been involved with some formal NBCD training at the SME



whilst attending courses. Another small group who have been able to attend overseas exercises have also received some basic NBCD instruction, however this has not given any depth to the subject. Some assistance has been given to units outside SME but this is limited. The remainder of the Army has not received any training in NBCD.

These varying standards require a starting point to ensure the attainment and maintainance of proficiency necessary to survive. NBCD training can therefore be divided into three levels each of which must be taken in turn to achieve proficiency at the third level. These are:

- a. Basic Survival Skills,
- b. Specialist skills, and,
- c. Maintainance of skills

A unit committed to an operational area in a hostile NBC environment will be required to operate for prolonged periods. The unit must continue to operate without serious degradation to its performance. Proficiency in basic survival and specialist skills will augment operational readiness. Once these standards have been achieved, both personnel and units must maintain the skills gained. This can be achieved by:

- a. periodic testing,
- b. refresher training, and,
- c. collective training evaluation.

To date NBCD training is varied and un-cohesive. Expertise is limited to a small group of individuals whilst the remainder of the NZ Army lacks NBCD training. SME can conduct further specialist courses to qualify the instructional staff of the training establishments. To enable a level of training to be maintained at the same level as allied armies RNZE personnel should continue to be sent on courses overseas. By maintaining the level of expertise within the SME the cadre will in due course eventually grow and become the hub round which NBCD training for the NZ Army revolves

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#### Accident

Nature of Ammunition:

Grenade Rifle Practice M497

Attributed Cause:

Error of Drill

A soldier found an unfamiliar Grenade on a Range and, in spite of orders and warning signs, picked it up and handed it to a SNCO.

The SNCO subsequently dropped or threw the grenade away. In the ensuing explosion, two soldiers received minor injuries.

#### Accident

Nature of Ammunition:

Cartridge Blank 7.62mm L13A1

Attributed Cause:

Tampering

A civilian boy found some live blank cartridges after a recruiting display. He attempted to open one by hitting it with a brick and the resulting explosion caused deafness and lacerations to both hands.

It is of note that only 10% of the cartridges issued were recovered at the end of the display.



Extract from the personal diary of R.C. Pemberton, OC  
8 Fd Coy NZE, near Enfidaville, in Tunisia, North Africa,  
5 May 1943 - meditating on grass, corn and wildflowers  
growing in minefields laid last season.

"After tea I meditated and produced this.

Death's in the grass there soldier, keep away.  
It's lurking hidden 'neath the sod. There are S mines there  
they say.

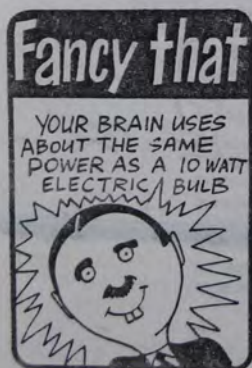
Wildflowers bloom mid the waving corn  
In a carpet of softest green,  
But Death's in the flowers and the corn there, man  
Where the S mine lies unseen.

But see those white tapes waving too? - that's your way!  
They were laid by the Sappers working there yesterday  
Searching, sweeping midst the corn  
With detectors humming low,  
They peered and prodded and they marked and disarmed  
Yes - that's the way to go.

It's safe in that lane, soldier - this I know,  
For I watched 'em walking and sweeping there to and fro.  
I saw them disarm the cunning traps  
By those wheel-tracks, fresh and plain,  
But Death still lurks 'mongst the glorious flowers on the  
sides  
So - follow the Sappers' Lane.

For those of you who have a good memory for names you  
will realise that R.C. Pemberton was our immediate past Colonel  
Commandant. No doubt some of you had the pleasure of meeting  
him and the opportunity of talking to him. He is still keenly  
interested in all activities of RNZE and keeps a close watch  
on our activities.

The messages contained in each of these poems is still  
relevant today - keep your eyes open, observe and carry out  
the correct actions when dealing with mines and booby traps.



## What do you know?

Test your general knowledge with these 10  
questions. Answers on Page 22

1. What does an apiculturist do?
2. Where is Montego Bay?
3. In what year did Queen Victoria marry Prince Albert?
4. When were British railway companies nationalised?
5. What's a croissant?
6. Where did Jesus live during his childhood?
7. What is a davit?
8. Who was Shakespeare's wife?
9. What do Americans call autumn?
10. What is the more common name for the Society of Friends?

Tunisia, near Enfidaville  
Thursday, 6 May 1943.

I produced another rhyme.

#### THEY ASKED THE SAPPER

They asked the Sapper if he'd mind  
Saying a word on what they'd find  
When this Continent's clear of Hun  
And the job in Africa's really done.  
They plan to take their little spade  
and dig up the mines both sides have laid  
'Cause if they don't it's an absolute cert  
That someone's going to get really hurt.

There are wooden boxes of various kinds  
In scattered fields or laid in lines  
With igniters of varied shapes and looks  
Being described in the military books,  
Itai metal ones long and thin -  
Watch where you place the empty tin!  
The safest way with nothing to lose  
Is blow 'em in place with jelly and fuze.

See the Teller large and round  
With a very loud bang if it happens to sound.  
They lay them single, more or less  
But double deckers increase the mess.  
If one you find, don't yank it out -  
Feel underneath and round about,  
For if you don't that mine may fire  
By pull igniter, picket and wire.

Then there's the 'S' mine nobody likes  
With nothing to see but three small spikes  
It does its job with vigour and zeal  
And hundreds of little round balls of steel.  
It slyly waits with malignant prong  
The heedless foot to come along,  
And ere the victim knows the worst  
It's leapt up from the ground and burst.

In years to come I greatly fear  
A very loud bang some folks will hear.  
They'll find a hole - all blood and slime -  
Where a camel or Wog has found a mine.

R.C.P.



## FREEDOM OF THE BOROUGH OF PETONE

### 6TH INDEPENDANT FIELD SQUADRON

#### ROYAL NEW ZEALAND ENGINEERS

The practice of granting the Freedom of the Borough or City has its origins in antiquity, and for British, and Commonwealth Arms, dates (in part) from King Edward the Third's charter of 1327 granted to the Mayor and Commonality of London. The honour is thus an ancient one and not lightly given by civic bodies. The custom has been widely followed through the British Commonwealth and is only granted to "regiments which have rendered conspicuous service, and which have been associated with the borough (or city)". The Freedom as a rule includes the right to march through the Borough with drums beating, bayonets fixed and swords drawn, without further formal permission from the municipal authorities.

In late 1981 the Petone Borough Council made a written proposal to the then Chief Engineer, Lt Col D.J. O'Brien, that the 6th Field Squadron accept the freedom of the Borough. Lt Col O'Brien welcomed the proposal, listing the numerous precedents for such an honour, and invited the Council to put forward a formal proposal through the normal channels.

Headquarters 2nd Task Force Region (in Palmerston North) received the proposal in 1982, and although the idea was supported approval in principal was not forthcoming. The question of 6th Field Squadron remaining in the Army as a separate identity was unresolved in the light of an impending restructure of the Army. However the matter was not closed and the Petone Borough Council was invited to await the results of the restructuring before resubmitting the proposal.

Prior to 26 Nov 84, when the new establishments for the RNZE came into effect the present Chief Engineer, Lt Col S.D. Jameson made it clear that 6th Field Squadron would remain in the Order of Battle. It would be called 6th Independent Field Squadron and consist of a Headquarters troop and two field troops. As a result the Council's proposal was resubmitted and approval in principal for the Freedom to be accepted was recieved from the Chief of General staff, Maj. Gen. R.G. Williams, CB, MBE. Further discussions with the council resulted in the date being set at the 8th February 1985 which would be at the conclusion of Annual Camp.

Drill rehearsals for the parade were conducted by Sgt MJR Walters (RF) and Sgt P Mikaere (TF) whilst the requisitioning of ceremonial clothing and equipment were organised by SSgt BA Cosford. All personnel took to the task of putting on a fine show. They were soon to be in the public eye and unit pride was the spur to sustained effort required to produce a high standard of drill and presentation. Some of the rehearsals took place during annual camp "in a grove of Karaka trees and succeeded in frightening a number of wood pigeons." This was hard for the Maori members of the unit to take as no doubt they were thinking of pigeon pie instead of drill. However the enthusiasm for the coming event grew daily and one could see shovels with imaginary bayonets being fixed during the quieter moments.

Upon the return to Pattie Street the polishing of drill movements and boots began in earnest. Time was short and the "DAY" was not



far off. Fifteen sappers undergoing their specialist training at SME were released by the Chief Instructor for the day so that they could attend their unit's big day.

Finally the 8th arrived. Smart uniforms, lemon squeezer hats, highly polished boots and all was ready. The Band of 7 Wellington Hawkes Bay Regiment arrived 30 minutes before the parade was to move off and took their place at the rear of the procession. At 1530 hours the SSM (WO 1 Oliver, BEM) handed the Parade over to Major Tovey who gave the orders and the unit marched off to their appointment to receive their charter.



Maj D. Tovey leads 6th Independant Field Squadron out the gates of Pattie Street Camp.

A short distance from the camp the parade was halted by a member of the local constabulary who "questioned the right of the Squadron to be marching throught the streets." The challenge was answered that it was "6th Independant Field Squadron marching to receive the Freedom of the Borough". With this the parade was permitted to pass and entered the Petone Recreation Ground where they were dressed off and made ready to recieve the official guests. The first to arrive was the Colonel Commandant of the RNZE, Col K Christie, MBE, ED, followed by Brig E.J. Torrance OBE the Commander of Support command who was in turn followed by the Mayor of Petone, Mr Ron Marston who took the final General Salute before the Charter ceremony began.

The Mayor was invited to inspect the ranks of the Squadron after which he complimented the members of the unit on both their dress and bearing. He then spoke briefly on the association of the Squadron and the Borough, and noted that there were many in the Hutt Valley who were unaware of the of the existance of the unit. This was attributed in part to the good behaviour of the camp and its occupants.

Following these remarks the Charter was read by the Town Clerk then passed to the Mayor who formally handed it over to the

Colonel Commandant. Col Christie stepped down from the dias and passed the scroll over to the safe keeping of the Charter Party. To reciprocate, and cement the bond made by the presentation of the Charter, Col Christie then handed to the Mayor a General Service shovel (made in 1918 by Brades Co) which had been chromium plated and mounted on a timber shield by Sgt Hansen, the RNZE carpenter at Base Workshops.



## Charter

### The Sixth Independent Field Squadron, Royal New Zealand Engineers

Whereas the Mayor, Councillors and Citizens of the Borough of Petone, New Zealand, being sensible of the honourable traditions of the Sixth Independent Field Squadron, Corps of Royal New Zealand Engineers, and being desirous of recognising, cementing and fostering the intimate association which is now and has for so long been enjoyed between the Borough and the Squadron.

And therefore the Mayor and Councillors of the Borough of Petone confer upon the said Sixth Independent Field Squadron, Corps of Royal New Zealand Engineers the right and privilege without further permission being obtained of marching (when such processions are approved) with swords drawn, bayonets fixed, bands playing, drums beating, and colours flying, through the streets of the Borough of Petone, and

Do hereby accept the honour of viewing the Sixth Independent Field Squadron, Corps of Royal New Zealand Engineers, once in each year for the purpose of an inspection by His Worship the Mayor, and

Do hereby accept the honour of having two officers of the said Squadron in uniform in attendance upon His Worship the Mayor on important official occasions.

The Common Seal of the Petone Borough Council was hereto affixed pursuant to a resolution of the said Council this 8th day of February 1985 in the presence of

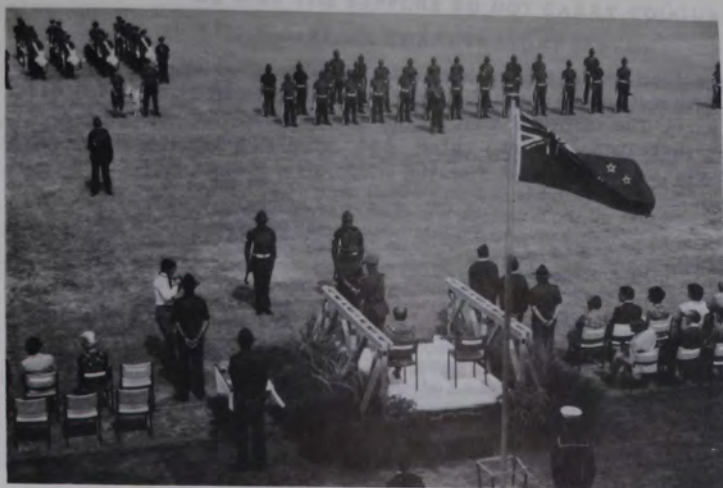
*Commissioner F.R.* Mayor

*M. J. [Signature]*

Town Clerk







Col Christie handing the Charter over  
to the Charter Party to take into safekeeping.

Following this ceremonial exchange The Mayor presented the Efficiency Medal to Cpl Roy Dale who had qualified for the award through service in both the Royal Engineers and the RNZE. Prayers by the Padre (and by the instructors that the next movement "fix bayonets" would be creditable) and the final general salutes now brought the ceremony to a close. The guests then departed and the Squadron marched off the parade. They continued through the streets of Petone into Jackson Street where curious bystanders moved to the edge of the footpath to get a better view. Soon an "eyes left" was ordered as a final salute as the unit passed the Mayor and guests now assembled outside the Council Chambers.



The unit returning to Pattie Street after the  
Charter Parade and March Past the Council Chambers

Comments from the military personnel who attended the parade were very favourable and due credit was passed to all who each did their part. The OC later that night also showed his appreciation of the sustained effort which had produced a most creditable result worthy of the unit and the Corps.

Sgt M.J.R. Walters

**ANGER AT NEW FRENCH NUCLEAR TEST:** New Zealand Premier David Lange has claimed that France is "hell-bent" on further, bigger nuclear tests at Mururoa, in the Pacific. The latest, on 7 December, had a yield of 70 kilotons. "The size of this last blast means that they have become utterly reckless, quite careless of our interests", said Mr Lange.

**OMAN RECRUITING OFFICERS:** Local reports indicate that a recruiting team from the Sultanate of Oman interviewed about 70 officers in New Zealand late last year. Those interviewed included officers ranked up to colonel and covered a wide range of specialist fields including former members of the élite Special Air Service. Tax-free salaries of more than \$NZ100 000 a year (almost triple the salaries which middle ranking officers receive in New Zealand) for two-year contracts are said to have been offered. The number of officers who have received and accepted firm offers is expected to be known early next month.

**AUSTRALIAN RECRUIT TRAINING:** Australian Minister for Defence, Gordon Scholes, has announced that junior recruit training at HMAS Leeuwin, in Fremantle, Western Australia, will end in December as the number of junior recruits has declined from about 600 in 1977 to about 80 this year.

**AUSTRALIAN DEFENCE FORCE:** Total strength of the Australian defence force, excluding reservists, was 70 856 at the end of October, according to latest official figures. Strengths of the individual services were: navy, 16 306, army, 31 963, and air force, 22 155.

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**PAPUA TROOPS DEPLOY TO BORDER:** According to Australian sources, Papua New Guinea is deploying troops along the border with Indonesia's Irian Jaya province. An initial company of 120 troops has been flown into the Amanab Green River area, a region beset by recent insurrection efforts by the OPM (Free Papua Movement) organisation.

Content removed due to copyright

#### WHAT DID YOU KNOW?

Page 26 quiz

- |                            |                    |
|----------------------------|--------------------|
| 1. Breeds bees.            | 6. Nazareth.       |
| 2. Jamaica.                | 7. A ship's crane. |
| 3. 1840.                   | 8. Anne Hathaway.  |
| 4. 1948.                   | 9. The Fall.       |
| 5. Crescent-shaped pastry. | 10. The Quakers    |



*This amusing article was published in June 1977 edition of the Royal Australian Engineer magazine "The Sapper" and we are grateful for the permission of both the Editor and Author to republish.*

WHEN the Duke of —, a son of Queen Victoria, was undergoing training as a Sapper officer he had occasion to visit what is now known as a wine bar with some of his fellow officers. Whilst imbibing the fruit of the vine they were accosted by some infantry officers who, in the manner so typical of their ilk, proceeded to attempt to take what is now known as the "Michael" from the Royal Duke and his friends. The main theme of their attack was the fact that the Sappers did not have Colours and that there must be some dark and mysterious reason for this.

His Royal Highness was, not unnaturally, most "unchuffed". (I should perhaps digress here to explain that "chuffed" is an archaic English word much used by the military which means delighted.) So unchuffed was he in fact that upon his return to Chatham Barracks he penned the following note to his mother the Queen.

*Dear Mama (he wrote, for in those days that was the mode of address used by all the best people), I am shocked to find that I, a Sapper Officer and a Royal Duke to boot (this is how they spoke in those days), am in a Corps which has no Colours. Please fix.*

*Your affectionate son*

Once again I feel that I must digress to point out to our non-Sapper readers that our Sapper officer in writing this letter was mindful of his fine sapper training in spite of being a Royal Duke, and in spite of the fact that his Colonel in Chief was his mother. Not for him a verbose and platitudinous missive relying on nepotism to receive assistance. No Sir! Far from it. Rather, in the finest Sapper tradition, he confined himself to the essentials—courtesy, brevity and clarity.

The Master General of the Ordnance, an officer skilled in fielding such missives, immediately placed the blame squarely upon several subordinates and at the same time directed them to turn their immediate and full attention to the business of investigating and authorizing the issue of Colours with appropriate Battle Honours to the Corps of Royal Engineers. As a result of their efforts he was able, in a space of time which would make a Russell-bound bureaucrat blanch, to pen the following letter to his Sovereign:

*Ma'am, Having severely reprimanded those responsible for this monstrous slight to His Royal Highness' Corps, and having caused immediate investigations to be carried out, I now have the honour and pleasure to report as follows:*

*Sappers have been present at every battle and engagement conducted by British forces against the enemies of the realm. They are therefore, without question, entitled to bear Colours.*

*The size of the Colour required, if all of the battle honours to which the Corps of Royal Engineers is entitled are to be emblazoned on it, is computed to be 24 feet by 12 feet and, to support such a Colour a staff 22 feet 3½ inches long would be required (note the precision—a precaution in case the Queen checked).*

*It is however Ma'am, my regrettably odious duty to inform Your Majesty that, desirous as we are to accord the Corps of Royal Engineers those honours to which it is undoubtedly entitled, to do so in the normal manner is not possible. This Ma'am is because the officer required to bear this Colour would have to be at least 18 feet tall and I am informed by the Commander in Chief (at that time the Duke of Wellington) that there exists at the present time a grave shortage of 18 foot tall officers. Indeed currently he knows of none, neither can he envisage any improvement to this situation for some time to come.*

*Your Majesty will of course recall that your Royal Regiment of Artillery is also entitled to use the motto UBIQUE. In this regard, and in order to avoid confusion, and perchance some diminution to the lustre pertaining to the Corps selected by his Royal Highness, I would respectfully suggest that as a further mark of distinction the following translations of Ubique be officially prescribed for use by the Corps of Royal Engineers and the Royal Regiment of Artillery respectively.*

*For your son's Corps (note the obsequious reference to the son of the Monarch) it is recommended that the translation "Everywhere" be granted. This in one word will serve admirably to still further enhance the already matchless reputation of your Corps of Royal Engineers. For the Royal Regiment of Artillery the translation of "All over the place" will, I think, suffice as a fair translation.*

*I have the honour to remain Ma'am*

*Your obedient servant*

Master General of the Ordnance.

You will no doubt, dear reader, having been obliged to wade your way through the overly long and convolutedly phrased letter of the Master General of the Ordnance, be longing once more for another sample of the laud phraseology so succinctly employed by our royal Sapper Officer. You shall not be disappointed.

In reply, brief as ever, and in a manner befitting the mother of a Sapper Officer the Queen wrote:

*Dear General, I like it, so be it, fix it!*

Victoria R

# RNZE OVERSEAS DEPLOYMENTS SINCE 1945

- 1946      5 NZ Engr Company in Japan as part of the Commonwealth contribution to the Occupation Forces. Unit was formed from NZE personnel in 2 NZ Division in Ital and proceeded directly from Florence. Unit was withdrawn and disbanded in 1948. OC Maj G. Bunce.(RF).
  
- 1950      Base Engineer Section leaves for Korea. A troop served with the British Army as part of a composite field company.  
  
A section involved as part of 12 Field Park Squadron R.E.  
  
A section also involved with the construction of a hospital in Korea.
  
- 1952      Sgt T.W. Dench (later Maj) on two year exchange with RE. Spent his time at SME, Chatham, principally with bridging wing.
  
- 1954      RNZE personnel withdrawn from Japan and Korea.  
  
Sgt K.F. Malloch (later WO 1) on two year posting to SME, Chatham, United Kingdom, Plant Wing. Returned about Jun 56.
  
- 1955      Small number of RNZE personnel go to Malaya and serve with NZSAS (as part of 22 SAS Regt). These included Lcpl G.D. Grieve (later WO 2) and Spr W. Edwards who left the army shortly after his return to NZ.  
Tpr G.E. Goldsworthy (who was not an engineer at the time became one shortly after his return to NZ in 1957. Later became Major RNZE.
  
- 1956      Sgt C.R. Parker (later Major) departed 30 Jun on a two year exchange posting with RE to September 1958. Posted to SME Chatham, Feild Engineering School.
  
- 1957      Individual members of RNZE serving with 1 NZ Regt in Malaya during the Emergency. The Corps has had a small number of personnel with each successive battalion since. Personnel included Lcpl M.T.O.T. Nepia, (later WO 1), Spr H. Ormsby, (later Cpl), Lcpl N. Pouwhare (later SSgt) Spr Harty.  
  
About this time RNZE first involved with DSIR Antarctic Division upgrading accomodation on the antarctic continent.
  
- 1959      Personnel serving with 2 NZ Regt include Cpl K.A.L. Dahm, Lcpl McPake, Lcpl E.I. Watson (later WO2). Spr N. Beecroft.
  
- 1961      A team deploys to Antarctica for building tasks.  
  
Personnel in Malaya with 1 NZ Regt includ Sgt B. E. Malloch (platoon sergeant Assault Pioneer Platoon) Spr I.E. Lamb, Spr K. Jorgensen, Cpl K.Woods,(later



Major MBE) Sprs W. Hudson, W. Kaio, F.W. Rawiri (later changed corps to infantry) Lcpl G. Lockwood, Spr B. Findlayson, Cpl W.G. W. Williams (later T/Maj). Fifteen of the eighteen in this platoon were RNZE pers.

1963 7 May. A Reef Gapping team departs for the Tokolau Island to create navigable gaps in the reef for islands shipping. Parties continued to go there until 1965.

1964 2 Plant Troop activated (17 Feb) and departs for airfield task in North East Thailand (Operation Crown), on 7 March. Remains in area until 1965.

New Zealand Aid Detachment (NEWZAD) RNZE formed and announced by Government on 25 May. Sent to Vietnam in June, arriving on 29th in Saigon. First NZ presence in Vietnam. Returns to NZ in 1965.

RNZE personnel in the infantry battalion involved with confrontation against the Indonesians in West Malaysia. Appointments were mainly in the Assault Pioneer Platoon but some were in infantry rifle platoons. Personnel include Cpl M. Carew, Cpl H.E. Chamberlain, Lcpl Broughton, Spr D.A. McKelvie, Spr E.F. Lamb.

Second team departs for Tokolau Islands.

1965 5 Specialist Team (Road Construction) RNZE raised and departs for Thailand for feeder road construction. Advance party arrives in Thailand in November. Remains until 1971.

RNZE personnel involved with confrontation against the Indonesians in Borneo as members of 1 RNZIR. Similar appointments to above. Some members of the Corps also serve with 1 NZ Ranger Squadron (NZSAS) in Borneo.

Reef Gapping in Tokolau Islands. Capt R. Treanor team leader, SSgt H. Waiwaitai, Lcpl B.J. Knowles, Spr W. Nathan, Spr R. Helmbright. Jun-Jul to Sep.

1966 RNZE personnel involved (for second time) in Borneo with 1 RNZIR. Only about seven personnel of the Corps attached to the battalion and two or three attached to 1 Ranger Sqn NZSAS.

1967 RNZE personnel involved with 1 RNZIR in Vietnam, and 161 Battery, 16 Fd Regt, RNZA. Personnel attached to 161 Bty were mainly plant operators and drivers.

## foam as camouflage agent

THE ARMY OF SWEDEN has announced development of a chemical foam as a camouflage material. Combined with additional camouflage devices, the foam gives full protection against all optical and electro-optical surveillance methods.

The foam's main objective is to change the infra-red signature of vehicles, tracks and other military equipment. Sprayed on the subject, in conjunction with standard camouflage nets and natural cover, the foam is resistant to weather, clings well to all surfaces, and can be coloured to blend with its surroundings.

Once spread, the foam takes on the environmental temperature, becoming indistinguishable from its background by infra-red detectors.

FFV has developed modularised foam-laying equipment which can be adopted to various vehicles or to fixed installations.

- 1970 RNZE Construction Team depart in December for Vietnam to construct quarters for the New Zealand Army Training Team (Vietnam) at Chi Lang. Team departs NZ during December. Team leader
- 1971 January. Sgt W.A.Kearny departed for Vietnam as a member of the 1st NZ Army Training Team, (NZATTV). Only RNZE member of the team.
- Capt 'Dick' Sampson leads a small team to Tawara Island in Gilbert and Ellis Group to construct a large water reservoir. Task took from July until September 1972.
- Hurricane "BEBE" created considerable damage in Fiji. A repair team from RNZE assisted rebuilding schools and housing from September until March 72.
- 5 Specialist Team disbanded wef 15 Dec 1971.
- 1972 Hurricane repair teams in both Fiji and Rotuma. Last team returns to NZ in March 73.
- January. Lt R.A. Barrett posted to 2 NZ Army Training Team Vietnam (2NZATTV). Served there for nine months before doing a two month stint in Saigon as G3 Ops. Returned to NZ in November.
- Approximately 118 RNZE personnel served in Vietnam either with RNZE teams or attached to other units.
- 10 Feb. Maj R.K. Rutherford on exchange to United Kingdom. Held appointment of 2ic 22 Engineer Regiment at Tidworth. Returned to NZ in May 74.
- The R.E. officer on exchange was Lt Col J.M. Harman RE, who held the appointment of Chief Engineer, Army General Staff. He subsequently took his discharge in NZ and joined RNZE as a Territorial Force officer.
- 1974 Harbour extension work carried out in Atiu in the Cook Islands. The job took longer than expected (14 months) and had number of replacement teams. The first team of 30 personnel was lead by Capt Ken Woods. Some other personnel who were involved were Lt G.R. Jason-Smith, Lt J.S. Hollander. Task was for Department of Maori and Island Affairs.
- SSgt H.E. Chamberlain in North Sumatra, Indonesia, managing a soils laboratory for P.T. Erba Coy (a subsidiary of Beca, Carter, Hollings and Ferner Auckland) from August to November. Task was to investigate the soils in the area of a proposed liquid natural gas plant.
- Lt S.A. Heaton leads a small team of ten RNZE personnel to Antarctica for reconstruction tasks at Scott Base. The team departed after Christmas and arrived back in NZ 16 Feb 77. Task was to construct a summer laboratory.
- 1975 November. Capt R.A. Barrett seconded to United Nations Organisation as an observer in Pakistan and India. He



was required to observe the situation in Kashmir.  
Returned to New Zealand in November 1976.

1977 19 Jan. Maj A.T. Beaver posted on exchange to 3 Fd  
Engr Regt RAE (now disbanded) as Ops Officer. Capt A.R.  
Adair, RAE posted as Training Officer, SME Linton.  
Maj Beaver returned to NZ 8 Jan 79.

A small team had to return to Atiu, Cook Islands to  
repair scour damage to harbour wall.

Sgt J.J. Campbell killed in a rock fall in Papua-New  
Guinea whilst working on a road project for Volunteer  
Service Abroad. Nominated for BEM but did not receive  
the award. (No posthumous awards.)

June. 2 Field Squadron (sixty personnel) including TF  
Commanded by Maj A Anderson deployed to Fiji for Civil  
Aid projects. Tasks were principally water supply (a dam  
and 2000 metre pipeline at Nambukavesi) and foot bridge  
construction.

1978 During February 1978 3 Field Squadron deployed to the  
Chatham Islands for civil aid tasks, mainly bridging.  
Although regarded as part of New Zealand proper the  
logistic support required was similar to that needed  
for a Pacific Islands task. Some 160 persons were  
deployed for the task. Maj John Bell (TF) OC of the  
unit at the time.

April - October. An RNZE Diving Team departs for Tuvalu  
(formerly Ellis Island of the Gilbert and Ellis Group)  
for reef gapping tasks. The team was commanded by Lt  
W.G.W. Williams.

31 Jul. WO 1 E.W. Bruce, and SSgt G. Findon depart for  
Moscow (arriving 8 August). The main party of 10 RNZE  
personnel arrive shortly after to refurbish the  
NZ Embassy for the Ministry of Foreign Affairs. The  
team personnel worked under very poor conditions during  
the whole tour. The building was a four story structure  
and the MFA had to ensure that the external appearance  
was not changed nor was the building to be weakened in  
any way. The building dated from the turn of the  
century. The winter through which the team worked was  
reputed to be the coldest on record (-45 Celsius)

**INNER GERMAN BORDER MINES:** SM-70 'Ratte'  
directional fragmentation mines (JDW 23 June) have been  
removed from 200 km of the eastern side of the Inner German  
Border fence, according to reports from Bonn. It is thought they  
are being replaced by some form of new optical and/or acoustic  
alarm system.

**IRAQ DENIES CW REPORT:** Reports that Iraq is  
constructing a plant capable of producing CW gases have been  
dismissed as "Imperialist and Zionist propaganda" by Iraqi  
Information Minister, Latif Nusayyif Jasim. The Minister claimed  
in Baghdad that false allegations had also been made about Iraq's  
Tammuz nuclear reactor prior to the Israeli bombing raid of 1981.

September. 3 Field Squadron mount team for Scott Base reconstruction works. This will be a continuing task for the RNZE for x years to come. Lt S. Ransley the team leader. Departed 23 Oct, returned to NZ Jan 79. Team included Sprs Dew, Pugh, and Wilson.

In December a reconnaissance party of 14 led by Maj Andy Anderson of 2 Field Squadron, visited Solomon Islands to investigate a number of tasks which could be carried out as aid tasks. These tasks were mainly basic water supply. Other personnel on the team included WO2 Chamberlain, Ssgt Hughes, SSgt Greig and Sgt Harris. The team was delayed on the return to NZ because of an aircraft malfunction and eventually arrived back on 26 December.

1979

1 Field Squadron deployed (29 Jan) to the Kingdom of Tonga to construct an 800 metre causeway between the Islands of Lifuka and Foa. The task was formally opened by the King of Tonga on 8 Sep 79. The task was not without its problems caused by poor reconnaissance.

April - October. A second team deployed to Tuvalu for reef gapping tasks.

Second team advance party departs for Moscow (11 May) under command of WO 2 A.J. Sinclair. The sappers were accommodated in either the attic or basement (depending on where the work was being done) on camp stretchers.

Major J.A. Tymkin and WO2 Chamberlain return to Solomon Islands (28 Aug - 11 Sep) for further information regarding the possible tasking of 2 Field Squadron.

Third team advance party deploys to Moscow August and October. The team leader WO 2 A.P. Hawkins arriving after some of his team.

1980

2 Field Squadron with assistance from both 5 Support Squadron (Phase 3 [12 Jun] six offrs, 62 ORs) and some manpower from 6 Field Squadron (3 x sections) carried out water supply tasks and some bridging tasks in the Solomon Islands. The first person (WO 2 Chamberlain) departed NZ on 11 February, the Advance party (led by Capt Lock) arrived on 2 April, followed by the first task team (Phase 1, 4 Offrs and 55 ORs) 21 April. Phase 2 (2 Offr and 58 ORs) changed over on 13 May. Phase 3 (12 Jun as above), and Phase 4 (3 Offrs and 58 ORs) changed over on 1 Jul. The final party returned to NZ on 14 August. The RNZAF supported all moves of personnel and equipment. The opportunity to work overseas was appreciated by all.

13 Mar. Sgt M.A. Petterson posted to SME Casula (Australia) on two year exchange. SSgt J.K. Arnold RAE was the reciprocal exchange instructor to SME Linton.

25 Jun. Three senior NCOs and three ORs from 1 Field Squadron depart for hurricane relief tasks in Fiji. Team lead by Ssgt T.E. Gilbert supervised house construction (completed seven) in the Navua District



south of Suva.

2 Jul. One officer (Lt G. Bruce), one senior NCO and 12 OR (incl 9 TF some Inf) depart for RAOUL Island to upgrade the causeway and carry out track maintenance. All 1 Fd Sqn personnel. A number of factors (including loss of stores and damage to the boat through a storm) contributed to this task being one of the less successful of our overseas enterprises. The team was recovered by RNZN on 3 Aug.

August. 3 Field Squadron mount team for Antarctic tasks. Reconstruction of Scott Base amenities. Team leader Lt N.K. Gattsche, 2ic Sgt M Vincent (1 Fd Sqn) Some of the team returned to NZ in late December whilst most of the team returned late Jan 81. The team leader returned by US Coastguard icebreaker.

September. Spr Cannon (5 Spt Sqn) assists DSIR in Antarctica for three months as their plant operator had been severely hurt in an accident.

1981 Maj S. Dickson returns to Solomon Islands to undertake a technical inspection of tasks carried out in 1980. There appeared to be a problem which in fact turned out to be one principally of education, although there was a problem with with some of the gate valves. The local people where hydraulic ram pumps had been installed did not remember how to start the pumps when water levels had temporarily fallen below the intake.

1982 February. Capt C. Hague posted to Sinai as Engineer Advisor to the Multinational Force and Observer organisation. (2ic of the Engineer effort in the area.) Returned to NZ March 83.

2 March. The OC 1 Fd Sqn (Maj Goldsworthy), two senior NCOs (Wos 2 Sinclair and Archer) and eleven ORs to Tonga to reconnoitre and reconstruct essential services damaged during "Hurricane Isaac".

24 May. Capt B.J.Knowles and WO1 T.N. Archer from 1 Fd Sqn depart for Tonga to carry out a reconnaissance on carpentry and diving tasks. (Possible construction of a gymnasium and workshops and further reef gapping task.)

22 Jul. Lt G.E. Pullen, SSgt T. Te Uira and Sgt M. Vincent and four sappers involved in diving tasks in Tonga as a result of the reconnaissance carried out in May. Team returned to NZ in September.

August. 3 Fd Sqn mount team for Antarctica once again. Most personnel came from 2 Fd Sqn, 2 plant ops from 5 Spt Sqn, and a painter from 1 Fd Sqn. Most remained until February. Team leader Lt B.D Kenning, 2ic A/Sgt W. Bryce.

September. One senior NCO deployed to Tonga to supervise hurricane reconstruction tasks.

1983

February. Capt D.J. Begley on two year exchange with RAE. Posted to HQ 2/3 Fd Engr Regt (7 Fd Sqn). Capt T.J. Walding RAE, posted to SME, Linton, as RAE exchange officer in the appointment of Training Officer.

March. Maj A.T. Beaver posted to Sinai to MFO as Engineer Advisor. Returned to NZ February 84.

9 Jun - 26 Jul. The New Zealand Government was requested by the United Kingdom Government to assist with a reconnaissance of Pitcairn Island jetty damage. Major G.R. Jason-Smith was detailed for the task and travelled both ways by ship. Some other tasks were also reviewed but were peripherals to the main task. The request was made as R.E. were fully committed during the Falklands War. This was a much lesser known and indirect assistance afforded to the UK by NZ during the South Atlantic War.

1984

February. A/Maj S.G. Ransley replaced Maj A.T. Beaver at MFO Sinai. Returned to NZ Feb 85.

Cook Islands. Avatiu Harbour phase one. A team under the command of Capt B.J. Knowles employed in removing coral to widen the harbour. 2ic Sgt B.J. Hutton (became known for wearing bright orange overalls underwater.)

December. Capt J.A. Lock posted to United Nations Organisation to act as an observer in Golan area of Israel.

1985

29 January. Personnel from 1 Field Squadron Lt R.C. Cassidy, SSgt B.J. Clark, SSgt B. Akari (from SME) Sgt F. Graham, Sgt T.W. Oakes journey to Fiji to assist with hurricane relief. This occasion was notable as two hurricanes hit the islands within four days of each other.

## Vehicle mine dispenser

THE AAI CORPORATION can usually be relied on to come up with something novel, and at the US Marines Corps exhibition it displayed two new systems. One was a simple but obviously effective mine dispenser for mounting on just about any vehicle with a 24 V supply and capable of dispensing M74 (anti-personnel) and M75 (anti-tank) mines.

The principle behind this device, which is a company-funded project, is disarmingly simple. A magazine containing five mines is clipped on to the launcher and mines are fed individually into the launcher by operating a hand lever. As each mine is fed into the device it comes into contact with a rotating rubber tyre which whips the mine around the dispenser interior and hurls it at speed through a slot. Using this system mines can be launched to about 36 m from the carrier vehicle and such a simple and relatively light device could find many tactical uses.

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An Admiralty computer sent naval recruit Peter Ball some instructions. He was told: "Pack five bras and several pairs of knickers. Wear light make-up, but no red nail varnish."

The odd orders arrived because he was the first male to join Queen Alexandra's Royal Navy Nursing Service and nobody told the computer.

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# Pacific Report

**CAMOUFLAGE CREAM 'A LUXURY':** Sweden's customs authorities have decided that personal camouflage cream should be considered a "cosmetic" and be subject to import taxes relating to luxury goods. The Swedish Defence Material Department has received a bill for Skr70 000 (£11 000) because of the decision.

## KENILOREA IS SOLOMONS P.M.

Solomon Islands has a new prime minister, Sir Peter Kenilorea, who was opposition leader until the November vote of the 37 members of parliament. The new parliament, elected on October 24, met to hold a secret ballot on who should be prime minister. The outgoing leader, Solomon Mamaloni, attracted only 13 votes — 12 from his own People's Alliance Party and one from the New Democratic Party. Sir Peter Kenilorea gained 21 votes, 13 from his United Party, four from the new SAS Party, and four independents. Three members of parliament abstained. At a press conference after the vote, Sir Peter said one of his main priorities would be to resolve the dispute with the United States over the Solomon's seizure of an American tuna boat in July. Sir Peter said he would also return the Home Affairs Ministry to the control of the Central Government, rather than leave those powers with the provinces. He said he would scrap a plan by the former government to set up a brewery in the capital, Honiara, and would attend to a demand by public servants for higher pay.

## PNG: TROOPS MAY BE USED TO COMBAT CRIME

Police in Papua New Guinea have been given the power to call in troops to help fight crime. Prime Minister Michael Somare said the police commissioner would be given the power to call out and control the troops to assist police in maintaining law and order. He said the use of the defence force was part of the government's package to control crime. The PNG government said it would introduce the package after mass public protests over a series of rapes. Mr Somare said serious crimes had increased dramatically since PNG gained independence from Australia in 1975. This had created serious effects on public confidence in law enforcement, and diminished business confidence. The prime minister said one of the most serious problems facing the police was a lack of manpower.

## A.D.B. CALLS FOR SHAKE-UP IN W. SAMOA

A report by an Asian Development Bank mission of inquiry into the economy of Western Samoa has recommended a massive shake-up in existing structures if the country is to achieve agricultural development. The six-volume report recommends the formation of a national planning committee, replacement of the existing cocoa and copra boards with one export development board, and the putting of the Western Samoa Trust Estates Corporation (WSTEC) "above politics." The mission saw "an overwhelming need for a national body to develop a common policy perspective for agriculture," and said the proposed national planning committee could fill this role.

## FRANCE SAYS "NO" TO JOINT VISIT PLAN

France turned down a planned joint visit late last year to New Caledonia by the leaders of five South Pacific nations. Port Moresby authorities said that although the French Government cancelled the joint trip, it advised the five prime ministers concerned to make separate trips if they want to gain a better understanding of the different political groups in New Caledonia. The last South Pacific Forum meeting in Tuvalu appointed a team comprising the prime ministers of Papua New Guinea, New Zealand, Western Samoa, Fiji and Vanuatu to meet political leaders in New Caledonia to discuss the colony's future.

## NEW CALEDONIA "OUT OF CONTROL" — LINI

The Prime Minister of Vanuatu, Father Walter Lini, is reported to have warned of further violence in New Caledonia if France does not move quickly to grant independence to the territory. In an interview with the American news agency Associated Press, Father Lini claimed the situation in New Caledonia was out of control following the November 18 election for a Territorial Assembly. He said France's socialist government was now in a difficult position, as it had to deal with the conservative Republican Party which won most of the seats in the assembly. Father Lini said Vanuatu would not raise the question of New Caledonia with the United Nations

committee on decolonisation. However, he said it would not hesitate to report to the U.N. on what he termed "the real situation" there. Asked why Kanaks had sought Libyan assistance and military training, Father Lini said this was because neighboring Pacific countries as a group had failed to help them.

## FJI: KOYA NAMES NEW SHADOW CABINET

Fiji's Opposition Leader, Siddiq Koya, has named a new shadow cabinet. Mr Koya retains responsibility for foreign affairs, and the line-up includes a former attorney-general, Sir Vijay Singh, as shadow minister for finance, and the Deputy Opposition Leader, Mrs Irene Jai Narayan, as shadow minister for health and social welfare. The opposition coalition comprises the wholly Fijian Western United Front and the Indian-dominated National Federation Party. The front has endorsed Mr Koya as leader. Two of its leaders, Ratu Osea Gavidi and Ratu Napolioni Dawai, are included in the shadow cabinet. The announcing of the shadow cabinet is part of a streamlining of opposition machinery, and designed to show that the opposition is ready and able to form a government.

## TONGA: THE ROPE FOR DRUG TRAFFICKERS

Tonga plans to extend the death penalty to include traffickers of hard drugs. Speaking in Melbourne, Tonga's Police Minister, Mr 'Alau'ola, said he was working on a law that would make death by hanging an option for Tongan courts when sentencing a person convicted of selling hard drugs. He said his government simply would not tolerate people taking drugs into the kingdom and distributing them among the people. Tonga's parliament voted last year to retain the death penalty for brutal murders after three men were hanged for killing a man with an axe, a spade and a cane knife.

## FJI TO VET IMPORTED ENTERTAINERS

Promoters in Fiji will now have to obtain a government permit before they can bring professional entertainers into the country. They will also have to undergo questioning by immigration officials and work closely with the consumer council when arranging shows. The promoters will also be required to fill in a special questionnaire, giving details such as work experience, financial backing, number of shows, venues and ticket prices. The new guidelines were drawn up by the government following complaints from the public and local entertainers about the standard of some previous shows and the high admission charges.

## RABAU VOLCANIC ALERT IS EASED

Government officials in Papua New Guinea confirmed in December that they have relaxed the level of the alert for the expected eruption of the Rabaul volcano. The alert is now at what is known as a stage one, which means the eruption is expected within months or years. However, the East New Britain provincial disaster committee is maintaining disaster plans in case the volcano erupts within weeks or months. The chairman of the committee, Mr Paulias, said the volcano would definitely erupt, but it was impossible to predict exactly when.

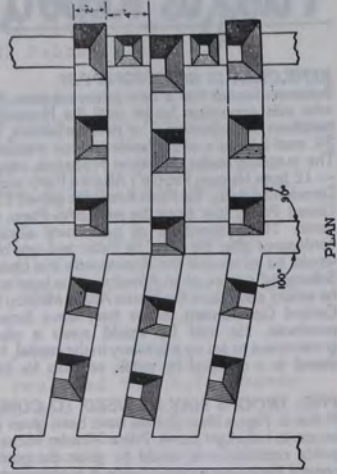
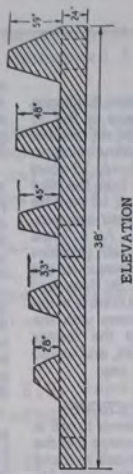
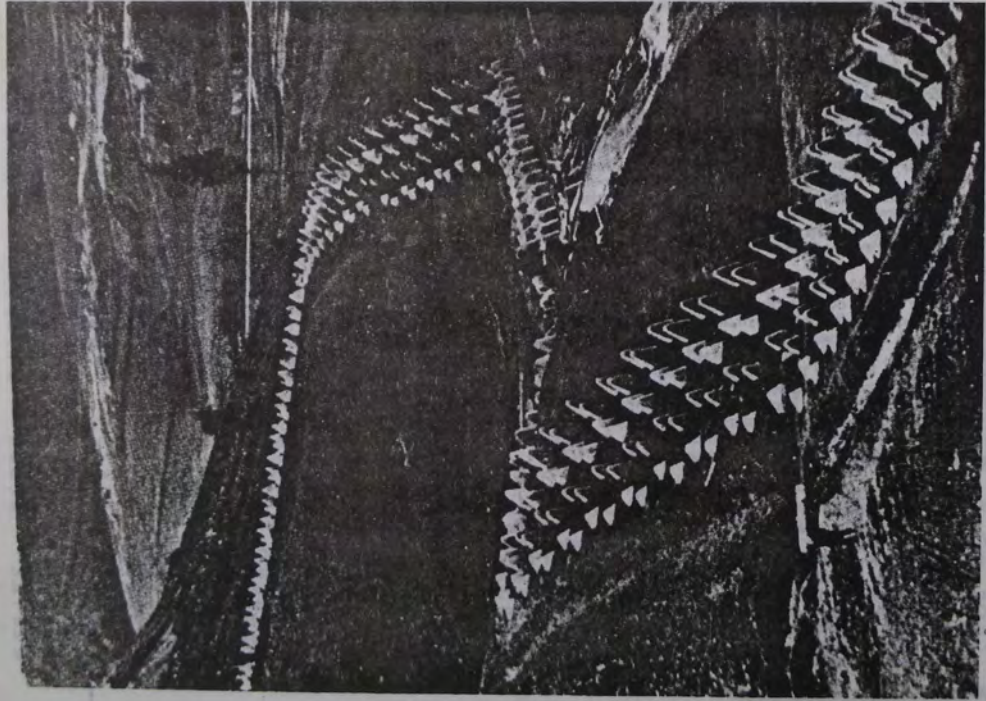
## N-FREE ZONE DECLARATION IN THE DRAFTING

A seven-country committee has been appointed to prepare the South Pacific Forum's declaration of a nuclear-free zone in the South Pacific. The committee is made up of representatives from Fiji, Australia, New Zealand, the Cook Islands, Nauru, Papua New Guinea and Vanuatu. The committee should have its first draft ready by the end of January.

## MR ZEDER TALKS UP MICRONESIA PROSPECTS

Fred M. Zeder II, President Reagan's ambassador to the Micronesia status negotiations, was in Australia and New Zealand in November talking to business organisations about the investment prospects opening up in Micronesia as the Compacts of Free Association with the U.S. come into force. The Federated States of Micronesia and the Marshall Islands Republic have already





5.

3. 'Dragon's teeth': row of four. Two such rows were sometimes used to form a row of eight.

4. Gate through the teeth: the entrance after the teeth was 10' high and 10' wide.

ie Sandor



## FOR THE DEMOLITION BUFFS AMONGST YOU

CALCULATE the amount of explosive required to make an 8 metre gap in the Dragon's tooth barrier. Use the figures provided. See if your answer is the same as SME Demolition Wing.

### the Sandbaggers

This is not a tale of how the Regiment broke an international Spy ring but how, over a sustained period of time, the Regiment was able to fill 400 sandbags per hour with only 5 soldiers.

Once upon a time there was a Commanding Officer who took his Regiment to Annual Camp at Inverness. Part of the work included tasks at RAF Kinloss, and to cut a long story short, required 6500 sandbags to ensure completion of the work. Like all good Sappers, the first reaction was to turn to our bible, the Royal Engineers Pocket Book and other, rarely used, pamphlets relevant to the matter in hand.

"My God!" We cried. "There's no DS solution."

This called for 'Initiative' and soon ideas began to formulate. There were visions, to a greater or lesser degree, of hoppers ready made and improvised from 40 gallon drums on 6 ft. pickets. Others thought they saw pipes coming from tipper tailboards, whilst others had pictures of plant pirouetting and spewing out just sufficient sand to fill a sandbag.

Consultation followed and the end result was a home-made 4 ton tipper tailboard with 3 pipes coming away from the truck. The pipes, produced by a light engineering firm with close ties to the Regiment, can be seen in Fig 1. When put into operation it was found that as the saying goes 'too many cooks spoil the broth' and so the centre pipe was made redundant, but not forgotten. Soon plan Y was adopted and as can be seen in Fig 2 it, involved bastardising an existing tipper tailboard.



Fig 1. Close up of pipe

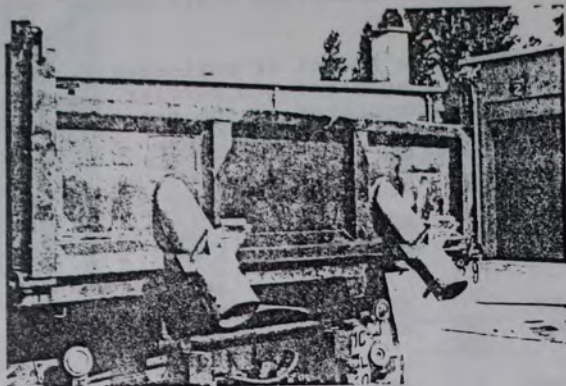


Fig 2. Plan 'Y'



Fig 3. *Modus operandum*

Further consultation followed and work progressed until it was found that 400 sandbags per hour could be filled by 5 soldiers. This rate could be maintained for several hours and, if necessary, could be pushed to 500 sandbags per hour, but only for short periods.

If the pipes had not come from the ducting of a light engineering firm, they were to have been produced with a square cross-section. The door in the pipe was found to be superfluous, due to jamming, although this was overcome by removing some screws and loosening the plate. Furthermore, because the sand was damp, it was easier for the people in the tipper to regulate the flow than if it had been dry and hence a continuous flow produced. The '*modus operandum*' can be seen at Fig 3. The aim of the article is two-fold. First to tell others one solution to the problem and secondly to find out if others have been faced with a similar one. If so how was it overcome? The Regiment would be delighted to know. Finally, the tailboard is currently on show with the Edinburgh Squadron and can be seen on any day providing prior arrangements have been made. The first offer secures the tailboard.

Contact:  
Captain M A Payne  
71 (Scottish) Engineer Regt (V)



## Type 74 minelaying rocket system

The Type 74 minelaying rocket system is intended for the rapid laying of anti-tank minefields in forward areas and is based on the chassis of the CA-30A (the Chinese version of the Soviet ZIL-157 (6 x 6) truck). Each truck carries 10 launcher rails with five rockets above and five beneath. The Type 74 rockets each carry 10 Type 69 or 70 plastic case anti-tank mines.

The launchers are normally deployed in 'batteries' of four and a single battery can lay a single minefield 400 m<sup>2</sup> with one salvo. The maximum range of the rocket is 1500 m and all 10 rockets can be launched from a single launcher in 15 seconds. The usual crew for a launcher is six men with four of them seated behind the driver's cab on an open bench seat. For firing the launcher has two stabiliser legs that are lowered at the rear of the chassis and steel shutters are used to cover the cab windows to protect the glass from the exhaust gases.

The Type 74 rockets are fin-stabilised and carry the anti-tank mines in a bulbous warhead. The rockets are delivered to the launcher in wooden boxes each containing one or two rockets.

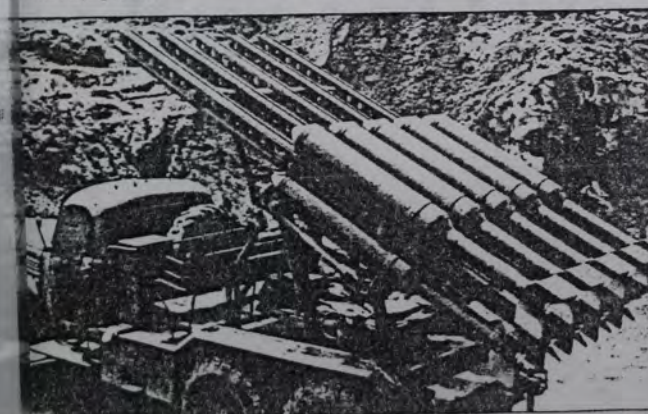


Type 74 minelet rocket



4 minelaying rocket

▲ Type 81 107 mm multiple rocket launcher



## 107 mm ROCKETS

| Type            | HE        | Incendiary  |
|-----------------|-----------|-------------|
| Length          | 841 mm    | 915.2 mm    |
| Weight complete | 18.8 kg   | 18.74 kg    |
| of warhead      | 8.33 kg   | 7.54 kg     |
| of charge (TNT) | 1.26 kg   | —           |
| Burning time    | —         | Max 40 secs |
| Max velocity    | 372 m/sec | 383 m/sec   |
| Max range       | 8500 m    | 7885 m      |
| Fuze            | Jian-1    | Jian-1      |

## TYPE 81 LAUNCHER

|                         |                         |
|-------------------------|-------------------------|
| Length                  | 4.6 m                   |
| Width                   | 1.964 m                 |
| Height                  | 2.185 m                 |
| Weight, travelling      | 3709 kg                 |
| in action               | 3615 kg                 |
| Max speed               | 100 km/h                |
| Elevation               | 0-60°                   |
| Traverse                | 105°                    |
| Rate of fire on vehicle | 12 rounds in 10-12 secs |
| on towed carriage       | 12 rounds in 6-9 secs   |
| Max range               | 8 km                    |

## 130 MM ROCKET

|                    |             |
|--------------------|-------------|
| Length             | 1048 mm     |
| Weight complete    | 32.807 kg   |
| of warhead         | 14.737 kg   |
| of explosive (TNT) | 3.054 kg    |
| Max velocity       | 436.8 m/sec |
| Fuze               | Jian-1      |

## TYPE 70 LAUNCHER

|                           |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|
| Crew                      | 6                                                                                   |
| Combat weight             | 13 400 kg                                                                           |
| Ground pressure           | 0.602 kg/cm <sup>2</sup>                                                            |
| Length                    | 5.476 m                                                                             |
| Width                     | 2.978 m                                                                             |
| Height                    | 2.625 m                                                                             |
| Ground clearance          | 0.433 m                                                                             |
| Track                     | 2.464 m                                                                             |
| Length of track on ground | 3.095 m                                                                             |
| Max speed on land         | 60 km/h                                                                             |
| on water                  | 5.2 km/h                                                                            |
| Range                     | 500 km                                                                              |
| Angle of approach         | 20°/25°                                                                             |
| Gradient                  | 32°                                                                                 |
| Side slope                | 25°                                                                                 |
| Trench                    | 2 m                                                                                 |
| Vertical obstacle         | 0.6 m                                                                               |
| Engine                    | 6150 L in-line 6-cylinder 4-cycle water-cooled diesel developing 260 hp at 2000 rpm |
| Launcher calibre          | 130.65 mm                                                                           |
| Elevation                 | 0-50°                                                                               |
| Traverse                  | 180°                                                                                |

## TYPE 74 ROCKET

|                      |         |
|----------------------|---------|
| Rocket diameter      | 284 mm  |
| Length               | 2470 mm |
| Weight complete      | 127 kg  |
| No of mines carried  | 10      |
| Range for minelaying | 1500 m  |

## TYPE 74 LAUNCHER

|                            |                       |
|----------------------------|-----------------------|
| Weight travelling (loaded) | Approx 8780 kg        |
| empty                      | 6954 kg               |
| Length                     | 6.44 m                |
| Width                      | 2.27 m                |
| Height                     | 2.93 m                |
| Max speed                  | 40 km/h               |
| Length of launcher rail    | 4 m                   |
| Elevation                  | 7°-48°                |
| Traverse                   | 90° left/45° right    |
| Rate of fire               | 10 rockets in 15 secs |

WAR DIARY

NZ DIVISIONAL ENGINEERS

Date 1941 Location

MARCH.

|      |          |                                                                                                      |
|------|----------|------------------------------------------------------------------------------------------------------|
| 1- 2 | HELWAN   | Preparing for shift from HELWAN Camp to assembly area.                                               |
| 3    |          | Left HELWAN 0900 hrs. Arrived AMARIYA 1800 hrs.                                                      |
| 4    | AMARIYA  | Arranging temporary accommodation.                                                                   |
| 5    |          | Standing by.                                                                                         |
| 6    |          | Adj't. embarked on "ULSTER PRINCE".                                                                  |
| 7    |          | Standing by awaiting embarkation.                                                                    |
| 8    |          | M/T and M/Cs sent down to assembly area 1900 hrs.                                                    |
| 9    |          | M/T taken to wharf at ALEXANDRIA A.A. party under CPL Aldersly sent down to report on board M/T Ship |
| 10   |          | Orders received for embarkation.                                                                     |
| 11   |          | Embarked on "HELLAS" and ship pulled out and anchored in bay.                                        |
| 12   |          | Convoy sailed 0600 hrs. Calm day.                                                                    |
| 13   |          | Weather broke about 1900 hrs.. Sea making.                                                           |
| 14   |          | VERY rough seas practically "hove to" all day.                                                       |
| 15   | PIRAEUS  | Arrived PIRAEUS and transported to HYMETTUS Camp.                                                    |
| 16   | HYMETTUS | Awaiting M/T.                                                                                        |
| 17   |          | M/T and party disembark.                                                                             |
| 18   |          | Checking over and preparing M/T for move N. Drew rations, petrol etc for move.                       |
| 19   |          | Left HYMETTUS 0700 hrs. Covered approx. 130 miles and camped.                                        |



30. KATERINE Arrived in KATERINE mid-day.

20. TYRNAVOS Convoy started out 0900 hrs. and camped again at TYRNAVOS.

21. KATERINE Arrived in KATERINE mid-day.

21-31. Establishing HQ.CRE setting out work for Coys. and generally taking over AREA from Greek Army.

APRIL.

- 1- 3 KATERINE All Companies engaged on defensive works, CRE organising engineering work being done by Greek civilians and taking over control from Greek Army. 6 Fd Coy placed sections under DIV CAV. 4&6 Inf.Bds. for defensive work. 19 Army Troops on road work.
- 3 GHANAKORA Engineer HQ moved up to GHANAKORA alongside DIV.
- 4-8  
8 Speeding up of defensive works and preparations for demolitions by Coys. German armd. troops in SALONIKA. Demolitions carried out on ALIAKIMON (2359 hrs) under instructions DIV CAV road bridge left for tactical purposes. Fd Park moving stores back.
- 9 Road bridge over ALIAKIMON blown (0530 hrs) arrangements being made to move back to OLYMPUS line. 3 trucks from HQ took lead through to DOLIKHI during night 9/10.
- 10 Div HQ moved from GHANAKORA back to DOLIKHI. Weather broken and Engineers busy on road over Pass.
- 11 DOLKHI Busy on extra road demolitions etc in KATERINE Pass and getting RE Stores back. Convoy of ASC trucks sent to pick up defence stores in forward area. Rain prevented access but picked up timber and MT spares with a load or two of wire and pickets.
- 12 ASC convoy unloaded timber and stores picked up. Enemy attempting crossing ALIAKIMON. DIV CAV inflicted heavy casualties on their Infantry. 2/Lt Yorke establishing liaison with Australian Corps.
- 13 Demolitions carried out by Lt Chapman as DIV CAV retired to METAXAS line. Still raining.
- 14 CRE inspected demolitions of MAVRONERI AND LOPHOS bridges and arranged demolition of KALOKOURI. Lt. Patterson completed and blew demolitions on 5 I.B. front under instruction of Bdgr. . AT 2 pdrs & carriers isolated in 23 Bn area behind Sanatorium.
- 15 TRYNAVOS Engineers working on demolitions and road repairs. CRE had conference with  
16 ANZAC Corps to tie up demolition programme. 'DIV HQ moved from DOLKHI TO TRYNAVOS. Coys on demolition including ELASSON gorge and bridge.
- 17 Preparation and commencement of withdrawal from TRYNAVOS. TRIKKALA bridge blown up by accident.



commenced withdrawal to MOLOS in evening. Original intention to proceed along VOLOS road but report that enemy was in LARISSA changed plans at last moment and moved along main road. Main party of HQ had made slow progress up to midnight. CRE all over the place checking up demolitions and tactical situation etc, arranging for repair on bad section on VOLOS road. CRE sent up to ascertain situation N of ELASSON where German tanks had attacked rearguard. Met Lt. Kelsall who told him how final demolition delayed to let 18 Bn out. Timing thereby upset and Rearguard moving in daylight attacked by aircraft. Enemy cruiser tanks cut off part of column when they were short of KATERINE road junction. Three trucks with men from Lt Kelsall's section were included. Information from CMDR 18 Bn later indicated that these men were badly wounded or killed. CRE made arrangements for delaying demolition of BLACK PILE bridge until all Savage Force out. This was the only way out for them after demolition of TRIKKALA bridge and destruction of detour bridge by enemy dive bombing. After conference at 25 Bn HQ CRE returned to HQ checking demolition parties en route. CRE to STYLLOS placed road blocking parties at edge of village and 20 Bn Coy (less one platoon) to cover LAMIA to assist anticipated withdrawal of LEE Force. Boat destruction completed and party withdrew firing road demolitions as they went. Party now included Capt. Woolcott, Lts Lindell and Hector as well as CRE.

- 51
- 19 MOLOS HQ main party under Capt. Carrie arrived at MOLOS about 1700 hrs after very trying time being attacked from the air several times while the convoy was congested on the road especially near PHARSALA. CRE choosing demolition sites approx. 30 miles from LAMIR near PALASQIA also visited BOWSTRING bridge- arrived at HQ at approx. 1700 hrs. 7 Fd Coy. instructed to take over demolitions from RES.
- 20 CRE organising Engineer defensive works, demolition etc. and destruction of boats.
- 21 KNIMIS Shifted HQ up alongside 6 Fd Coy behind Cap KNIMIS. CRE arranging for repair to roads etc. RE Stores situation bad owing to blowing up of trucks at LAVADIA STN.
- 22 CRE at conference to organise withdrawal and final evacuation of GREECE. CRE given CMD Rearguard for move from MOLOS.

APRIL

23

CRE organising rearguard. Lts Peacocke and Yorke on reconnaissance to ascertain if possible coastal route direct from LEVANTES to KHALKIS to assist withdrawal of rearguard to KHALKIS. NO route located and Officers back to HQ position at 1800 hrs. to find HQ had commenced withdrawal about 1500 hrs Capt. Carrie, Capt McFarlane Sprs McRae, Hector & Gough remaining with CRE in rearguard. Lts Peacocke and Yorke left at 1930 hrs in endeavour to connect with HQ. Caught up with convoy but did not see anything of HQ.

24

Near ATHENS

Convoy arrived in area near beach NW ATHENS just before daylight after a bit of confusion in ATHENS due to the convoy being split up and nobody knowing where we were due to go. Australian Staff Officer finally guided us to area. Camouflaged vehicles and kept under cover all day. Lts Peacocke & Yorke failed to find rest of HQ. Moved down to beach at dusk, destroyed PU and embarked on lighters to be taken out to transport GLENGYLE.

25

CRETE

GLENGYLE and convoy sailed approx. 0330 hrs Everyone very weary. Arrived SUDA BAY about 1600 hrs fairly uneventful trip with two or three air raids alarms. Disembarked and marched to Transit Camp (2 Miles). Had rest here and cup of tea. Lts Peacocke & Yorke joined HQ here. Continued on a further 4 miles or so during the evening and made Camp for night with 19 Army Troop on Olive grove W off CANEA.

26

SANTA  
MARIO

Moved another 5 miles forward to SANTA MARIO where we were established in olive groves. Rations quite a problem last two days.

27

Resting all day. Major Langbein (acting CRE) attended conference at DIV HQ.

28

GALATOS

Moved back to GALATOS where we joined up with 7 FD COY and 5 Fd PARK Coy.

29

Major Hanson took over acting CRE and commenced an organisation of Engineers to play a defensive role in the tactical scheme.

30

General organisation with limited resources at our command. 5 FD PARK to handle RE Stores. General sorting out and making up casualty returns. Nominal rolls. ETC.



APRIL.

- 22 MILOS CRE given CMD of Rearguard from MILOS. Troops were:- NZ DIV CAV Regt. under Lt Colonel Corruith One Bty. of H.A. under Capt Boulton; six 2 Pdrs under Lt Pomfret; One Bty 2 Pdrs (9 guns) NZAT Regt. under Major Jenkins; One Coy with eleven guns from 27 MG BN under Major White; 22 and 28 (Maori) Bns.
- 23 HQ NZE moved on way back to evacuation point leaving Adj. (Capt Carrie), Capt McFarlane (M/O), Sprs Hector, McRae and Gough with CRE's party.
- 24 News of enemy crossing river and Australians having withdrawn to position back of pass near BRALTOS leaving 6 Inf Bde. in exposed position at MOLOS. Conference R.G. Cmdrs. 1000 hrs. to fix details of withdrawal. Position attacked throughout the day and at least 13 enemy tanks destroyed during heavy fighting. Crossroads at MOLOS being shelled and withdrawal slowed up.
- 25 Forward demolitions blown by 2/Lt P Wildey 0230 hrs after 6 Inf. Bde. rearguard had come through. Withdrawal unopposed. Arranged to cover DELPHI road. Adj. left to stand by first demolition back from LEVADIA. CRE moved ahead to try and gain communication with DIV HQ to ascertain route beyond THEBES which was by main road and through 4 Inf. Bde. covering position near MAZI. Rearguard in by 1130 hrs. Only one enemy bomber while just south of THEBES. Lt. Colonel Corruith takes over Rearguard and joins Armd. Bde. CRE instructed to continue down to CORINTH and arrange final demolitions for withdrawal in PELOPENNESE. Arranged with the Aust. Fd Coy under 4 Inf. Bde. to bring all explosive stores. CRE left DIV HQ with party 2030 hrs and proceeded via CORINTH. Contacted 6 FD Coy demolition parties on CANAL about midnight and pushed on to MILOS.
- 26 Finally located DIV HQ about 1500 hrs. Informed 6 Fd Coy had been caught by airbourne attack at CORINTH but Major Rudd had got out on foot. Bridge on CANAL had been blown. Cmdr. instructed that it was essential to blow road as no AT guns left. NO explosives as Australian Engineers left N of CANAL. Arranged with Force HQ to procure depth charges from destroyer due in MILOS that night. Borrowed demolition party of DIV CAV from Petries' "Straggler" group for job also picked up two Sprs of 6 Fd Coy. Sent remainder of HQ party to wait about two miles from MONEMVASIA beach. CRE down topier 2030 hrs, and procured depth charge from tender waiting for Sunderland Flying Boat. No sign of destroyer so asked Bdr. Calloway to arrange for more depth charges at MONEMVASIA.

APRIL

27

Arrived MONEMVASIA where three depth charges were secured from Greek destroyers aground there; Went out to select site for demolition at 2030 hrs. Waited for convoys to go through before placing charge.

28

Major Rudd with 20 survivors passed through 0200 hrs. All rearguard party had passed through at 0500 hrs though this not apparent as this may have been a gap as the last party were scheduled to pass at 0900 hrs. One depth charge (Greek) placed in road was unsuccessful but two on bridge wrecked it completely. (Site about 16 miles from MONEMVASIA). Conference 1300 hrs re-embarkation. Remaining charges placed in culvert at 2030 hrs. Left this to be fired by Pioneer Officer 24 BN who successfully did this 2359 hrs. This was our last demolition in GREECE.

29

Embarked on "HOTSPUR" during early hours of morning. Arrived CRETE (at SUDA BAY) about 0730 hrs where we transhipped to "COMLIEBANK".





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# ENGINEER LIAISON LETTER







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A Message from  
the Chief Engineer  
Lt Col S.D. Jameson, AFNZIM, RNZE

It is now almost three years since I assumed the appointment of Chief Engineer and, in today's Army, I suppose that could be considered to be a long posting. In some ways it is not long enough as one sees things that need to be done but there is simply not enough time or manpower to do anything about it. For all that, the Corps has undergone numerous changes in this period. Some of these changes have been small others quite wide-ranging - most, however, have affected us all. In my following comments I wish to touch on three of these changes.

The most apparent change affecting the Corps has been the Army restructure. From a Corps viewpoint, I must take responsibility for our current shape and organization, warts and all. However, for any system to survive in a world of changing requirements - some military, some political - it must be prepared to adapt and change itself. Suffice to say that at this stage the reorganization is not yet complete. You will be aware that the Government has approved additional manpower for the Army and current planning indicates that RNZE will be allocated approximately 30 additional RF vacancies. The opportunity is therefore being taken in this next phase of the reorganization to overcome some of the deficiencies in the Phase I structure and to more clearly define the role of certain units. This re-definition will, I believe, provide a more balanced grouping within the Corps and allocate the units concerned a more realistic function to fulfil on operations. In addition, these measures should make more difficult any future attempt to reduce RNZE manpower and capabilities.

While skilled manpower is the Corps most vital resource, the other element of the capabilities equation is efficient and serviceable equipment. Over the last couple of decades, engineer equipment has tended to be viewed with less than enthusiasm by those determining the various Defence procurement programmes. Accordingly, we have received only one or two new equipments each year. Over the past three years, however, we have been able to instil a more balanced approach to the Minor Equipment Programme. Examples of new equipments received are:

|      |                                 |    |                               |
|------|---------------------------------|----|-------------------------------|
| 1983 | Survey Equipment                |    |                               |
|      | Shrike Exploders                |    |                               |
|      | Concrete Mixers                 |    |                               |
| 1984 | Lancer boats/outboard motors    |    |                               |
|      | Terex Scrapers                  |    |                               |
|      | Hydraulic Power Tools           |    |                               |
| 1985 | Camouflage nets/support systems |    |                               |
|      | Dump Trucks                     | -- | ordered and                   |
|      | Plant Transporters              |    | scheduled to arrive before    |
|      | Engineer Plant                  | -- | the end of the financial year |

A Message From  
the Chief Engineer  
to Col. S.B. Jamison, AFM31M, W2XK

It is now almost three years since I assumed the appointment of Chief Engineer and, in today's Army, I suppose that could be considered to be a long posting. In some ways it is not long enough as one soon finds that need to be done but there is simply not enough time or manpower to do anything about it. For all that, the Corps has undergone numerous changes in this period. Some of these changes have been small others quite widespread - most, however, have affected us all. In my following comments I wish to touch on three of these changes.

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|      |                               |
|------|-------------------------------|
| 1983 | Survey Equipment              |
|      | Shrike Explosives             |
|      | Concrete Mixers               |
| 1984 | Launch board/motor            |
|      | Trench Sappers                |
|      | Hydraulic Power Tools         |
| 1985 | Camouflage net/supply systems |
|      | Dump Trucks                   |
|      | Plant Transporters            |
|      | Engineer Plans                |

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the end of the financial year



The engineer plant project - with 30 items in the first year - will see the total replacement of the plant fleet over the next eight years. Yet further downstream are projects to obtain new equipment for mine warfare (for both laying and clearance operations), bridging, rafting, field defences, works construction and chemical warfare defence. Given that over the past three years, the RNZE-sponsored element of the Defence Minor Equipment was worth over \$14 000 000 and the RNZE portion was 17% of the Army's Minor Equipment Programme, I believe that in 1985/86 we are doing very well in comparison to most other Corps. This of course does not mean that we can become complacent and it is up to us, here in Wellington, to ensure that you out at the workplace get what you need when you need it.

My final comments relate to something much less dramatic than the restructure or the equipment programme, but certainly no less important in its own way. I refer here to the Corps Liaison Letter. Largely because of a lack of guidance the Corps Liaison Letter had developed into something akin to a gossip column padded out with corny jokes - hardly a serious commentary on the state of the Corps. Unless we produce a document which is a true reflection of our professional capabilities we are doing ourselves an injustice. The new style of Liaison Letter is much more appropriate and while there is still room for improvement the Editorial staff are to be complimented on their efforts.

In conclusion, the Corps has suffered a number of setbacks of late. However, on balance, I believe that morale is still high and we have maintained our professional standards in spite of a number of difficulties. While we have no room for complacency, we can take comfort from the knowledge that the Sappers have a particularly good image both inside and outside the Army - an image which has been justly earned.

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## EDITORIAL

It has been pleasing to see the response to the recently issued Liaison Letter and to know that it was quickly snapped up at unit social rooms. Obviously the magazine was well overdue and needed as a vehicle to reach members of the Corps as a means of keeping in touch with each other. However the magazine is now at the point where continued support is necessary to see that it does not fade and disappear as happened for more than two years. The Phoenix has risen from the ashes and a new era has commenced with the "new look" set by the last issue. This is a sappers magazine for sappers to be able to pass on information, a lesson learned, share a joy or a sorrow.

It has been said that the 'pen is mightier than the sword' but I dare say that such pens had their tops off. The challenge is set. It is up to each of you to play your part and not wait for the 'other chap' to supply the material for the following issues. Remember this is your magazine. Don't grizzle if the contents don't suit you - write something - even if it is a letter to the editor.

H.E. Chamberlain  
Editor

\*\*\*\*\*

Deadlines for copy to reach the editor are:

1 April 86 for the June issue, and

1 October 86 for the December issue.

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## NOTE

Articles accepted for publication are not necessarily the opinion of the editor nor the accepted doctrine of the Corps.

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\*\*\*\*\* HONOURS AND AWARDS \*\*\*\*\*

Honours and Awards recently bestowed upon RNZE personnel recognises the service they have given which is beyond the ordinary daily duty and tasking. The Corps is pleased to see these personnel so honoured.

Ssgt Jack Hadfield (HQ 3 TF) awarded the British Empire Medal (BEM) in the Queen's Birthday Honours 15 Jun 85.

WO1 H.E. (Clas) Chamberlain awarded the Meritorious Service Medal on 22 Oct 85.

\*\*\*\*\*

The following have received a new award which is for officers only. It is called the New Zealand Armed Forces Award and is issued for 15 years service.

Clasp to the Armed Forces Award for 30 Years Service;

Col R.K. Rutherford

Armed Forces Award;

Col R.K. Rutherford

Lt Col S.D. Jameson

Lt Col N.A. Bradley

Maj R.A. Barrett

Maj G.R. Jason-Smith

Lt Col D.J. O'Brien

Lt Col H.E. Wedde

Maj A.T. Beaver

Maj J.A. Tymkin

Maj T.E. Jones

WO2 Greg Findon (1 Fd Sqn) awarded the Long Service and Good Conduct Medal on 21 Mar 85. Sorry we did not get that information in time for the last Liaison Letter Greg.

SSgt K.J. Hanson wef 21 May 85

Further awards announced on 10 Sep 85

WO1 P.A. McKeany

WO2 J. Greig

SSgt P.G. Phillips

SSgt C.D. Brickell

SSgt R.J. Hughes

Maj D.M. Tovey (6 Indep Fd Sqn) awarded the Efficiency Decoration on 2 June 1985. This award is a little late, however we are pleased to see that it has now arrived.

WO2 E.W. Johnson (now deceased) the clasp for the Efficiency Medal for eighteen years service in the Territorial Force. Our condolences are sent to his family.

The following have also received the Efficiency Medal wef 19 Sep 85

WO2 J. Allison

SSgt N.J. Napier, BEM

SSgt E.N. Harniss

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# RECENT PROMOTIONS

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In Liaison Letter No 30 we attempted to bring notice of recent promotions to members of the Corps world wide, so that we are all informed of movements within the body of the Corps.

|       |        |                               |              |             |           |
|-------|--------|-------------------------------|--------------|-------------|-----------|
| LtCol | D.J.   | O'Brien                       | Canberra     | To be A/Col | 18 Dec 85 |
|       |        |                               |              | To be T/Col | 6 Jan 86  |
| Lt    | A.M.   | Skinner                       | 25 ESS       | T/Capt wef  | 12 Apr 85 |
| LtQM  | M.A.   | Oliver                        | FMG          | T/Capt wef  | 7 Jun 85  |
| WO1   | D.W.   | Mardle                        | Army GS      | Lt & QM wef | 4 Nov 85  |
| WO2   | K.S.   | McEwen                        | Spt Comd     | T/WO1 wef   | 12 Mar 85 |
| SSgt  | R.M.   | Edwards                       | B'Ham Fire   | T/WO2 wef   | 3 Apr 85  |
| SSgt  | L.K.   | Langdon                       | 3 WAT        | T/WO2 wef   | 9 Apr 85  |
| SSgt  | K.G.   | Smith                         | SME          | T/WO2 wef   | 23 Aug 85 |
| SSgt  | B.E.   | Meade                         | SME          | T/WO2 wef   | 23 Aug 85 |
| Sgt   | J.W.   | Greening                      | 3 Fd Sqn     | T/SSgt wef  | 22 Jan 85 |
| Sgt   | B.M.   | McDonald                      | Linton Fire  | T/SSgt wef  | 5 Feb 85  |
| Sgt   | R.J.   | Fels                          | 1 Fd Sqn     | T/SSgt wef  | 1 Mar 85  |
| Sgt   | G.E.   | Corlett                       | 25 ESS       | T/SSgt wef  | 22 Apr 85 |
| Sgt   | N.J.   | Orr                           | SME          | T/SSgt wef  | 1 Jul 85  |
| Cpl   | W.G.   | Stowers                       | 1 Fd Sqn     | T/Sgt wef   | 28 Nov 84 |
|       |        | (better late than no mention) |              |             |           |
| Cpl   | D.M.   | Stott                         | 25 ESS       | T/Sgt wef   | 3 Mar 85  |
| Cpl   | B.C.   | Powell                        | SME          | T/Sgt wef   | 8 Mar 85  |
| Cpl   | A.M.   | Greeve                        | 3 WAT        | T/Sgt wef   | 12 Mar 85 |
| Cpl   | C.J.   | MacKenzie                     | 3 WAT        | T/Sgt wef   | 16 Apr 85 |
| Cpl   | K.D.   | Boniface                      | ATG Fire     | T/Sgt wef   | 2 Jun 85  |
| Cpl   | R.H.   | Cockburn                      | 1 Fd Sqn     | T/Sgt wef   | 3 Jun 85  |
| Cpl   | P.G.D. | Haines                        | SME          | T/Sgt wef   | 15 May 85 |
| Cpl   | E.F.   | Estall                        | SME          | T/Sgt wef   | 15 Jul 85 |
| Cpl   | P.L.   | Kay                           | ATG (Museum) | T/Sgt wef   | 8 Aug 85  |
| Cpl   | M.J.   | Cavanagh                      | 3 Fd Sqn     | T/Sgt wef   | 10 Sep 85 |
| Cpl   | T.K.   | Hokianga                      | 25 ESS       | T/Sgt wef   |           |

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## THEFT

Regimental property in the form of a CORPS FLAG 1800mm x 900mm approx was removed from the SSM's Office at SME during June. This had a fine hand embroidered Corps badge in the centre of the flag. To date this item has not been recovered and the matter has been placed in the hands of both the civil and Military Police. It is particularly disappointing to note that this theft has left the Corps with only one flag of such a fine make and further, will cost the Corps over \$2,000 to replace.

The quote received for the badges alone are \$1,000 each



# RECENT ARRIVALS

\*\*\*\*\*



2 Lt N.F. McGregor ex Portsea posted to SME 13 Jun 85.  
Welcome to the Corps. May your stay be long and fruitful.

We also say welcome to the following who have  
just graduated from the institutions shown:

|     |                |                 |
|-----|----------------|-----------------|
| Lt  | J.D. Peacocke  | Ex RMC Duntroon |
| 2Lt | J.C. Flannagan | Ex OCS Portsea  |
| 2Lt | G.P. Shirley   | Ex OCS NZ       |

Whilst on the subject of graduations we must add our congratulations to Lt Peter Amyes who has graduated as a fixed wing pilot. He was presented with his pilots wings by the Chief of General Staff, Major General Mace at a parade at RNZAF Wigram in October.

\*\*\*\*\* POSTINGS \*\*\*\*\*

The following personnel have been posted to the appointments shown:

|     |             |                                                            |
|-----|-------------|------------------------------------------------------------|
| Maj | R.A Barrett | to be the new Chief Engineer with effect<br>6 January 1986 |
|-----|-------------|------------------------------------------------------------|

\*\*\*\*\*

|        |                 |                                                                                |
|--------|-----------------|--------------------------------------------------------------------------------|
| Lt Col | D.J. O'Brien    | to Col, Plans and Development<br>Army General Staff wef 18 Dec 85              |
| Lt Col | S.D. Jameson    | To Joint Services Staff College<br>Canberra 6 Jan 86                           |
| Maj    | A.T. Beaver     | To RFMF, SO Engrs wef 7 Jan 86                                                 |
| Maj    | J.S. Hollander  | To SME, Chief Instructor wef 6 Dec 85                                          |
| Capt   | JLC Alabaster   | to 3 TF as AQM 9 Jul 85                                                        |
| Capt   | S.G. Ransley    | to 1 TF as SO3 Recruiting 2 Mar 85                                             |
| Capt   | K.M. Lang       | to Defence Works, as ADW(4) 4 Dec 85                                           |
| Lt     | C.R. Dalton     | to 25 ESS Plant Tp Comd 12 Jan 85                                              |
| Lt     | P.N. King       | to ATG Plant Team Comd 12 Jan 85                                               |
| Lt     | P.G. Curran     | to SME (Tp Comd TIT) 4 Dec 85                                                  |
| WO2    | A.A. Gladstone  | to LF Comd MS Clerk? 10 Jun 85                                                 |
| SSgt   | K.C. Jones      | to SME Instructor FE 8 Jul 85                                                  |
| SSgt   | B.A. Cosford    | to CE Office, AGS 15 Jul 85                                                    |
| SSgt   | W.D. Toia       | to 1 Fd Sqn (again) 25 Jan 85                                                  |
| Sgt    | K.D. Boniface   | to ATG Fire 3 Jun 85                                                           |
| Sgt    | P.S. Free       | to Linton Fire 3 Jun 85                                                        |
| Sgt    | D.P. Walton     | to ATG Fire 15 Jul 85                                                          |
| Sgt    | E.F. Estall     | to SME 16 Sep 85                                                               |
| Sgt    | M.J. Walters    | To 3 Fd Sqn (Chief Clerk)                                                      |
| Cpl    | B.J. Bennington | to 3 Supply Company 15 Jul 85<br>(Terminal Posting close to whitebait country) |

In approximate order of release.

|      |                |                                                    |
|------|----------------|----------------------------------------------------|
| Cpl  | P.J. Schofield | Ex SME. Can now be found at Massey University.     |
| Sgt  | D.L. Horaby    | Ex 2WAT. Can be found in Shannon.                  |
| Sgt  | F. Graham      | Ex 1 Fd Sqn                                        |
| Cpl  | O.P. Smith     | Ex LF Comd. Now in the Auckland Area.              |
| Sgt  | B.J. Hutton    | Ex 1 Fd Sqn. Now in Papua New Guinea.              |
| WO1  | F.J. Chick     | Ex 3 Fd Sqn. Now in Christchurch.                  |
| SSgt | J. Greening    | Ex 3 Fd Sqn. Building supervisor ?????             |
| SSgt | I.L. Evans     | Ex 1 Fd Sqn. Gentleman - perhaps?<br>Ask 1 Fd Sqn. |

#### OTHER CORPS MATTERS

Some of you will no doubt have heard of the RNZE Twenty Year Certificate which has now been issued to personnel who have served twenty years in the Corps, and will be issued to those who reach that mark in the future. It is hoped that they will be treasured by those who receive them. So far the only adverse comment which has been made is one which questioned "why did it not have my rank as at the 20 year mark?" Perhaps that could be addressed in the future.

For those of you who are just setting out on your career with the Corps it is something to look forward to in years to come. For those of you who have not received one of these certificates the commencement date was set by the RNZE Head of Corps Conference on 22 Sep 82. Those who had completed 20 years in the Corps, and were serving on or after that date will receive a certificate if one has not been issued already. For those who miss out we are sorry but a start point had to be made. What better date could be set than the one when the decision was made?

::::::::::::::::::::

#### ROYAL ENGINEERS WINDOW IN CHAPEL

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The stained glass window mentioned in the last Liaison Letter has now been installed in the Corps Chapel in Linton Camp. It is positioned above the altar in the central part of the roof over the sanctuary.

The window was designed by Shona McFarland, and manufactured by the stained glass window specialist firm of Miller Studios in Dunedin. The aluminium surround was manufactured by Hughes and Trask in Palmerston North and the final joinery was completed by Cpl Kirton of SME. Plumbers, both staff and apprentices from SME, fitted the window into the roof of the chapel.

The first public viewing of the window was on the occasion of the Annual General Meeting of the Engineer Corps Memorial Association on 18 Jul 85. The window was dedicated at a special service on Sappers Day.

The window is the colour feature on the cover of this issue of the Liaison Letter.



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# SPORTING ACTIVITIES

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Since the last Liaison Letter went to print there have been some notable sporting activities achieved by Corps personnel. Although I do not have all the information at hand as to the outside units the following have given a good account of themselves.

Cpl A.G. Wall of SME turned in a time of one hour sixteen minutes for the Manawatu Half Marathon (approximately 21 Kilometres) run on 11 Aug 85 in Palmerston North. Fourteen personnel from SME took part and two from the FMG Fire Brigade. Cpl Wall finished 34th out of a field of 1009 participants. Well done.

Whilst talking about half marathons two other sappers went the whole way in the Interservice Marathon. The Congratulations of the Corps are extended to Cpl C.J. Glen and Spr S.B. Green who gained first and second place respectively - and in so doing both beat the previous best time for an Army representative in this event. Well done. A splendid effort and a magnificent result.

The FMG Half Marathon run on 28 Nov 85 also saw some very good times being set. Congratulations to all those who took part and completed the race. Pride of place go to the following:

|                   |            |             |              |
|-------------------|------------|-------------|--------------|
| Cpl G.D. Robinson | 25 ESS     | First place | 1 hour 11.24 |
| Cpl A.G. Wall     | SME        | Third       | 1 hour 14.44 |
| Cpl R.J. Kirton   | SME        | Fifth       | 1 hour 18.25 |
| Spr P. Bable      | RFMF (SME) | Ninth       | 1 hour 27.07 |
| Spr B. McKeich    | SME        | Tenth       | 1 hour 27.49 |

We are pleased to know that two members of the Corps are part of the Combined Services team who have been selected to take part in the Australian Combined Services Marathon in April 1986. We wish Cpl Glen, and Spr Green all the best for this competition and hope that nothing will prevent their taking part. Also should Cpl Robinson meet the qualifying time he too could well be going to Australia.

Cpl M.P. Henderson has again been selected for the Manawatu Representative rugby team. This is the third year that he has achieved this standard. SSgt K.G. Smith is also a Member of the Manawatu team as their Masseur. He too has been involved in this position for the past five years.

Other personnel selected for Army or Representative sports teams are:

|                     |          |       |                          |
|---------------------|----------|-------|--------------------------|
| 2 Lt J.R. Armstrong | SME      | Rugby | Senior grade             |
| 2 Lt N.F. McGregor  | SME      | Rugby | Senior grade             |
| Cpl M.P. Henderson  | SME      | Rugby | Senior grade             |
| Spr G.D. Marks      | 1 Fd Sqn | Rugby | Senior grade             |
| Spr C.J. Manaia     | SME      | Rugby | Senior grade             |
|                     |          |       | (Non travelling reserve) |

|                  |          |       |       |
|------------------|----------|-------|-------|
| Spr M.J. Leach   | 1 Fd Sqn | Rugby | Colts |
| Spr C.W. Manion  | 1 Fd Sqn | Rugby | Colts |
| Spr R.L. Boyd    | 3 Fd Sqn | Rugby | Colts |
| Spr M.J. Skelton | SME      | Rugby | Colts |
| Spr P.A. Hauraki | SME      | Rugby | Colts |
| Spr D.S. Bowden  | 3 Fd Sqn | Rugby | Colts |



|     |                |      |                                         |
|-----|----------------|------|-----------------------------------------|
| Spr | P.N. Charleton | SME  | Rugby Colts<br>(Non travelling reserve) |
| WO2 | R.W. Bulman    | SME  | Volleyball (Manager)                    |
| Spr | S.F. Stiffe    | 1 TF | Volleyball                              |

These volleyball players have just recently returned from playing in the Australian Interstate Volleyball Tournament in Adelaide. They played seven games, winning four, and were placed second equal in the tournament.

In a class almost by himself Spr McKeich - Skiing, which unfortunately is not yet recognised as an Army sport.

Again in a class almost by himself is Lcpl John Byrman (TF, 25 ESS). He won the Bronze medal in the "SHARP INTERNATIONAL TAE KWAN DO JUNG DO" competition in Wellington in October. Some of you may recall John running with his father - WO2 Bill Byrman - who was an instructor for some years at SME.

Capt Eddie Bruce MBE, from the RNZE Works cell at Defence Headquarters was selected to referee at the Oceania Judo Championships on 23 - 24 Nov 85 in Auckland.

After the softball trials in Wanganui in late November we are pleased to report that the following have been selected for the Army Team.

SSgt P.G. Packer  
Spr D.W. Taurima

Cpl P.F. Lepou

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#### PLAYER PROFILES

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Cpl Murray Henderson

Cpl Henderson's rugby career started with the RF Cadet School 3rd fifteen coached by WO1 'Blue' Johnston, RNZCT. He graduated into the RFCS 1st fifteen in 1976-78 but did not gain selection in any representative team at Colt level. On posting to Linton Camp Murray played Senior Rugby for the Linton team when he was 18. After playing in several Central Regional Teams he was selected for the Army Team in 1981, and after the Combined Services Tournament in 1982 gained selection for the NZ Services Team to tour the Lower North Island.

In 1983 Cpl Henderson joined Palmerston North Marist Club which went into the Manawatu Finals that year. The next step was the Manawatu "A" team but sat on the bench for all but one game which was a loss to Otago 24 - 17. In 1984 Murray was selected again for the Manawatu "A" and took part in three games including one against the American Grizzlies - but unfortunately spent most of the time on the bench waiting his chance.

After representing NZ Services in 83, 84 and 85 which included games against Wellington, and Manawatu (for the Kiwis Fortieth Anniversary Reunion) Murray was again selected for the Manawatu Team and went on to play against Auckland. This game secured for him the coveted Manawatu Blazer. In 1985 virtually the last game of the season saw him Captain of the Manawatu Team.

This year Cpl Henderson achieved the distinction of being selected to play



in the NZ Combined Services Team which is to tour the United Kingdom, returning about the same time as this Liaison Letter is distributed.

#### Representative Honours

|                      |         |          |
|----------------------|---------|----------|
| North Island Marist  | 1985    |          |
| NZ Army Seniors      | 1981-85 | 10 games |
| NZ Combined Services | 1982-85 | 7 games  |
| Manawatu "B"         | 1984    | 2 games  |
| Manawatu "A"         | 1983-85 | 18 games |

\*\*\*\*\*

#### W02 Kevin Smith

W02 Smith's rugby career started in 1968 when he was a member of the RF Cadet School 3rd Fifteen. On posting to Linton Camp he played for the Linton senior team for a number of seasons. In 1972 he joined the Palmerston North Marist team where he played 2nd five eighth or centre for the next five years.

Kevin played for the Central Region Team from 1970 -76 and from those tournaments was selected to play for the Army team between 1971 - 75. When he was posted back to Waiouru in 1976 he continued his link with rugby and played in the Waiouru Regional Team during 77 - 78. At this time he also played against the Fiji Combined Services Team, and the Australian Combined Services Team.

Injuries received prevented further games so Sgt Maj Smith created a new career within the sport by becoming an assistant coach and masseur - and orange boy for the Waiouru Seniors in 1979. On posting back to Linton in 1980 Kevin started with the Manawatu Senior Representative side as their trainer, being responsible for the team's fitness and conducting their warmup sessions. His responsibilities also included strapping joints and limbs and massaging injured muscles.

Kevin says that to date he has assisted Graham Hamer through six years of rugby, some 95 games and some 3000 leg rubs. A player putting something back into the sport. Well done Kevin.

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#### OLD COMRADES NOTES

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At brief phone call recently from Noel Woodley (ex SSgt plant instr at SME) revealed that the establishment of "10 Forestry Support Squadron" is alive and well. Former Sappers Gordon Byron, Dave Foreman, Gary Burke, Peter Kennedy, Peter Englebrechtsen (Chunky) and of course Noel, are all at NZ Forest Products at Tokoroa. Furthermore Ralph Harvey and Arthur Hori (both ex RNZEME) are also at NZ Forest Products. Ralph and Arthur were both members of 5 Specialist Road Construction Team in Thailand.

A short note from HongKong has just informed the editor that Col Rob Dickie OBE (retired) is moving to Fiji where he will be taking up an appointment with the Ports Authority. He can be contacted through P.O. Box 780, Suva, Fiji.

It is good to receive news that former sappers are well and prospering.

# South Seas Sappers

CAPTAIN and QM BJ KNOWLES, RNZE



*Captain Knowles joined the NZ Army as Regular Force Cadet in June 1957 and graduated into RNZE in July 1959. He originally trained as a vehicle mechanic but later changed to storeman. As an Other Rank he held a number of stores appointments including SQMS 1 Field Squadron and Warrant Officer Instructor NZ Army School of Administration. In 1979 he was commissioned as a Lieutenant and posted to the Army Training Group Waiouru as the SO3 Works. Since January 1982 he has been the Quartermaster, 1 Field Squadron.*

## FOREWORD BY LIEUTENANT COLONEL S D JAMESON, AFNZIM RNZE (CHIEF ENGINEER, NZ ARMY)

FOR over two decades, RNZE personnel have been actively involved supporting various NZ Government aid and disaster relief tasks in the South West Pacific. The latter aspect is especially relevant as a number of RNZE officers and SNCOs are currently deployed in Fiji assisting with hurricane damage repairs and school reconstruction following Cyclones Eric, Nigel, Gavin and Hina. However, one particular RNZE skill has produced a steady trickle of bids for support from our Ministry of Works and Development (MWD) which provides works and design assistance to a number of South Pacific governments. The skill in question is that of Army diving.

In 1963-64, RNZE diving made its first official foray into the Pacific to blast a channel through a reef surrounding the tiny atoll of Fakaofo in the Tokelau Group. This sort of task was to be directed to the Corps with some regularity in the following years. Diving teams have since been dispatched to Tuvalu (formerly the Ellice Islands) and the Cook Islands. More recently, an RNZE officer was included in a MWD team which reconnoitred a series of tasks in the Tokelau Group; these tasks included reef gapping, construction of breakwaters, removal of shipping wrecks and the construction of an airfield.

The most recent task, however, arose from a harbour modernization project being undertaken by MWD on behalf of the Cook Islands Government. Avatiu is the only port on Rarotonga which is the main island in the Cooks. The project would involve harbour deepening, replacement of the sheet piling and renovation/relocation of some of the harbour buildings. The RNZE diving team was to be responsible to MWD for the works associated with the harbour deepening. Leading the team was Capt BJ Knowles, one of the most experienced diving supervisors in the Corps, and a member of the original team which went to the Tokelau in 1963.

## BACKGROUND

LOCATED approximately 3000 kilometres north of New Zealand midway between Samoa and Tahiti is the Cook Island Group. This group which comprises fifteen





Photo 1 Coral blasting on Rarotonga. A 30kg ringmain is initiated.

islands covers an area of approximately 2.6 million square kilometres. The population of the Cook Islands is about 18,000, half of whom live on the main island of Rarotonga. In 1965 the Cook Islands became a self-governing territory in free association with New Zealand.

As the country developed, there have been greater demands on existing port facilities, and recently priority was given to upgrading the main port of Avatiu in Rarotonga. In conjunction with the NZ Ministry of Foreign Affairs (MFA) and the Cook Islands Government, the NZ Ministry of Works and Development (MWD) commenced a NZ\$3.5m project to reconstruct the harbour. Scheduled to take up to three years to complete, the project involves re-alignment of the wharves, replacement of unserviceable sheet piling with concrete piles, dredging and deepening the inner harbour, and widening and deepening of the harbour entrance. The latter two sections of the task would involve the underwater use of explosives to break up the coral deposits.

In July 1984, MWD approached the NZ Ministry of Defence (MOD) and requested the assistance of an RNZE diving team to undertake the harbour entrance element of the project. The task itself involved the removal of a submerged 10 metre-wide bank of coral extending 130 metres along the western side of the harbour entrance. MWD initial estimates suggested that approximately 4000 cubic metres of coral would have to be removed to achieve the desired result. The existing harbour channel was 12 metres deep and the RNZE task would be to blast the adjacent coral to a depth of at least 6.5 metres, with the overburden being reduced to a size able to be removed with a mechanical grab.

#### RECONNAISSANCE AND PLANNING

A reconnaissance team comprising myself, an RNZE senior NCO diver and the MWD Project Manager flew civil air to Rarotonga in 26 July 1984. The reconnaissance established that the team needed to be completely self-sufficient, as the equipment available on the island was in a doubtful state of repair. Taking into account such factors as the type of coral to be removed, weather conditions at that time of year, delays likely to be caused (by the presence of civil shipping in the harbour) and anticipated equipment serviceability, it was estimated that the task could take up to two months to complete.

The two major limitations in determining the dates for deployment were the onset of the hurricane season (mid November), and RNZAF commitments on pre-planned tasks. Both would fix the date by which time the task would have to be complete and the team recovered to New Zealand. (The prospect of having to spend an extra month or two in the Pacific sun was tempting but would have hardly drawn favourable comment from Defence Headquarters). Consequently, to meet the November deadline, it would be necessary to deploy by mid-September and this gave rise to some rapid planning and preparation.

The team selected comprised one officer (myself), a SNCO diver (the same NCO who had been on the reconnaissance), five Sapper divers and an RNZCT cook; the latter being granted 'honorary sapper' status for the duration of the deployment. The inclusion of a cook enabled the team to work flexible hours to overcome any difficulties with delays through tides, shipping etc. However, more importantly, it ensured that the divers had well prepared meals. The divers had been selected from units throughout the Corps to ensure that all units would benefit from the experience gained on the task. Since New Zealand was still feeling the cold of winter at this time, there was no shortage of volunteers. For six members of the team, it was to be their first tour outside New Zealand and they were obviously excited at the prospect of working in a new environment.

The team assembled at 1 Field Squadron (in the Auckland area) on 3 September 1984 for pre-deployment training. This included briefings on the geography and customs of the Cook Islands, refresher training, operation and maintenance of the equipment being taken, fitness training and preparation of the stores for the flight to Rarotonga. The main equipments comprised a 0.75 tonne Landrover, an Atlas Copco 250 cfm air compressor (for drilling the coral), a small concrete mixer and a diving compressor. The multitude of other small stores brought the total payload to approximately 7300 kg.

We flew out of Auckland on 12 September 1984 courtesy of RNZAF C130 Hercules and five hours twenty minutes later landed in Rarotonga. Although the temperature on arrival was 24°C (75°F), the humidity certainly made it feel much warmer—a welcome change to the cool climate we had left in New Zealand. Coincidentally, we had crossed the International Dateline enroute so we actually arrived the day before we had left New Zealand; if that was not confusing enough, we also had to put our watches forward two hours!

#### TASK

THE first four days after arrival were spent settling in, unpacking and preparing the stores for work. An underwater grid system was established on the sea bed work site to enable the divers to properly orient themselves once work commenced. The grid comprised a weighted line which was laid along the side of the area to be blasted and to which bouyed shotlines were attached at ten metre intervals. To position a charge at a specific point the diver simply descended at the initial shotline, proceeded along the axis line to the required reference shotline then paced out at right angles the distance required. Such a system was necessary because, although the team had anticipated clear water conditions, a dredge operating in the inner harbour was at times stirring up the silt and reducing visibility to less than one metre.

Once the grid has been established, the team set about establishing the size and type of charge to use. Coral differs in hardness and on previous similar deployments in the South Pacific it had been necessary to drill and blast the coral. At Avatiu, however, the coral was soft enough to allow the use of plaster charges, ie, charges laid directly on to the surface of the coral. This was an unexpected bonus as drilling coral can be very time consuming, and cause excessive wear on machines and associated equipment.

The method of attack employed was to establish a quarry face and, applying quarrying techniques, work along the coral bank until the task was complete. Once the face had been established, the task progressed quickly and by selective placement





Photo 2 Preparation of 10kg charges

of charges it was possible to 'throw' a great proportion of the overburden into the main channel. The initial ringmain comprised 90 kg of explosive. However, after experimentation this was quickly reduced to 30 kg—three separate 10 kg charges placed at five metre intervals. Tamping was not required because of the containing effect of the water itself. The charges were connected using detonating cord (Redcord) which was then connected to an electric detonator. This was in turn connected to D10 firing cable which was attached to the nearest buoy and then across to the firing point located on the causeway. Charges were initiated using a Shrike exploder.

The task progressed faster than had been anticipated due largely to three factors: first the 'softness' of the coral had saved considerable time as the charges reduced it to fine rubble, able to be handled by the harbour authority's clamshell excavator. Secondly, work was able to continue while shipping was present in harbour. (It had been expected that blasting would have to be curtailed once a ship arrived in harbour; the ship's masters, however, were quite happy for the work to continue.) Finally, the Cook Islands Government attached three local civilians to the team to assist with the preparation and packing of charges, thereby enabling the divers to concentrate on the work underwater. These factors enabled the task to be completed three weeks ahead of schedule and substantially assisted in reducing project costs overall.

#### EXPLOSIVES

BASED on past experience it was decided to use Ammonium Nitrate—Fuel Oil mixture (ANFO) as the explosive. ICI (NZ) Ltd in their Manual of Quarry Blasting state the following in regard to the use of ANFO: 'The experience of thousands of quarry blasters throughout the world provide ample warning that the blasting performance of ANFO cannot be relied upon in the presence of water.' Contrary to this warning, RNZE teams have used ANFO underwater on numerous occasions without failure—the secret lies in the packaging of the charges and the organisation of the task to ensure that the ANFO is under water for the shortest possible time. ICI 'Nitropril' was used on this task. Being in the form of small porous spherical prill, it absorbs fuel oil readily, resulting in a dry mix with good pouring quantities.

The ANFO was mixed on site in the concrete mixer in 30kg batches which were

then broken down into 10kg charges. This proved to be an optimum size for the divers to handle underwater as well as ensuring that the charge would be adequately protected against water damage (seepage). The ANFO was poured into a heavy duty plastic bag and then sealed with highly sensitive tape. This package was then placed in a second plastic bag, re-taped and then placed in a 'Nitropril' bag and sealed again. Extra 'Nitropril' bags had been obtained because their robust construction provided extra protection against the abrasive coral. Molanite was used as the booster charge because of its excellent water resistant qualities.

#### INNOVATIONS

As indicated earlier the dredging operations, which were proceeding apace with the blasting, reduced underwater visibility considerably. The team leader's daily works inspection had to be conducted early each morning before this dredging commenced. Early in the task it was found that the divers' fins stirred up the silt formed by the dredge thereby further 'clouding the issue'. We, therefore decided to change to gumboots (wellingtons) and extra weights to enable the divers to walk on the sea bed. The sensation of weightlessness together with the walking technique employed resulted in something akin to 'moon walking'. However, even though divers sometimes had to walk up to 100 metres underwater, this technique proved satisfactory.

To protect the wet suits against the sharp coral, the divers also wore overalls over their wet suits. (The Harbourmaster—a retired RN Diving Officer—was somewhat bemused when he saw the sappers dressed in overalls, gumboots and CABA gear.) To assist with the problem of poor visibility below the surface, the team experimented with a pair of iridescent orange overalls. These proved successful and even at ten metres it was a simple matter to locate the diver in the murky conditions. It is intended that these overalls become standard equipment on tasks of a similar nature.

#### DIVERSIONS

In their off duty periods, the team became involved with the local sports team, played golf and generally explored the island. One particular noteworthy event, however, was in support of the local Rotary Club which had embarked on a project to raise funds for local charities. The members of the team decided to run a sponsored relay around the island (32 kms), dressed in wet suits (complete with air bottles, weight belts) and



Photo 3 At the Telefon Appeal 'Round the Island' Run startline



carrying fins and face masks. Running in pairs, the team ran one km legs and completed the journey in three hours forty minutes. The locals naturally thought that we had been affected by the heat (mad dogs and Englishman and all that...). However, the run was a financial success, with the locals donating a total of NZ\$450 towards charity.

Pacific Islanders are traditionally friendly people; certainly the Cook Islanders were no exception and at times the team was embarrassed with the overwhelming hospitality. The Prime Minister of the Cook Islands, Sir Thomas Davis, made several visits to the job-site and took a personal interest in our progress. At the conclusion of the project he honoured the team with an official function, an occasion we will long remember.

#### CONCLUSION

PLANNING for blasting operations of this nature is essential and requires full consultation with the appropriate interested parties, such as police, harbour authorities and public services. Avatiu Harbour remained fully operational throughout the task so there was a need for close coordination with all concerned. Notices were published in the local newspapers warning the public of the blasting, and radio announcements were broadcast regularly. Indirectly, however, these tended to exacerbate the crowd control problem. It did not take the Islanders long to realise that the blasting would produce stunned fish; our announcements simply gave them early notice to get down to the harbour to collect them.

For those statistically minded, the task was completed three weeks ahead of schedule. It had consumed 3627kg of ANFO, 1336 metres of detonating cord, and had removed nearly 4000 cubic metres of coral. Divers' personal times spent underwater ranged from 975 minutes to 1659 minutes, with the team grand total being 7534 minutes. It was a reluctant but weary team which packed up for the move back to NZ. Sappers worldwide have the happy knack of being able to fit in with the local community; the RNZE diving team in the Cook Islands in 1984 was no exception.

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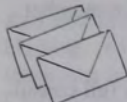
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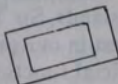
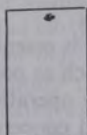
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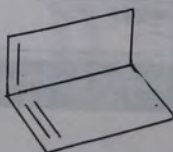
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## Coastal road development

Colonel Robert McL Dickie, FIPENZ, is at present working for the New Territories Development Department, in Hong Kong. The following are extracts from a letter he wrote to the Institution's President, Murray Sweetman.

"I have been fortunate to have been associated with the trunk road system in the New Territories. It is presently under construction to link the new cities of Shatin, Tai Po, Fonling, Yuen Long, Tuen Mun and Tsuen Wan with the urban area of Kowloon. Shatin and Tsuen Wan will be about 800,000 each with others around 250,000 - 350,000. The eastern trunk will also be the main road to China. At a cost of a little over \$NZ200 million for but 7.3 km of coastal road you may well comment that it should be an interesting project. I am enjoying it very much.

"From the coastal section the

Shatin to Tai Po coastal road hives off across the grain of the country to bypass Tai Po which our office is reclaiming from the harbour and building up with high rise. Although the alignment is only about 100 m above sea level the terrain has characteristics like the King Country and the road chops through ridges and across the gullies.

"In a 2.8 km section there are five dual bridges — 10 in all, and of these eight are incrementally launched concrete box girders with characteristics similar to the Ngaauranga bridges. A Japanese firm put in an alternative tender for them in an eight week tendering period in mid 1982 and won the day. Like the Ngaauranga bridges they have aroused a lot of interest here.

"The coast road work has had its full ambit of engineers and there will be a major arbitration next year over

the contractor's contention that the engineer has not certified sufficient recompense for the contractor's efforts. I have learnt a lot about conditions of contract with his 15 odd claims approaching \$NZ16 million.

"I am unsure when I will return to New Zealand for good. I may have another contract in Hong Kong but I am enjoying the engineering scene. It is not all go but we are not faced with the tribunal hearings that beset engineers in New Zealand and work gets done quickly. I like that.

"Our office has eight town planners, 18 engineers, three architects and a landscape and forestry section which I am pleased to say has considerable input to development. Consultants work to our briefs and on the trunk road over 900,000 trees and shrubs are "growing on" in the contractor's nursery for planting along the verges and to regenerate barren areas."

• Seven C-130 Hercules and two Boeing 727 flights delivered 200 Army and Air Force personnel, three Iroquois and two Sioux helicopters to Western Samoa for two weeks of exercising in tropical conditions.



The Air Force detachment and groups of Army signallers and engineers camped on Faleolo Airport while the 87-strong infantry group from the Burnham-based 2/1 Battalion, Royal New Zealand Infantry Battalion camped on Savaii Island.

Besides their military training, personnel from both services were involved in a number of civic tasks including the establishment of a number of trig stations, water reticulation development and the overhaul of electricity generators.

The exercises were the first undertaken by the New Zealand armed forces in Western Samoa.

Senior Sergeant Darren Hunter (left), a Western Samoan Police section commander and a former New Zealand Army infantry soldier, chats to his former platoon sergeant Warrant Officer Ian Paipa of Christchurch (second from left), now the Company Sergeant Major of the infantry company currently exercising in Western Samoa.

With Senior Sergeant Hunter and Warrant Officer Paipa is Constable Panifasio Ioane and Lance-Corporal Vini Tapu, a Samoan in the New Zealand Army, who acted as an interpreter for the infantry company.

## Australia, USA worry over Soviet agreement

By Frank Cranston in Canberra

AUSTRALIA and the USA have expressed anxiety at the signing by the mid-Pacific nation of Kiribati of an agreement allowing fishing vessels from the USSR to operate in its 200 nm exclusive economic zone, even though there is no provision in the agreement for Soviet vessels to use facilities at the port of Tarawa or to establish any sort of 'base'.

Kiribati will receive some \$A2.4 million a year in licence fees from the Soviet fishing activities.

The anxiety in Canberra, and throughout the South Pacific, is that once they are established on the Kiribati fishing grounds, the Soviets will make a sufficiently attractive offer to secure base facilities from which the operations of much US naval activity could be monitored. In the meantime, their fishing boats will, it is presumed, be conducting hydrographic and oceanographic surveys of interest to the Soviet Pacific Fleet commanders.

New Zealand also attempted to persuade the Kiribati Government not to let the Soviets into their waters but had to try to explain that against the background of New Zealand already having let the Soviets into one of its ports to conduct fishing operations in the Southern Ocean.

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## Greater diskette range

The wider use of personal computers and their growing use in the home has produced a need from more compact equipment. In the case of floppy disks, this need has been met by a range of 3-inch and 3½-inch diskettes now available from AWA.

Manufactured by Hitachi Maxell, one of the world's largest manufacturers of floppy disks and magnetic media, the new diskettes represent the latest advances in miniaturisation technology.

In addition, the role of Epitaxial magnetic material used was also critical. This material, the first of its kind used for consumer products, consists of cobalt ferrite encapsulating the gamma ferric oxide.

Compared with other materials used, this has a very high coercivity and makes possible the diskettes' high recording capacity, stable output and superior durability.

The 3-inch diskette, the CF2-D, is suitable for Amstrad personal computers and one of its most important features is that it can be handled in much the same manner as an audio-cassette.

Each CF2-D comes in a clear plastic case, the magnetic disk can be used on both sides and is protected by a rigid case and a shut-

ter. Thus, it resists the effects of dust, finger prints and pressure from being written in, making it more durable than conventional floppy disks.

The encoding scheme, data transfer rate, disk revolution speed, number of tracks and recording capacity are the same as those of 5¼-inch mini-floppy disks, so that the CF2-D is compatible with existing mini-floppy disk controllers and software.

The 3½-inch diskettes, MF1-D, MF1-DD and double-sided versions MF2-D and MF2-DD are suitable for personal computers such as Microbee, Apple, Macintosh and HP 150 etc.

These feature an 'auto-shutter' to keep out dust, debris and fingerprints, software compatibility with the 5¼" mini-floppy series, they can withstand extreme and rapid fluctuations in temperature and humidity and have a proven durability of more than 10 million passes/track.

## New Zealand Army doubles intake of cadets

THE NEW ZEALAND Army is to double the number of officer cadets it trains in New Zealand. Twenty-nine men and women are currently undergoing the one-year training course they started in January at the Officer Cadet School (OCS) of New Zealand in Waiouru.

This month, they will be joined by a further intake of 32 officer cadets. This mid-year intake will be the first of what is to become a continuing pattern of two intakes each year at the OCS.

A major officer training reorganisation by the Australian Defence Department will soon see the closing of two army officer training establishments which have been attended by up to 30 New Zealanders annually for many years.

In December this year, the Royal Military College, Duntroon in Canberra and the Officer Cadet School at Portsea in Victoria will close their doors for the last time.

## Bailey Bridge designer dies

May 16, 1985

Sir Donald C. Bailey, inventor of the Bailey Bridge, died last week in England at the age of 83. His military bridge, consisting of truss panels that could be assembled quickly and launched over a river, played an important part in the Allied victory in World War II.

Bailey first sketched his design on the back of an envelope during the war. His design was at first passed over in favor of another—a system of tubular components that were pinned together on site. Bailey's bridge was rushed into production, though, when a model of the pinned-tube bridge collapsed in 1941.

Two-thousand Bailey bridges were churned out by 1947. The trusses were easy to make and could be carried by six men and bolted together in different combinations to suit varying tank-carrying duties. The bridge's military success was followed by worldwide civilian use.

Born in 1901, Bailey studied at Cambridge and received a doctorate in engineering and other degrees from the University of Sheffield. He joined the



Sir Donald Bailey designed key WW II bridge.

British civil service in 1928, working for the War Office on development of military construction equipment. He was knighted in 1946 and became director of Britain's Military Engineering Experimental Establishment in Dorset.

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by

Major J.S. Hollander

Fellow sappers, I would like to offer you a few words on the subject of productivity, for your consideration and possible interest. Some of you may know that for the past fifteen years, I have taken a keen interest in resource management and industrial engineering and what they can do for the improvement of our lives in general. My interest became more involved when I was elected National President of the NZ Institute of Industrial Engineers 1978 - 81, and of the Institute of Management Services in 1984. So what - what might you ask is industrial engineering all about and for that matter, what is management services and what have they to do with me? I believe a couple of definitions are called for at this point:

Industrial Engineering. Industrial Engineering (IE) is concerned with the design, improvement and installation of integrated systems of men, materials, equipment and finance. It draws upon specialised knowledge and skill in the mathematical, physical physiological and social sciences together with the principles and methods of engineering analysis and design to specify, predict and evaluate the results to be obtained from such systems and measure achievement.

In short, IE is a science devoted to getting the best results from available resources, provided always that quality and human satisfaction are met.

Management Services Management Services (MS) is the application of a systematic means of improving productivity, where the work is done or planned to be done. MS uses as its basis, analytical and creative thinking and consideration of people. In its fullest sense, MS will maintain and can assist in improving the standard and quality of living.

In a nutshell, MS is the application of skills covering a very wide range of activities (including IE), which essentially has one aim: to improve productivity whenever/wherever work is done.

As you can see, both fields are very similar. But I guess you should also understand what productivity is all about, which is fundamental to both IE and MS, and why I wanted to write this article. WO1 McKeany mentioned in his recent article on the systems approach to training (Food For Thought - Liaison Letter No 30, Apr 85) that there is nothing new in this concept, just a "different angle of attack" and certainly nothing to be cautious or skeptical about the application. The same applies to productivity, where we have been dealing with the subject for many years, perhaps without really understanding the basis behind it.

Productivity is simply the rate at which and efficiency with which something is done, manufactured produced or constructed. The effective and efficient use of resources and at all times, the relationship between the input of resources in the production of output, is productivity or a ratio between the two.

Looking at productivity from a quantitative viewpoint and in sapper terms, how effectively and efficiently can we construct a building, water supply point or road, whilst minimising our resources of manpower, materials (including money) and time. Both IE and MS are aids or tools in the management of production and productivity, which to the professional manager, productivity improvement must be his ultimate aim in life.

The same must apply to officers and NCOs in the RNZE, who are in the game of managing resources and producing things for themselves and others. I don't want to get into the detail of these two fairly complex subjects, suffice it to say that as sappers, we should (and probably do) consider the principles of IE and MS when we are on the job. If we don't, then we are not worthy of being members of a Corps that prescribes pretty rigidly to the theories of hard work, hard play, extemporization and boundless professionalism.

Enough of long words, although there is one more which is perhaps the most important of all, the quality aspect of productivity. That is, the quality of our thought, planning, preparation, management of resources, completion of a job properly and so on. Both efficiency and effectiveness relate directly to quantity and quality, but the latter tends to be more important these days. It doesn't necessarily matter how many mines are laid, or bridges erected, but how the mines are laid and bridges are erected - the quality of the output or end product is of paramount importance. This is an area which is often not well done, given less consideration and therefore requires further attention in the future. We have spent many years in the construction game, overseas

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deployments and aid, trade training and combat engineer support, to have established methods of operation, checklists, Standard Operating Procedures and a wealth of experience. All these to improve future efficiency and effectiveness. But not so, not perhaps to the highest of standards (particularly quality), if we think more deeply into our record of activities ("production") over say the last ten years.

Sadly enough, we are still lacking in the areas of attention to detail and quality control. After all, these are the essential criteria for improved productivity and are the basic principles of IE and MS. By spending more time and thought on quality and through using new and innovative technologies and improving our management of resources, we can improve our efficiency and effectiveness. That is not to say that we need to take longer over planning a task or the completion of it, but it will enable us to prevent delays and errors and the wastage of all resources. Unfortunately the latter occurs all too often on many of our projects and places a black mark on our otherwise long and good record of "production".

What might you ask has all this to do with me? If you are a member of the RNZE, then I am directing my comments to you. Whether you are an officer or NCO, job boss or production manager, even the ordinary but important sapper, then you must pay more attention to to your productivity and quality of your work. Careful attention to the effective and efficient management of all resources must improve your output, man management, professional approach and record and overall attitude to your work and life in general. Remember, that the quality of your life and work will remain with you, your colleagues and your family throughout your days on this earth, so why not help to improve this quality for everybody's benefit, including yourself and the Corps.

I would like to commend more wise words on productivity to you, but not perhaps at this time. If you would like to know more on the subject, please feel free to contact me (at SME after December) and ask for more



information. In the next issue, I would like to address the description of an element (of work), which is part of the IE and/or MS analytical function of breaking down each part of a job and examining them for potential improvement.

To be continued.

# \*\*\*\*\* DIVERSIONS \*\*\*\*\*

Hidden in the square opposite are many weapons (in the widest sense of the word) dating from the ancient times to the present day. Read horizontally, vertically, diagonally in all directions and see how many you can find. Letters may be used more than once. Having cleared as many squares as you can in this way the remaining letters taken in sequence should add three more to your score. HOW MANY WEAPONS CAN YOU FIND?

As there were no takers for the last quiz with a small prize attached to it we will close that one and try again. A small prize will be sent to the first three entries with the largest number of weapons (including those made from the extra letters).



\*\*\*\*\*

Don't forget also the competition for a new Corps Christmas Card. Entries are to be at SME by 1 Jul 86. Don't grizzle if you do not like the current Corps Christmas card - design a new one.

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## NOTES FOR THE GUIDANCE OF THOSE SUBMITTING ARTICLES FOR THE LIAISON LETTER

Copy for publication in the Liaison Letter should be typed on one side of the paper only and double spaced. Black and white glossy photos may be included with the article, but should be accompanied by names of personnel and/or location. The articles should be written in a conversation manner rather than presented as a staff paper and paragraphs should not be numbered. All personnel are encouraged to write something for this magazine for it is upon these articles that our magazine will grow.

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Best wishes for the festive season. May Christmas and New Year be a time of joy and refreshment for the year ahead and may all your travels be safe.

## TWO YEARS WITH A GREEN BERET

by

Cpl P.J. Lighthourne

There are two tradesmen pioneers attached to 1 RNZIR currently stationed at Dieppe Barracks in Singapore. At present they are both carpenters though in the past there has been on occasion an electrician. These two are part of the Administration Company and come under the direction of the Quartermaster Platoon. It should be noted that Tradesmen Pioneers are quite a different species to the Assault Pioneers who have a completely different role within the battalion.

As a Tradesman Pioneer attached to 1 RNZIR in Singapore for the past two years I was involved with almost every type of carpentry task you could imagine. These included such tasks as fixing wardrobe doors in the barracks to dismantling temporary office accommodation in the New Zealand High Commission.

The Tradesmen Pioneers are tasked (in theory anyway) by the Assistant Quartermaster who receives and evaluates "maintenance requests" through the system. A good working relationship existed between ourselves and the AQM who would where ever possible consult the TPs to ensure that the task could be undertaken by them. In some cases the "maintenance request" was unsuited to the ability of the tradesmen pioneers or was the direct responsibility of the Works Services Unit and therefore handed over to them. There were also numerous "fast balls" that short circuited the system but none the less had to be dealt with.

Some of the tasks completed were:

- a hit and miss picket fence at the Sportsman's Rest (Bar/Restaurant)
- two new Orderly room counters complete with cupboards and pigeon holes,
- plant holder boxes for the Cpls club,
- Benches and partitions for a computer/language study and recreation room,
- numerous chalk boards, notice boards, boxes large and small, and the odd - dare I say it - PERK.

Over the two year period many tasks were completed against, at times, what seemed like insurmountable odds. The close working relationship and never failing support of the Works Services staff contributed largely to this record and we were very grateful to them. Although the Tradesmen Pioneers' work seemed insignificant and to outsiders "a bit of a bludge", there were as many others who went away from the "chippies shop" as satisfied customers.

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### **IN BRIEF...**

**ISRAELI AIRCRAFT FOR PAPUA NEW GUINEA:** Papua New Guinea is to buy three Israel Aircraft Industries' Arava IAI201 STOL military transport aircraft, in a deal valued at \$10 million (£7.58 million), Premier Michael Somare announced in Port Moresby. The first is expected to be delivered by the end of the year, and will be used for patrols along the Indonesian border.





## PFM-1 mine in Afghanistan

THE PFM-1 'BUTTERFLY' anti-personnel mine is one of the most efficient weapons to be used by the Soviets in Afghanistan and, scattered along the mujahideen's most travelled routes, has caused heavy casualties. The mujahideen has learned to distinguish the unique shape of the PFM-1 mine, the mere discovery of which brings the caravans to a standstill, becoming sitting targets for Soviet helicopter attack. Lacking any mine-detection equipment, the Afghans are forced to seek out these small mines on their hands and knees and to detonate them by throwing stones.

Using Mi-8/Mi-17 Hip helicopters and large-calibre artillery to disperse the mines, the Soviets are able suddenly to sow

minefields and as a consequence have had a major impact on the breakdown of the resistance.

Dispersed randomly, the mines are used to disrupt mujahideen lines of communication, or scattered in front of a force to bring it to a halt before attack. They are also scattered into the caravans (usually at night) to create chaos and cause casualties among rampaging animals and guerrillas.

During airborne strikes in the deep rear of the enemy, Soviet elite troops sow minefields to protect their rear and flank, and special forces detachments also use them for the protection of their landing and ambush sites.

A Hip usually carries two mine dispersal

units and can sow 144 mines. Each unit comprises six 12-mine packets (figures 1 and 2). The dispersal units are hung from the helicopter's hard points and the top of the unit (the rod in the centre) remains attached to the hard point for further use. The two solid-side covers of the unit are pushed apart mechanically by piston-like levers operated by springs and hydraulic pressure. When each of the six 12-mine packets is released, the mines are scattered by airflow or on impact with the ground. The packets are made of a very thin foil and the dimensions of the unit are about 250 x 250 x 250 mm.

The Soviets introduced a new mortar-launched mine-dispersal unit in their offensive sweep from Jalalabad towards Asmar in mid-February. One or more units are launched from a 240 mm mortar, which can be either towed or self-propelled, at a range of 12-15 km.

The mines disperse in packets which look like green plastic bags, measuring 200 x 200 x 100 mm. Each unit contains some 20 PFM-1 mines and a blast charge in the middle. The unit explodes on impact, dispersing the mines within a radius of 100-200 m, depending on the terrain.

According to resistance commanders in the Nangarhar and Konar provinces in eastern Afghanistan, the Soviets introduced extremely heavy mortars at the beginning of 1985 in order to ambush caravans. In the first airborne raids of 1985 in these provinces, the Soviets used these mortars to shell resistance installations from the other side of a mountain ridge just before the landing of the helicopter 'desant'. These barrages included a combination of high explosive bombs, incendiary munitions and 'mine-bags', and mujahideen commanders described the effect of the HE shells as 'devastating'.

▼ Figure 3. Crater in Nangarhar province caused by 240 mm HE mortar bomb



"The Engineers  
Have hairy ears"  
And hairy, harried faces:  
Robust and rough  
they do their stuff  
In all the toughest places.

For they are the babies who take the raps,  
The boobs who probe for the booby traps;  
The scouts ahead of the scouting lines  
Cutting the wire and hunting mines.  
And they are the playboys, gay and bright,  
Who crack pillboxes with dynamite,  
And they are the fellers who fell the trees  
While the bullets hum like a hive of bees.

The Engineers!  
They grease the gears  
That Army transport runs on,  
And foot by foot  
Build roads they put  
The trucks and tanks and guns on.

They are the buckaroos who buck away  
Through stubborn granite and sticky clay,  
with pick and shovel they break their backs  
After (and under) the bomb attacks.  
They drill for water through desert dunes  
and over the rivers they toss pontoons.  
They slap down runways in fields of mud  
(And some of the ooze is the ooze of blood).

The Engineers  
Are cavaliers  
Who joust logs and boulders  
A task that's done  
With half a ton  
Of junk upon their shoulders.

For they are the lugs who lug the most  
Of loads that land on a hostile coast,  
And they are the guys, when equipment fails,  
Who scratch out a ditch with their finger nails.  
You find them up in the mountain crags,  
And down in the jungle clearing snags  
Where the moccasins coil and the snipers lurk -

Engineers doing the dirty work.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Editor's Note: I had always understood that this poem was attributed to an Australian Sapper written whilst he was in Vietnam. I note that in the recently published SAPPERS ASSOCIATION (NZ) HISTORY that a verse from this same poem was stated as being from a work called, "Nostalgia" published by Col Guy Sanders. Unfortunately Guy doesn't recall having written the poem. Perhaps someone may come to light with the author.



# HURRAH FOR THE CRE

\*\*\*\*\*

Good morning Mr Stevens and windy Notchy Knight,  
Hurrah for the CRE.  
We are working very hard down at Upnor Hard,\*  
Hurrah for the CRE.  
You make fast, I make fast, make fast the dingy,  
Make fast the dingy.  
You make fast, I make fast, make fast the dingy,  
Make fast the dingy pontoon.

\*\*

For we're marching on to Laffan's Plain,  
To Laffan's Plain, to Laffan's Plain.  
Yes we're marching on to Laffan's Plain  
Where they don't know mud from clay.  
Ah, ah, ah, ah, ah, ah, ah, ah,  
Oshta, oshta, oshta, oshta,  
Ikona malee picaninny skoff,  
Ma-ninga sabenza, here's another off.  
Oolum-da, cried Matabele  
Oolum-da, away we go.  
Ah, ah, ah, ah, ah, ah, ah, ah,  
Shuush.....Whoow

\*\*\*\*\*

This song, a favourite amongst the Royal Engineers had its origin during the South African War of 1899 - 1902. The words are partly in English and partly in Kaffir. The tune is a traditional South African song called "Daer de die ding". The Kaffir words are a complaint that there is "too much work, for too little wages and little food, so the Kaffirs are off.

\* Upnor Hard - Bridging training area on the Medway river not far from Chatham - the site of the Royal School of Military Engineering.

\*\* Laffan's Plain - Named after Lt Col H.D. Laffan CMG, RE, who was involved with the survey of Natal, and later the border Commission surveying the border between Bechuanaland and German South West Africa 1898. A distance of 1,113 miles. Recalled from retirement to serve in WW1.

The reference to "windy Notchy Knight" is not known at this point of time. Perhaps some reader may come up with the answer.

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# Exercise Long Look

## The British View

Exercise LONG LOOK is an annual individual exchange between the British and the Australian and New Zealand Armies. The Exercise lasts for four months and takes place between August and December.

### Aim

The aim of Exercise LONG LOOK is to broaden the military experience and knowledge of individual officers and NCOs selected for the exchange and, at the same time, promote a wider cooperation between the 3 Commonwealth Armies.

### Historical Background

The roots of Exercise LONG LOOK are found in the tri-national 28 Commonwealth Brigade. Troops from the three Nations served side by side in Malaysia, Borneo and later Singapore. Australian and British units withdrew from this integrated force in the mid-seventies although the New Zealand Battalion remains in Singapore and provides a valuable half-way point for mounting the Exercise. Exercise LONG LOOK perpetuates the traditional relationships established in the Far East and for the first time offers exchange appointments for relatively junior ranks in the home countries. The Exercise has taken place every year since 1976. It has been an undoubted success, not only in maintaining goodwill but has led to greater understanding in training, equipment and doctrinal matters.

● Thirty-one New Zealand soldiers are on a four-month exchange exercise with the British Army.

A similar number of British soldiers will spend four months attached to Army units in New Zealand.

Called Exercise Long Look 85, the deployment is the tenth in a series of annual exchange exercises started in 1976.

The New Zealanders left for the United Kingdom on August 12. The aim of the exercise is to broaden the military experience and knowledge of the soldiers, who range in rank from corporal up to major. Several members of the contingent are serving in Germany with units of the British Army on the Rhine (BAOR).

### Individual Selection

The Exercise is open to any NCO, Warrant Officer or officer in the Army between the ranks of Corporal and Major. One hundred and twenty British servicemen take part and the ratio of appointments is 60% to UKLF and 40% BAOR. The exchange is not limited to specialists or those with a particular knowledge or experience to impart. It is important, however, that individuals of reliable calibre are selected. The British soldier abroad is an ambassador of this country and is taken as representative of its Army by those with whom he serves. In deciding individual positions, Units and Directorates are asked to consider the following points:

- The Australian and New Zealand individuals must have a proper appointment to fill in UK or BAOR. It is NOT acceptable for them to fill supernumary positions.
- Compatibility of equipment for technical appointments.
- The appointment must allow individuals to broaden their military knowledge and experience.

### Exercise Planning

Planning for the Exercise begins in MOD(AT2) 8 months before the mounting date. Appointments for exchange are offered in alternate years by the UK or Australia and New Zealand.

In 1982 the UK MOD allocated Exercise positions to the Arms and Service Directorates and called for offers of appointments, which were in turn passed to Australia and New Zealand who are largely bound to accept them and offer similar appointments for British personnel in their own Armies. A measure of flexibility, however, exists in the arrangement. Australia and New Zealand may, if they wish, nominate up to 10 non-reciprocal positions which means that while they will accept a particular nomination from us, they will send an individual to a different job in the British Army. In the past this has caused problems because units found difficulty over losing an individual without an Australian or New Zealand replacement.

### Value of the Exercise

Problems have also arisen when units have been reluctant to release individuals for the Exercise. Whilst there is no shortage of interest on the parts of would be volunteers, units are understandably reluctant to release key staff for four months. Commanding Officers should consider, however, that they would almost certainly receive a high calibre replacement from Australia or New Zealand. In addition the released individual will return to the British Army with the far greater awareness experience and maturity associated with overseas exchanges. Opportunities to serve outside North West Europe have lessened in recent years and Exercise LONG LOOK is a chance not to be missed.





## "ENGINEERS OF THE NORTH"

It has been a very long time since the Engineers of the North burst forth into print or had a roll call in the RNZE Liaison Letter, so we hope this will serve to provide an update. Below is a "Who's who" at the moment, in HQ Land Force Command, Takapuna:

|                    |   |                                |
|--------------------|---|--------------------------------|
| Maj Joe Hollander  | - | S02 Plans/SORE 2 (Ops Branch)  |
| WO1 Alan Sinclair  | - | Resources WO (Pers/Log Branch) |
| Cpl Geoff Robinson | - | RF Clerk (HQ Coy, LF Comd)     |
| Cpl "OP" Smith     | - | HQ Reception                   |

When not sunning himself in the Pacific Islands or appearing on TV, the Major spends most of his time involved with RRF and IEF activities, planning exercises in NZ and abroad and maintaining a general overwatch of engineer activities throughout the Pacific region, including those at home. He is looking forward to his new appointment at the School of Military Engineering, Linton, towards the end of this year.

WO1 Sinclair continues to persevere at his desk, monitoring works and logistic activities and finances, until he takes his retirement about the end of the year. We all wish both he and his family the very best for the future, and for his not-yet chosen second career (likely to be tax-dodging).

Cpl Robinson has had a double cartilage operation on his legs, but will in no time be back on the road again. He hopes to go to Australia in 1986 with the Services Marathon Team, but in the meantime is content to be involved in and play as many sports as possible.

Cpl Smith is still "on the door" and is arranging cut-price deals about the North Shore for the HQ staff. It is understood that he has been taken on the inventory of 17 Byron Ave, as a permanent fixture.

What the future will hold is anybody's guess. Spring is here and those remaining in this glorious location are readying themselves for the onslaught of summer and beach parades during lunchtime jogging sessions. You will be advised of the new editor for the "Engineers of the North" in due course.

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Note: Since this was sent to SME "OP" Smith has decided to leave the service. We wish every good fortune to come his way for the future.

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ACCORDING to the Soviet newspaper *Red Star*, the Antonov An-124 heavy freight transport, known to NATO as Condor, has set its first weight-lifting record. At this year's Paris Air Show its maximum payload was quoted as 150 000 kg. In a record attempt awaiting confirmation by the Fédération Aéronautique Internationale, an An-124 lifted 171 219 kg to a height of 10 750 m (35 250 ft). The current record was set by an American Lockheed C-5A military freighter, which lifted 111 461 kg to a height of 2000 m (6550 ft) on 17 December 1984.



## THE SAPPERS ASSOCIATION (N.Z.) INC.

### "OPERATION RETIRED SAPPER"

Dear Sapper,

We are aware that you served with a RNZE unit during the past 12 - 30 years and are most concerned at the fact that we are not looking towards your interests or welfare, at all. The main reason being that you are not a member of The Sapper's Association (NZ) Inc and that at the time of your departure from the service, a national Sapper organisation did not exist.

Well, that situation has changed and now our organisation does exist to look after the interests of the Sappers of NZ, both serving and retired. The Association (hereafter - Assn) evolved from the Sapper's Association (Auckland) Inc, with a membership of 700 strong, NZ - wide. Since becoming the national Assn in late 1984, the membership has crept towards 800 and 20 - 30 new members are joining each month. However we are mindful of the fact that over 1200 members of the Corps have retired from the Army, since the 1960's.

Most of you have disappeared into obscurity, seeking a break from the good and bad memories of your service and establishing a second career. But what about all those friends you made, good times you had and the goals and satisfactions you achieved during your time as a sapper? Remember the saying, "Once a Sapper - always a Sapper." and it is doubtful you will forget these times during your life span. However, you do run the risk of losing contact and your record of these important events in your life, by "cutting the cord" with the Corps.

We can help you, particularly as you get older and want you to know that we are committed to the "esprit-de-corps" and welfare of ex-members of the RNZE. By parting with a very meagre sum (\$18), you will receive Life Membership of the Assn, ie you pay no more than your initial membership and joining fee. For this one-time subscription, you will receive:

- a membership card;                      Lapel badge;
  - be entered on the membership rolls;
  - receive a quarterly newsletter with news and information of your colleagues and sapper activities and events;
  - be informed of various reunions, news from about NZ and overseas, plans for Sapper's Day (15 October, celebrated on that date, or the nearest weekend each year);
  - contact with Australian Sapper Organisations;
  - have recourse to welfare calls and contact, and much more.
- Not bad for \$18.00 these days!

The Assn has been very ably run by an active group of senior sappers, ie senior only by age, as most are WW2 veterans. Their immediate concern arises out of the fact that they are not getting any younger. The successful and financially sound organisation they have built up over the past 25 years, needs to be carried on by younger sappers. This flourishing



camraderie and tremendous goodwill must continue and to do this, we need the support of each and every Sapper, especially you the retired ones. Now that we have a growing national organisation, there is a need to have the old and the young, the serving and retired members of RNZE. This will ensure that all the members of the Corps are catered for properly. By the way, membership of the Assn is open to all ranks, that is , all Sappers.

AS a sign of success and to commemorate the Assn's Silver Jubilee, we have produced a record of the first 25 years of its existence. A book entitled "Your History 1960 -1985 Your Heritage", has been printed and is available from the Sappers Association. (See insert) This book covers all the Sappers and sapper history as they pertain to the to the assn over the past 25 years. There are the membership rolls, as well as the Aims, Objectives, management, re-union records, photos, to name but a few sections of this excellent history of Sappers at home and abroad. We urge you to obtain your copy NOW so that you will not be disappointed later. Once stocks are exhausted there will be no further reprints.

# UBIQUE

## NOTE

You will find an insert with this Liaison Letter should you wish to take up the opportunity to obtain your copy of this book.

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 \* SAPPER'S DAY IN THE MANAWATU 1985 \*  
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Tuesday 15 October dawned bright and fair, though many sappers had been up before the dawn to organise "Sappers Day Surprises" on the rest of Linton Camp. Not only was there movement in the camp but sappers, both serving and retired, were making their way in the stillness of the early hour to the Post Office in Palmerston North from where they would march the short distance to the Cenotaph in the Square. Here a wreath would be laid in a quiet ceremony to remember our dead of wars recent and long past. Nearly 30 ex sappers and serving soldiers met here for this act of remembrance.

|                         |   |                                           |
|-------------------------|---|-------------------------------------------|
| +++++                   |   | Back in Linton Camp things were beginning |
| +                       | + | to happen. Reveille was the traditional   |
| + WE WILL REMEMBER THEM | + | sappers reveille (which was heard by the  |
| +                       | + | Sappers in Palmerston North) and was      |
| + WE WILL REMEMBER THEM | + | followed by the officers and senior NCOs  |
| +                       | + | waking the troops in barracks. It should  |
| +++++                   |   | be noted that for some reason some of     |
|                         |   | these troops looked as if they had been   |
|                         |   | up all night.                             |

With the "Noises off" being orchestrated by Capt Walding RAE and the Fire Station playing the 1812 OVERTURE at almost the same time over the Camp System there could have been few that were still sleeping in the houses nearby. Later in the morning, about 0715 hrs radio 2ZA spoke briefly with the SSM of SME about Sappers Day and then played "Hurrah for the CRE". That was a great start to the day.

Breakfast was an almost family affair with all ranks joining together in the 600 Man Mess. Living out personnel too were well represented as they had all come prepared with meal tickets. One has to admit that there were one or two green faces about when faced with a SPECIAL scrambled egg dish in the red and blue of the Corps colours. Strangely enough there were not many takers for that. Can't see what is wrong with red or blue scrambled eggs - can you?

After breakfast it was a time of waiting round to see the reaction of the rest of the camp coming to work and being faced with a toll gate at the entrance of the Camp and barriers set up so that the toll gate could not be avoided. This drew a response of over \$80.00 for the Corps Memorial funds which was greatly appreciated. After the initial reactions had been noted by those who had perpetrated those "despicable deeds" it was time to clean up. It was indeed quite interesting watching the amazement of the civilian staff as they wandered all round Camp Headquarters building trying to get in - and discovering that ALL the entrances had been closed with building blocks.

At a few minutes to ten nearly all the sappers in Camp had congregated at the chapel for the dedication of the new stained glass window which had been given as a gift of abiding friendship from the Royal Engineers. (see details of the window on page of this issue). Visitors included the Colonel Commandant, Chief Engineer, Shona McFarland and her husband Mr Highet (Former Minister for the Arts), Col Farrell (UK Defence Liaison Officer at Canberra), Maj Steel RE (currently the UK exchange officer at SME Casula, Australia) Col Rutherford from Defence headquarters, representatives from 1 Fd Sqn, Waiouru, (ATG Headquarters, Fire Station, and Plant Team), 6 Ind Fd Sqn, and 3 Fd Sqn. As well as these visitors there were ex sappers from the Manawatu area, sapper widows (so pleasing to see that they still maintained an interest in the Corps) and wives and those who had maintained an interest in the history both of the Corps and the Chapel.

Morning tea followed the service in which Padre Bob Short lead our thoughts to memories of former comrades, the Corps, the benefits of team spirit, and greater still 'esprit-de-corps'. The Colonel Commandant had some words to say then the service moved on to the dedication of the window itself. Shona McFarland was asked to speak briefly about the design of the window and we as a Corp were delighted to learn that her father was a WWI sapper - and an unofficial war artist in Mesopotamia. It is most unfortunate that his work like that of Sapper Moore Jones now resides in Australia. After the service Padre Short said that the laughter raised at his description of a sapper was worth a million dollars to him.

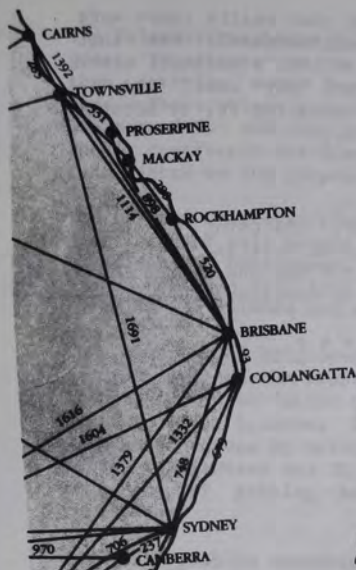
The afternoon was set aside for sports of a sapper nature. Some required brain as well as brawn. At one stage it looked as though the brawn was going to be the deciding factor but it was the efforts of the ATG Plant Team which won the day. Each team member was able to take a small trophy home with him to remind him of the day.

For some sappers perhaps the highlight of the day was the evening function in the Palmerston North RSA. Cpl Henderson and 2 Lt Armstrong had arranged a night of conviviality and entertainment with dancing, magician/humourist duo, and a supper. Over three hundred and twenty sappers, ex sappers, wives and girlfriends attended the evening.

The following day was the day for headaches - fixing up the leftovers of the previous day's activities, and trying to recover without too much effort. It was a grand day and one of the best celebrated in Linton for a number of years.

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## "ROO" NEWS

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The following is an edited extract from a letter from Capt D.J. Begley RNZE who is now drawing close to the end of his two year exchange with RAE. Firstly his whole family is well and there is another little Begley in the family. Trish of course is enjoying having family somewhat nearer and not separated by a great ditch full of water.

... I arrived over here to be told that I was not going to be the Support troop Commander as was planned originally; instead I was going to be the Recon Officer. However the CO could not see his way clear to give one of his appointments to a "Foreigner". So for the first ten months I was not really being employed to full potential and was getting bored especially during the long periods spent away on exercise. During 1984 from May onwards my exercise programme was as follows:

- a high risk engineer search training exercise of 3.5 weeks,
- a Regimental Exercise at Townsville of eleven weeks,
- a brigade exercise of four weeks, and
- a unit basic skills exercise of two weeks.

In addition to all these we still had to do all the usual things such as stocktakes, audits and the unit's share of duties. As you can see from the above the average Aussie sapper is away from home a lot more than our guys with the consequent discipline and domestic problems which manifest themselves...

...This year has been little different from last except that we have not had the three month exercise. It started off with a bang in February when I headed off as part of the advance party after cyclones "ERIC" and "NIGEL". I ended up in VANUATU where I had some interesting experiences and was able to visit a very beautiful and nearly untouched part of the world. Even Vila is a nice place, and not at all like Honiara.

Since then I have been flat out with construction work and exercises. I have constructed roads to civilian standards in Enoggera itself as well as extensive roads in Shoalwater Bay.

As part of the Support Troop I have three chippies, two electricians and one plumber. With these we have tried to live up to expectations with projects about a third the size of the 25 ESS Headquarters building. However there is room for improvement in their skill levels. By the time I go I hope that they will be better.



I have one very interesting project under my command that really takes more of my time than it should, and that is the reconstruction of the unit mascot. The 2/3 Field Engineer Regiment mascot is an 1890's Marshall steam traction engine. It was found rusted out on a farm "out west" and in conjunction with the Queensland Museum the unit is restoring it. By October I hope to have her on the parade ground in Holsworthy.

\*\*\*\*\*

Looks as if the Begly family are having a good time. Listening to short wave radio one can get very envious of the weather in Brisbane with day temperatures at this time about 28o C. I wonder if DJB was one of the Kiwis down at the cricket ground watching the first test in November.

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#### EXERCISE TROPIC VENTURE 1985

or

#### THE RRF HOLIDAY IN SAMOA

Exercise Tropic Venture, for the RRF (which for the sappers means 1 Fd Sqn) was held between 12-26 Jul 85 in Western Samoa, was an excellent exercise from the engineers point of view. It allowed us to work in a different environment on tasks that were both enjoyable and demanding. Our job was to carry out civil aid tasks and to help the Airforce with the setting up of their base camp. Some of the tasks carried out are described below.

#### The Tree at Magiagi Cemetery

This was a very difficult and dangerous task. The tree was approximately 35 metres high with a canopy spread of approximately 50 metres. The trunk diameter was two meters. The problems encountered with this job were:

a. It overhung headstones in the cemetery and nothing was permitted to fall on them.

b. It had a road running beneath it and houses on the other side of the road.

c. We only had a Tirfor hoist, blocks and tackle until a crane was found quite by accident. Even with the crane this was still no easy task. It was made even more difficult with the numbers of locals hanging round to see that none of their ancestors graves were damaged or interfered with, and also, just before the task was completed the local crane operator tipped the machine on its side.





The Faleasiu Pumphouse job was made a lot easier by the fact that it was of great importance to the villagers concerned. This would eventually save them carrying water from a point about one and a half to two kilometres away. The problems encountered with this task were the heat, the shortage of materials and that just before arriving on site to commence work, a local contractor had dumped the aggregate required for the concrete floor dead centre on the proposed site.

The Lister Generator task was of great importance because the generators provided the main source of communication. These were owned by the Samoan Broadcasting Department. The main problem encountered was that the new parts had been sent from New Zealand. These were for newer machines than those in the islands and a lot of time was spent in modifying them.

The clearing of trig beacon sites and the installation of the stations was carried out on the mountainous terrain of Savaii. Dense bush and large trees had to be felled to be able to get the trigs in and give line of sight to other beacons. This required two three man teams to be winched in with their stores by helicopter. The trees that were felled were up to 2.5 metres in diameter and 30 metres high. The Airforce pilots did an extremely good job of getting the teams into location in very difficult weather conditions.

The main problem encountered was the weather. The jobs were continually shrouded in mist and rain. One group had actually cleared a site on the first day but nobody could get near them for five days because of the weather. This group became a little frustrated when their ration got very low. It became worse when being on tinned ration packs, having Tilley lamps for lighting and being smokers, they ran out of matches. Not to forget that all their clothing and sleeping bags were soaked.

A Water Supply task which had been started by a group of Australians but not completed next took up some of our time. We were not really set up to do much with the time and stores available, and it was all that we could do just to make some recommendations. The water was to have been the supply for two schools.

Red Cross Seminar and Base Camp tasks also kept some of our people busy. This involved taking lessons on health and hygiene in the field, water supply and the construction of helicopter landing pads. This was conducted for the assistance of disaster relief teams on both the Islands of Upolu and Savaii.

We assisted where we could with the normal engineer tasks of setting up camps - water supply, lighting and power, putting up tents and anything else that the RNZAF requested which we could handle.

To conclude this was a most worthwhile task and from our observations there still remains much more work for the engineers in Western Samoa. This however can be said of all the Pacific Islands that the RNZE have worked on. Our unit motto still remains and was practised in full -

WORK HARD - PLAY HARD.

\*\*\*\*\*

A lady entered a pet shop and asked the man behind the counter if he "Had any small dogs going cheap." Quick as a wink he replied "No lady. Only small birds going cheap."

## A KIWI IN THE SINAI

by

Capt S.G. Ransley

One of the more unusual places round the world that officers and soldiers of the Corps of Royal New Zealand Engineers are posted is the Sinai desert. The RNZE currently fills the position of Assistant Engineer Advisor (AEA) on the Headquarters of the Multinational Force and Observers (MFO) Sinai.

The MFO was set up as a result of the agreement reached between Israel and Egypt at the Camp David Accords with the role of monitoring the peace treaty between the two countries. One of the more significant parts of the treaty was the handing back of the Sinai Desert by Israel to Egypt. The MFO occupies a portion of the Sinai with a three battalion force and its logistical supporting elements coming from the military forces of eleven nations. The "Observer" element is made up of civilians specifically tasked with monitoring military activity throughout the Sinai and reporting directly to the Force commander, Lt Gen INGEBRITSEN (Norway). The military elements of the MFO are restricted to one area of the Sinai, Zone C. The specific role of the MFO is to observe and report breaches of the treaty protocol to both countries. The MFO is impartial.

I was posted to the MFO in February 1984. The MFO was created on 25 Apr 82 after a hectic year of engineer activity to develop the facilities throughout Zone C to accommodate the members of the MFO. The facilities are centred round two major camps and forty desert outposts consisting of Observation Posts (OPs), Check Points (CPs) and Sector Control Centres (SCCs). The outposts are positioned in areas and on routes that enable them to observe and report unauthorised movement throughout the entire zone.

The main camp, North Camp, is constructed on what used to be Etam Air Base, now known as El Gorah. Many ex-Israeli facilities have been utilized in El Gorah but many others have been constructed to accommodate the MFO in its entirety. The other camp is South Camp located on the Southern tip of the Sinai peninsula at Sharm El Sheik, opposite Tehran Island and the Straits of Tehran. South Camp was constructed specifically for the MFO at its inception.

The engineer Adviser (EA) for the MFO is an American Lt Col, with a staff of officers and NCOs from USA, NZ, Uruguay, Colombia, Fiji and England. A cosmopolitan group with the ability to speak four languages - English, American, Spanish and Fijian. The diverse nature of the group was in itself an experience. The responsibilities of the EA's staff frequently overlapped. Generally my responsibility was for everything outside the gates of the main camps, i.e. outposts, roading and water supply.





With roading I was ably assisted by a plant troop of Uruguayan Engineers. We were responsible for maintaining and developing all roads used by the MFO throughout Zone C, a total of approximately 900km. This task alone presented many problems as the majority of desert materials are not suitable for roads carrying 5000 gallon water tankers. Most roads were constructed using hard clay. The lack of water for compaction presented obvious challenges. While the problems were many, they were overcome by the hard work and professional standards displayed by the officer and soldiers of the Uruguayan Plant Troop.

On the vertical construction side, the Force Commander approved a programme to upgrade the outposts from the spartan facilities initially constructed. Because of the nature of the MFO, no permanent facilities could be constructed so all had to be of a transportable nature. The primary engineering support for the MFO is a civilian support contractor (SSC) employed to carry out both base and outpost maintenance. The capacity of the SSC to undertake new work was limited so most facilities had to be constructed by Egyptian and Israeli contractors. This introduced another aspect of engineering - the management of Egyptian and Israeli contractors by a Kiwi.

The scope of the contracts was varied to include toilet blocks, accommodation buildings, storage sheds, observation towers, supply of stoves, interior joinery and the construction of mobile accommodation for the Uruguayan Engineers. As the MFO's construction was limited, the infantry battalions, with their Assault Pioneers, undertook many self help engineering tasks. Of particular note was the upgrading security and construction of new sewerage systems on all outposts.

Living in a desert environment creates the obvious problems of water supply. I have previously mentioned the effect on the roads of heavy water tankers but this was only the tip of the iceberg. The MFO relied solely on water pumped from a coastal aquifer at Yamit (just south west of the Gaza Strip in Zone C) by a system operated by the Egyptian Government. The system was in the process of being rebuilt since Egypt regained the Sinai in 1982. This coupled with the spartan nature of the system meant that it wasn't without its particular challenges. The Bedouin who in the past have freely pursued their nomadic desert existence were quickly moving in and settling round a permanent water source - the same one we relied upon. The system could barely support the growing population in the area. Water became a source of problems that required constant monitoring and liaison to ensure that our water tanks did not run dry. Water restrictions became a way of life that most inhabitants adapted to without too many grumbles.

The challenges of desert engineering were many and varied. Coming from a country where building materials and resources are readily available, to an area of the world with vastly different climate and terrain meant totally different construction standards and methods were employed. This in itself was a "culture shock" to say the least, one that tested principle of flexibility to its limit. For me as an engineer it has played a significant role in my professional development.

Life in the MFO was not without its social events. Living for a year in the Holy Land meant it was commonplace to centre leave plans around many of the sites to be seen in both countries. For a Kiwi from Down Under, it was also a great opportunity to see Europe and those places most only read about.

My year in the Sinai was a long one, but an experience I would not have missed for the world. I feel I have gained a tremendous amount, both culturally and professionally. The opportunity to work with eleven nations does not present itself every day as it may do in some armies around the

world. The MFO has proved itself as a successful peace-keeping force which is contributing a tremendous amount in maintaining the stability in a potentially volatile portion of the world, a force that I am proud to have had the opportunity to serve with.

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Whilst reading about this area of the world which Captain Ransley has described just take a moment to pore over the accompanying map of the area. The area is full of history some of which can be seen to this day. In Egypt there are the pyramids, well known to many tourists, and in Jordan the hidden city of Petra which only had one entrance through a defile in a rock wall, and which is little known.

This map also shows the site reputed to have been where Moses knelt before the Burning Bush (as told in the Old Testament) to the site traditionally identified as the place where Moses received the Ten Commandments.

Further north in Israel one can see the location of Bethlehem which is no doubt on the minds of many in this Christmas season. Nearby the city of Jericho whose walls Joshua and his men caused to collapse by shouting, clashing of cymbals, and trumpet blasts as told in the Bible and related by a well known negro spiritual.

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Information that  
Cpl Gardyne was  
on TOD in this  
area arrived too  
late to be  
placed on the  
inside cover map





A WORD FROM THE CHAPLAIN  
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Thanks - to the Corps of Royal Engineers for the splendid gift of a stained glass window recently given and installed in the St Martin's Memorial Chapel in Linton Camp. This is a worthy addition to the Memorial and is a constant reminder of the links forged in battle and during peacetime between units. It creates a focus point in the Sanctuary and there is something special about it's ability to make us as we enter, to lift our eyes to the ceiling. Its ability to capture the sunlight and focus it onto the altar, sending rays of many colours is a joy to behold.

The Service of Dedication on 'Sappers' Day, drew a large gathering of people to the chapel, It was great to have so many old friends and service persons present to share in the event. The Colonel Commandant outlined the history of the window and it's designer Shona McFarlane expressed her satisfaction with the completed work. As padre it was my privilege to dedicate it to the work and glory of God. To pray together, to sing together, to hear the word of God preached - this was truly a memorable occasion.

The Chapel exists in this setting as a living memory to those who have served and to those who serve. It is a building with life and memory as it's base. It's very existence at the heart of the Force Maintenance Group, Linton Camp complex reminds us of our duty to place God at the heart of our living. It stands to offer us a place of sanctuary, peace, acceptance, security and it is suprising just how many people make use of it daily. It is where we begin our Christian pilgrimage by Baptism, where we confirm our faith by confirmation, it is where we are refreshed by sharing Eucharist or communion, its where we confirm partnership by marriage, and where we say a sad farewell to our friend in death. It's the one stable and unchanging facility in our whole pilgrimage in the military. It's the place of story and memory and it's great to know that the Engineers are partners (some sleeping) in this important enterprise of faith.

As the Regular Force Chaplain who shares the responsibility for the work of this Memorial Chapel I would take this opportunity of saying thanks for the assistance physically and financially that your Corps provides, that the work of god may continue and so that the 'living' spirit within this memorial may be effective.

To all the seen and unseen workers - Thanks!

Chaplain R.(Bob) D. Short C14, FMG Linton Camp

## System welds earthing conductors

An alternative method of permanently joining earthing conductors on sites where a power source is not available, has recently been introduced to New Zealand.

Backed by major resources of a 75-year-old electrical engineering firm, the new portable welding process forms part of a complete and comprehensive earthing system of bolted connectors, copper and stainless steel-clad earth rods, inspection boxes and portable safety earthing sets.

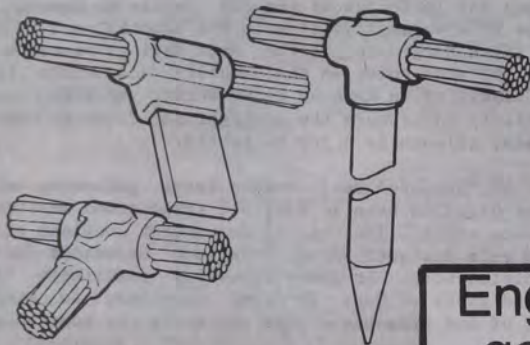
Copper-to-copper and copper-to-steel connections can be readily made with this British-developed "Furseweld" process, say sole local suppliers Canterbury Engineering. It also joins other materials such as stainless steel, monel, brass, bronze and galvanised steel.

Typical applications include cable junctions with other cables or rods (illustrated). Stan-

dard accessories join cable to flat bars, lugs, large flat or curved surfaces and railway lines. Such junctions are required for earthing, cathodic protection, bus bar systems and railway electrification.

The welding process takes only seconds and involves comparatively little heat — an important advantage when welding insulated cable or thin-walled pipe.

The joint is a molecular weld of pure copper which can carry more current than the conductors welded. The point of weld is electrically secure under all conditions, and resists vibration and corrosion.



## CAD/CAM Conversion and 3D CAD System

Engineers can now bridge the CAD/CAM gap with a software package that translates CAD drawings into industry standard NC machine tool data formats, according to the suppliers, AM International Ltd.

The 'Manufacturing/NC Toolkit 1' is a software package which creates files of NC information which can be printed for use by NC programmers or transmitted directly to a machine tool, to another NC computer or to a paper tape punch. It thus increases manufacturing productivity, shortens the time from concept to finished parts and enables parts to be produced more reliably.

The three available formats are APT, COMPACT II or 'G' CODE, which is BruningCAD's format that is similar to the code sent to an NC machine.

The Manufacturing/NC Toolkit 1 also allows the operator to: generate an NC labelled plot of the part geometry when using the APT or COMPACT II options; specify an optional 'mill' or 'lathe' format when translating part geometry into the COMPACT II format; and automatically optimise tool path when outputting part geometry in the 'G' CODE format.

## CAD system

A computer aided design system offers full compatibility with new technology as it becomes available.

Developed by Australian company Easinet, the trade name for Engineering and Scientific Computers Pty Ltd, it rivals the world leaders in CAD/CAM systems.

Easinet is an exhibitor at the New Zealand International Trade Fair.

The Easinet system originally was developed for a group of companies where information needed to be accessed by architects and engineers. It was designed to have sufficient flexibility for a multi-disciplined environment.

This has resulted in success in fields as diverse as electrical, mechanical, civil and structural engineering, architecture, mapping and manufacturing.

The system has been based on Data General's range of Eclipse computers using their advanced operating system. This provides highly efficient use of the central processing unit and its peripherals.

## Engineers study geotextile use

'Geotex' is produced in large rolls of cloth which are simply rolled out on the road subgrade and covered with gravel. The product provides a separating and reinforcing layer, and reduces the accumulation of surface water.

"One interesting use of the product is at the Motonui synfuels plant, under which lies 30 kilometres of 'Geotex' to act as a soil stabiliser," Mr White said.

"We have also recently begun to export small quantities of 'Geotex' to Australia."

The ICI 'Terram' range are non-woven retrofilament spun-bonded fabrics made from a mixture of polypropylene and polyethylene. Chris Lawson, Pacific Region Manager for ICI and a world authority on geotextiles, introduced 'Terram' to engineers at the seminar and presented a detailed study of geotextile use.

"The 'Terram' range are among the world leaders in the geotextile market," Mr White said, "and together with 'Geotex' offer a selection of fabrics to suit all New Zealand construction requirements and conditions."

For the past 18 months Donaghys Textiles has also been marketing a geotextile called 'Soiltex', which Mr White said has proved very popular. Designed for farmers, 'Soiltex' stabilises the soil in potentially boggy areas such as farm tracks, sheds and gateways by providing a firmer surface and stopping any metal applied being forced down into the mud.

"By using geotextiles, work can go ahead in areas where traditional construction methods are not economically viable or when weather conditions are bad," Mr White said.



## ACROSS RUSSIA BY TRANS SIBERIA RAILWAY

Ex Sapper Wattie Hoban

As a ten year old boy, 70 years ago, I read a most interesting book about the Trans Siberian Railway being built from Moscow to Vladivostok on the east coast. Over the years I often reflected on this huge undertaking, and wondered if I would ever get the opportunity to see it and satisfy my curiosity. Last year my wife prompted me to take the trip, so off I set. It was an experience which I won't forget, and, once back in New Zealand created quite an interest amongst local groups where I have given an number of talks.

I flew by Qantas which has a route through Bangkok, Taiwan, HongKong and Japan so took the opportunity to visit places en route to Vladivostock.

Leaving a frosty New Zealand, and the day after arriving in a 38 C heat of Bangkok took a bit of getting used to, but being an old hand I took things quietly. I dogged the early morning and late night excursions, but casually enjoyed the local environment, living conditions and the bustle of life. The shrines and Budda temples in Bangkok are magnificent and well worth a visit. However in the monsoon season it would not be so pleasant as the buildings have no spouting and the water pours off onto the footpaths which are in bad condition. Most shopkeepers understood English but I had difficulty in getting what I wanted when I entered a well set up cafeteria. However after a lot of waving of arms, gesticulations and so on I managed to get a good meal - minus the chopsticks. The shops in Bangkok sure maintain the supersalesman pitch which we experienced in Singapore.

I took a trip to the area of the Bridge on the River Kwai where the Japanese employed their P.O.W.s in building the railway through to Burma. The trip took us through paddy fields and sugar cane fields which were dotted with Budda shrines. I took photographs of the Australian section of the War Cemetry which contains some 10,000 graves; it is estimated that 100,000 prisoners died in this area. An original prisoner hut about a hundred yards long is still maintained and pictures and momentos of the inmates display the deplorable and pitiful scenes which they had to endure. The army still maintains patrols in the area to combat smuggling across the Burma border which is only a few miles away.

Onwards to Taiwan where we stayed in Taipeh for a couple of days. It is an overcrowded place of people and motorbikes. We saw the changing of the guard at the Chiang Kai Chek Memorial. The guards never flicker an eye during their two hour duty but the march was a kind of funeral step. An English leaflet is produced for the tourist hotels with some interesting information such as land prices which were quoted at 2.81 million New Taiwan dollars per hectare and NT\$15 million for dry land or in building areas.

Our journey continued on to Japan. We landed at Osaka, stayed at Kyoto and took the "Bullet Train" to Tokyo. This trip took three hours and cost A\$62.5 plus A\$20 for the baggage to be taken by road. I cashed a A\$100.00 traveller's cheque and received 20,600 Yen. Meals at the tourist hotels were very expensive but restaurants quite reasonable. Service at the hotels was very good with the customary Japanese habit of bowing when you meet housemaids and other staff. While in Tokyo I saw some high rise buildings being constructed. The foundations for some of these being made by cranes and augers and going down for over a hundred feet to accomodate 12" and 10" rails. This of course being necessary in earthquake prone areas. We took the Russian ship (Karbaroskya) from Yokohama to Nakhodka, a journey

af three days through the northern Japanese islands where we saw thousands of fishing boats. Like all cruise boats a special dinner was put on for the final night. Plenty of refreshments including vodka with the dinner - and strange to say nearly every passenger seemed to get rid of it through the night. It was definately not seasickness.

At Nakhodka we went through the usual customs inspection then collected our tickes for the train journey. The carriages are over a hundres feet long and twelve feet wide. Each of the nine cabins has four bunks, room to store your baggage, a small table and is electric and air conditioned. An attendant at the end of each carriage looks after the cabins (linen etc) provides hot water from a coal fired boiler and locks the cabin in your absence. The first class carriages were much the same as ours but only had two bunks. The trains run on a five feet wide guage double track which is electrified for most of the journey. A buffet car in the middle of the nineteen carriage train supplies meals for the group travellers only - the remainder of the passengers having to fend for themselves at various stops on the way.

My first booking on the train was quite interesting for I discovered that I was booked with three women. Evidently all bookings are done by numbers regardless of sex. However I chickened out of that one and found the husband of one of the women and exchanged places with him.

We left Nakhodka in the evening and arrived at Khabarovsk in the late afternoon next day. A distance of over 1,000 km. Through the daylight hours we passed mainly through bush (forest) areas and small villages of square log built houses with a chimney up through the centre. Piles of wood of about two feet long were stacked round each of these houses. The larger appartment building were all electrified so we were told.

At several of the small towns through which we passed we saw depots of up to a hundred or more steam engines all mothballed ready for future use if needed. Many of the villages we passed had few formed streets and it was noticed that there was a lack of gravel virtually through the whole trip. I found the trains smooth running and never noticed the stops or when we started. On the other track trains going in the opposite direction rushed past every few minutes right throughout each 24 hours. I counted nine trains in one half hour period, each of which I understood to be of 3,000 tons or greater capacity. One train we saw had a load of missile launching trucks heavily guarded by soldiers. Other trains carried header harvesters and grain, long trains of coal each truck carrying up to sixty tons, and many carrying fuel tanks.

At the hotel where we were to stay in Khabarovsk we sought out the shower room but found the water cold. We found out later that the whole town was out of hot water as only one steam plant served the whole area. The heavily insulated pipelines told their own story. I compared this plant to one I had seen in Vancouver, Canada. I was told by our Intourist guide that climate was severe in this area and temperatures were often as low as minus 52oC in winter. The shopping area here was plain and drab, no windows and no displays. Inside only stands and benches to contain and display their wares. All the buildings were thick skinned and windows double glazed.

The next stretch was a 3,000 km journey from Khabarovsk to Irkutsk which took three days. We passed over many bridges each of which had a military guard as this area was across the top of Mongolia and Northern China. In several places we noticed groups of soldiers jogging about, and along one area the construction was being done by soldiers (military engineers?). Some of the track laying equipment was similar to what we see here in New Zealand only the machines were larger. Many of the repair and maintenance



gangs along the line contained women who could be seen holding their shovels, and often women were stationed at crossings with flags to control traffic.

The second day of this trip we passed through flat country all day and the following day undulating country. At one place we passed a huge sawmill or wood factory, surrounded by three barbed wire fences the inner one of which was covered by electric lights. Interspersed all along the fence at regular intervals were pill boxes or towers, and all heavily guarded. There were a lot of stoppages through this area and we arrived some three hours late.

At Irkutsk we took a day trip of about 90 km through bush country to Lake Baikal (which has only two fifths the surface area of Lake Superior, but at over 5,000 feet deep makes it the greatest volume fresh water lake in the world. The road was tar sealed or bitumenised but without chips. Most of the roads seemed to be the same and were built on a rotten rock conglomerate much the same as the railway tracks.

In Irkutsk we visited ancient Russian churches now converted to museums, housing early artifacts. Alongside one of these we witnessed the changing of a guard at a Memorial Flame on an embankment. The guard of two girls and two boys all under fourteen years of age, goose-stepped from their quarters about 500 metres or so to the spot and in a precision movement exchanged with the guard who had stood motionless for fifteen minutes before being relieved. This activity carried on all day. Also at this spot wedding couples arrived at a nearby church, evidently to be blessed after their civil ceremony at the marriage centre. The couples were friendly and didn't mind us taking photos of them.

Our four day trip from Irkutsk to Moscow passed through more civilised country. Communes were more in evidence as in the grain areas 20 or so header harvesters could be seen to be working at a time. Herds of cattle could be seen and huge barns for them to use for winter housing. We also saw large silos and a mob of fine woolly sheep. Previously we only saw six cows in a herd, and quarter acre sections with farm cottages where potatoes and other vegetable were grown albeit rather poor specimens. Later in the Moscow area the state farms showed good products.

Our Intourist guide, a Moscow lady, was very helpful in explaining the living standards. She explained that an Aeroflot pilot could earn 1000 roubles a month and could retire on that sum after fifteen years. I was fortunate in having contact with a Hungarian student who hoped to become an Aeroflot pilot. He had done eight years in the university and thought that he could qualify in a year or two. Academics qualified for a 1000 per month plus extra for directorship or other activities. Bus drivers and communal managers earned 500 a month. Ordinary wages were 100 roubles per month with free electricity, a small rent for the apartment houses and no income tax. Coal and mica miners retired at 55 years of age and women who had five or more children could retire five years earlier. Population figures show that there are three females to every two males resulting in some vocations, such as doctors, being 73% women.

In Moscow we stayed at the Intourist hotel (Moscos) which accommodates over 5000 guests. It is serviced by 100 large buses like Volvos etc. Moscos dealt in American dollars only, as the locals did not seem to understand currency values. Drinks were all a dollar, but my sporting colleagues from Melbourne always seemed to be able to find a place at half the price. We were able to see the huge Moscow university (next to the equally large Moscow sports stadium) which has about 35,000 students each year. All students who qualified in their degrees were guaranteed a state job. In the eyes of the Russians the achievements of the Soviet astronauts rate

very highly and takes pride of place. A huge pinnacle several hundred feet in height depicting a space flight stands in front of Moscos.

We had difficulty with language as ours was often slangy and not understood. A bus trip to the Kremlin to see Lenin's tomb and the changing of the guard landed us in a queue about six deep and a mile long. We asked the guide how long it would take. When she said it would take about three hours we turned it down and went for a stroll round the government buildings. A large block contained the circus training centre but it was out of season as was the Bolshoi ballet. However we managed to see a performance at the Ballet School of Arts and a travelling circus, the standard of both being very high. A farewell dinner at a smaller Intourist hotel had a vaudeville act which was quite high standard, and the dinner was quite good. However most of the time the menu did not change. Soup, mostly cabbage, rice, and a dried reprocessed meat which was quite tasteless.

On to Leningrad where we stayed at the most up to date hotel I have ever been in. deep freezers and refrigerators are rare but we had small fridges in our rooms here. We visited the home of Peter the Great and saw his great gardens with their life size animals, and the fountains over 400 years old which were all gravity fed. Hitler's army destroyed most of these but they have all been restored to their original image. The visit to the Winter Palace was quite interesting. It has a 1,100 rooms filled with art treasures and would take days to see through them all. Czar's palaces, the Stock exchange and many churches have all been converted into museums. However we were able to visit a monastery in Gorgansk maintained by the Orthodox members of the community who were mostly elderly people.

We crossed the border into Poland at Brest (Brest Litovsk) where our carriage bogies were exchanged for a smaller size of four feet eight inches. It took an hour to change the whole train. The Warsaw station was a huge underground affair designed to be difficult to bomb. The continuing journey took us across Germany but we did not get much sleep when we crossed the border in Berlin. The journey to the border was all clackety - clackety but once over the border the rails were silent. We were all a bit hungry on the train from Moscow to Germany as there were no refreshments on the trains. However we made up for it on the boat crossing to England.

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Wattie Hoban served during WW 2 in 21 Mechanical Equipment Company. He is a good supporter of the Corps and has presented the medals of his step brother (who was killed in action) to our Memorial. Thank you for this article Wattie.

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# SAILEX

During the last week of October a team (crew) from SME took part in the annual combined services exercise called SAILEX. This has been for the last six or so years an exercise where crews man whalers and cutters and sail these small boats from Auckland to Paihia/Waitangi. The comments here were recorded by those on the trip however the original log was lost on the last or second to last move.

## Day One

After an early start and breakfast it was down to the Tamaki Boatyard to be briefed and wished good luck. The boys were all keen and ready to go and rape and pillage the seven seas. We then went down and started rigging our cutter (The RNZE cutter "Rape and Pillage"). Capt 'Yellowbeard' got us to a good position and we were third across the line after the starting gun, soon making our way through the fleet to take up the lead. It was bad luck that later the wind dropped and we were overtaken by a whaler being rowed. It was a great day for taking off the shirts and putting on sun glasses and sun tan lotion.

As the wind dropped the sea became glassy smooth, the sails hung limp without enough wind to fill them. It was almost a repeat of the "Rhyme of the Ancient Mariner" when he quoted 'like a painted ship upon a painted ocean'. After about two or three hours like this the escort vessels came and took us all in tow to Sandspit where we juggled with the tourists boats coming back from Kawau Island where they had gone to see Sir George Grey's home. This was our first night in the tented camp which we were to see set up each night by the shore party.

In spite of the lack of wind the crew's morale was high. 'Rape and pillage' echoed across the water and bounced back from under the trees in the campsite. People quickly learned that this was the cry of the pirates from Linton as they set out on any task put to them. Sandspit camp was set in amongst trees where there were large native pigeons and tuis could be heard and seen in abundance. This was also the first experience of the 20 cent piece into a slot for a hot shower. We soon learned that two people could each get a good shower with one coin.

## Day Two

Today started off with the generator waking everybody about 0400 hours. The cooks seemed to think that if they could not sleep then why should any one else. Reveille was at 0445 followed by breakfast. Even before breakfast



Pirate "Bambam" Whitworth on the jib sheets

our team had packed their bags, rolled up their beds and were waiting round. So our crew picked up sails, masts, anchor and chain and carried them down to the boats at the jetty. Most of the others were waiting for a truck to take their kit down for them. This was really where our crew first started to show that above all we were a team to be reckoned with.

We had to row out of the harbour as there was no wind and the tide was somewhat against us. However we made it out to where there was just the faintest breath of wind which soon deserted us. Once again we were to suffer the indignity of taking part in TOW-EX rather than Sail-Ex. Today we were towed for something like six hours before a slight breeze arose just north of Bream Head which we were able to use for a short while. However this did not last long and we were again taken in tow by Hinau. Most of us saw whales and little penguins but for a goodly part of the day it was suntan lotion again. We were only cast adrift at the end of the day so that we could sail into the anchorage at Tutukaka which we found to be just the place for carrying out pirate raids. The tourist brochures stated that this was the only place in the world where within eight minutes of boarding a boat one could be in a recognised deep sea fishing zone. Striped marlin, swordfish and other game fish were regularly taken by sportsmen and women.

Pirate Wilson, once on shore approached the third mate with the question "Hey Dad, can I have the keys of the car tonight." The third mate looked at him and dismissed him with a glare. Later the third mate said to Capt "Yellow-beard" "I'll have to talk to Pirate Wilson later!" Needless to say Pirate Wilson never did get the car.

#### Day three

This was a so called rest day where we could make and mend should it be necessary. Some took the opportunity to go into Whangarei for a couple of hours for a look round and to buy black eye patches to wear at the fancy dress bar-b-q. We made ourselves a pirate flag here and sunk a few ales. "A boomer night at the public house on the turps and Capt "Yellowbeard" rocking the place up with a guitar - arrrh rape and pillage!



By courtesy of the Auckland Star



#### Day four

Fortunately the day's sailing was scheduled to be a short run from Tutukaka to Whangaruru. In contrast with yesterday this day dawned grey and ominous with dark clouds skudding across the sky. We were the last boat out this morning because we were the duty crew and had to clean up all the breakfast dishes and wallop all the pots. However we were soon on our way. Once outside the harbour there was a good wind (about 30 knots) and the opportunity for some sailing. We didn't have Terrible Tom (Sig Thompson) with us today as one of the whalers was in need of a replacement crewman for a day. However we had a very attractive replacement in the form of Karen the Airforce photographer who sailed with us. The seas were short and choppy and two of the crew decided that they would share their breakfast with the fish.

My stomach is in a commotion  
I hasten to get to the rail,  
I don't want to dirty God's ocean  
So hurry up and fetch me a pail.

Our crew was sailing well and starting to overhaul the feild when Hinau came up and told us to go about for forty-five minutes, as the fleet had become too spread out. We were however able to regain our place and coming into Whangaruru harbour had all sails up and were fair bounding along. We came in second and had all our boat kit stowed away were waiting for the 'taxi' boat to take us to the shore. We had to moor our boats off shore here and the water was taller than us. Once we got ashore and sorted out our beds for the night some of the crew were away up the beach to where they had seen a hire catamaran and so spent another two hours sailing. Our crew and one of the whalers crew did boat picket this night.

#### Day Five

This was to be our last day's sailing and was a long haul. Early reveille, breakfast then down to the boats. It was a rough day but those who performed yesterday were better prepared today and the fishes went hungry. This was the best day for sailing that we had. We were really doing well and enjoying our-selves and now confident that we could sail our cutter and rape and pillage at will. However the Navy came by and took us in tow again. We didn't want them. We could sail round Percy Is. Arrrh. Anyway once round the rock and left alone again we put up all sail and lept ahead. We were actually surfing on the wave tops as we came through. The second mate cast his fishing line over the stern and almost immediately pulled in a Kawhai. So he tossed his line out again - and promptly had a strike which took away



By courtesy of the Auckland Star

the spinner and hook. He lost three spinners that way. We could not see much of the surrounding country as the cloud had closed in and caused our visibility to be reduced to just a few hundred metres. However we came up the harbour in the mist still with all our sails spread and into the boat anchorage at Waitangi. Someone had conveniently sited this facility by the Waitangi pub.

As this was our last time in the boat we had to strip all our fittings, check sails and lines and generally make the boat ship-shape before handing it over to the next crew. Our camp had been set up across the bridge in the Paihia camping ground. Some of the other crews had arrived before us and had hogged all the hot water. So it was make ourselves comfortable for the night, have a cold shower, then tea and off to the Waitangi pub. The cabin boy and the second mate being old stagers and knowing the value of reconnaissance found another place where there were hot showers.

#### Day Six

On our last day we were all involved with some civic assistance. Two boat crews went to paint a toilet while a greater number went across the bridge and painted the roofing of two houses and an implement shed. With forty people painting it did not take long to get most of the work done. However the old paintwork should have been cleaned off first prior to the application of new paint. Some of us went and had a look at James Busby's house (the Treaty House), the Waitangi flagstaff and the huge war canoe. Unfortunately we didn't have time to see the audio visual presentation so that will have to wait until the next Sailex.



Pirates (Sprs) De Silva, Snalam, Whitworth and Wilson painting the roof of the Waitangi Trust groundsman's workshop and offices

Everyone enjoyed the exercise and would have liked to have continued with the southern leg as well. But it was time to go so the pirates had to give up raping and pillaging and become 'civilised' (if possible) once more. The general opinion was that if there was a chance next year there would be several crewmen willing to sign up ships papers.

\*\*\*\*\*

Crew: Capt Yellowbeard  
First Mate  
Second Mate  
Cabin Boy  
Pirates

Maj Beaver  
Sgt Hutson  
Capt Wadding  
Wol Chamberlain  
Sprs De Silva, Lakai, Nasomia,  
Snalam, Whitworth, Wilson and  
Sig Thompson



## A FIELD COMPANY OF ENGINEERS.

ESTABLISHMENT AND TRANSPORT.

Peace Establishment.

1910

| Detail.                                  | Personnel. |                                |                    |                           |                       |                    |                 |                    |                 |                    | Remarks.                                    |
|------------------------------------------|------------|--------------------------------|--------------------|---------------------------|-----------------------|--------------------|-----------------|--------------------|-----------------|--------------------|---------------------------------------------|
|                                          | Officers.  | Staff Sergeants and Sergeants. |                    | Mounted Branch Artificer. | Trumpeter and Bugler. |                    | Rank and File.  |                    | Total.          |                    |                                             |
|                                          |            | Mounted Branch.                | Dismounted Branch. |                           | Mounted Branch.       | Dismounted Branch. | Mounted Branch. | Dismounted Branch. | Mounted Branch. | Dismounted Branch. |                                             |
| Major .. .. .                            | 1          | ..                             | ..                 | ..                        | ..                    | ..                 | ..              | ..                 | 1               | ..                 | (a.) To be a Permanent Staff W.O. or N.C.C. |
| Captain .. .. .                          | 1          | ..                             | ..                 | ..                        | ..                    | ..                 | ..              | ..                 | 1               | ..                 |                                             |
| Subalterns .. .. .                       | 4          | ..                             | ..                 | ..                        | ..                    | ..                 | ..              | ..                 | 4               | ..                 |                                             |
| Company sergeant-major .. .. .           | ..         | ..                             | (a)                | ..                        | ..                    | ..                 | ..              | ..                 | ..              | 1                  |                                             |
| Company Q.M. sergeant .. .. .            | ..         | 1                              | ..                 | ..                        | ..                    | ..                 | ..              | ..                 | 1               | ..                 |                                             |
| Sergeants .. .. .                        | ..         | 1                              | 5                  | ..                        | ..                    | ..                 | ..              | ..                 | 1               | 5                  |                                             |
| Shoeing and carriage-smith .. .. .       | ..         | ..                             | ..                 | 1                         | ..                    | ..                 | ..              | ..                 | 1               | ..                 |                                             |
| Trumpeter and bugler .. .. .             | ..         | ..                             | ..                 | ..                        | 1                     | 1                  | ..              | ..                 | 1               | 1                  |                                             |
| Corporals .. .. .                        | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 1               | 6                  | 1               | 6                  |                                             |
| Second corporals .. .. .                 | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 1               | 6                  | 1               | 6                  |                                             |
| Sappers .. .. .                          | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 8               | 138                | 8               | 138                |                                             |
| Drivers (first line for vehicles .. .. . | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 25              | ..                 | 25              | ..                 |                                             |
| transport) for pack animals .. .. .      | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 4               | ..                 | 4               | ..                 |                                             |
| for spare horses .. .. .                 | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 3               | ..                 | 3               | ..                 |                                             |
| spare .. .. .                            | ..         | ..                             | ..                 | ..                        | ..                    | ..                 | 3               | ..                 | 3               | ..                 |                                             |
| Total Field Company .. .. .              | 6          | 2                              | 6                  | 1                         | 1                     | 1                  | 45              | 150                | 55              | 157                |                                             |
|                                          |            | 8                              |                    |                           | 2                     |                    | 103             |                    | 212             |                    |                                             |

Note.—This establishment includes 1 N.C.O. and 2 men trained in signalling for internal communications.

## Transport.

| Detail.                                                                     | Vehicles. | Drivers. | Horses.  |       | Remarks.                                                                                                 |
|-----------------------------------------------------------------------------|-----------|----------|----------|-------|----------------------------------------------------------------------------------------------------------|
|                                                                             |           |          | Draught. | Tack. |                                                                                                          |
| <i>Headquarters.</i>                                                        |           |          |          |       |                                                                                                          |
| First line—                                                                 |           |          |          |       |                                                                                                          |
| Wagons (pontoon (a) .. .. .                                                 | 2         | 6        | 12       | ..    | (a.) Carrying 2 pontoons capable of constructing 15 yards of medium bridge.                              |
| trestle (b) .. .. .                                                         | 1         | 3        | 6        | ..    |                                                                                                          |
| (G.S. for technical stores, baggage, and supplies .. .. .                   | 1         | 2        | 4        | ..    | (b.) Carrying 2 trestles and 1 bay of super-structure, capable of constructing 5 yards of medium bridge. |
| Drivers (for spare draught horses .. .. .                                   | ..        | 3        | 5        | ..    |                                                                                                          |
| spare .. .. .                                                               | ..        | 3        | ..       | ..    |                                                                                                          |
| <i>Sections.</i>                                                            |           |          |          |       |                                                                                                          |
| Carts (tool, double, R.E. (1 per section) .. .. .                           | 4         | 8        | 16       | ..    |                                                                                                          |
| forage, for technical stores, baggage, and supplies (1 per section) .. .. . | 4         | 4        | 8        | ..    |                                                                                                          |
| Drivers for pack animals (1 per section) .. .. .                            | ..        | 4        | ..       | 4     |                                                                                                          |
| Total .. .. .                                                               | 12        | 33       | 51       | 4     |                                                                                                          |

Note.—Bicycles: If, from the nature of the country in which operations are to be undertaken, bicycles can be possibly used, they will be supplied, on mobilisation, at the rate of 8 per section. The bicycles will be used for transporting men with tools and small stores as may be necessary, utilising for the latter sand-bags and straps.



GOOD GRIEF  
LEMON AND PAEROA  
LEE AND PERRINS  
L AND P

## GOLAN AND ALL THAT

\*\*\*\*\*

The article below is an edited version of a letter to SME Staff from Capt John LOCK who is currently serving with the United Nations Forces in the Middle East as an Observer.

\*\*\*\*\*

### Act 1

Spent the first six months of this exciting Middle East Tour in the Upper Galilee on the Golan Heights doing Observation Post duties during the Golan winter which is something like Waiouru on a rotten day. Snow, fog, rain and wind, etc. Tank water frozen until morning smoko and refrozen by 1600 in the afternoon. However it is no trouble to keep the wine cold. I am a fan for Irish coffee - just to keep the cold out. Dress here is something like 5 Support Squadron working down the Argo during winter. I'm glad that I brought all my winter Annual Camp kit with me.

Had a good flat in Tiberias by the lake side of the Sea of Galilee. Ancient history, crusades, Capernaum, (loaves and fishes). Talking about fish - you can get a good feed at St Peter's Fish and a pint in down town Tiberias. The ancient and present live quite well side by side. My highlight at this stage would be the wonderful OP mates I've been on duty with on the Golan. Seven days at a time, returning to Tiberias on the eighth day. I did twelve winter OP duties and all my mates were great. I'm pleased to say that the area of operations was quiet and calm during my stay. Let's hope it stays that way. It could get rough if things changed.

### Act 2

For some reason unknown to me I was appointed to a staff job in Jerusalem - much sought after by some United Nations Military Observers(UMNOs) - but not me. I'll let you know later how it works out. Part of the deal was that to take a staff job you should have served in Beirut/South Lebanon. So if your name is LOCK it meant six weeks in Beirut and four in South Lebanon. So that sounded like a good idea to me. South Lebanon was great. One OP only and then I joined the teams (two men and a jeep) doing duties 4 - 8 days touring round the UNIFIL Interim Force in Lebanon area. Spending the nights with one of the battalions - Fiji, French, Finish, Irish, Norwegian, Nepalese, and the Dutch company. South Lebanon was the second highlight of my tour. However the bad news was that I did not go to Beirut. Some of the Fijians I met were building a new check point in Lebanon. I gave them a burst about the rough block work then had a good talk with them. Most of these chaps had spent time in Linton camp.

### Act 3

After seven months of working 'fun time' I'm now working normal hours. UNTSO hours are 0700 - 1400 hours Monday to Friday which is OK by me. We have the afternoons and weekends free. My chief is a Norwegian Navy Captain. A good guy, hard working and an old hand with the UN. The job I'm now working on includes officer reports, postings, transfers, extensions, and other staff things. In our free hours we spend quite a lot of time in the Old City (my wife has arrived to join me) in Jerusalem. We've been to Bethlehem, Masada, Galilee, and have gone floating in the Dead Sea. We are due to go to the UK for fourteen days leave on 21 July and we hope to visit Cyprus some time as well.



Things are all going well here. It is great and I'm enjoying it all. We are going to arrive home sunburnt and broke and happy.

\*\*\*\*\*

Editors' note.

For some of you who know Capt Lock you will realise that he spent some time as a young soldier as a member of the British Army in Cyprus. Like most of us who have served in another part of the world we often wonder what the place is like now that twenty or so years have passed since we served in a specific location.

There is much of history in the area in which he is currently serving. Quite an amount of it tied to the Bible which is in part the history of the peoples of the Holy Land. The reference to Masada is an outstanding example of a group of people who decided that they would oppose the Roman occupation of their country. The Jewish revolt which started in 66 AD kept the Romans out of Jerusalem for nearly three years. However the city fell in AD 70 but some patriots fought on from their mountain fortress of Masada until AD 73.

\*\*\*\*\*  
 \* \* \* \* \*  
 \* Diversion \*  
 \* \* \* \* \*  
 \*\*\*\*\*

For the mathematically minded here is a puzzle to blow the mind. You are required to put all the required signs (plus, minus, multiply, divide) in the right places to make this matrix work.

|                         |     |    |
|-------------------------|-----|----|
| 7 ? 5 ? 5 ? 2 ? 15 ?    | 1 = | 5  |
| 3 ? 4 ? 3 ? 1 ? 3 ? 20  | =   | 3  |
| 20 ? 5 ? 2 ? 10 ? 10 ?  | 2 = | 2  |
| 18 ? 3 ? 2 ? 4 ? 3 ? 10 | =   | 2  |
| 6 ? 4 ? 4 ? 3 ? 8 ? 3   | =   | 3  |
| 21 ? 4 ? 2 ? 10 ? 3 ? 5 | =   | 10 |
| 16 ? 5 ? 9 ? 4 ? 2 ? 2  | =   | 8  |

Answers are found towards the end of this Liaison Letter.

---  
 0  
 ---

\*\*\*\*\*

**IDF FORTIFICATIONS ON GOLAN:** The Israel Defence Force (IDF) is strengthening its fortifications on the occupied Golan Heights. The head of the IDF Engineer Corps, Brig Gen Yehuda Kohen, said the investment in infrastructure is intended to establish an "impenetrable line". Syria, he said, was doing the same, and was investing in infrastructure and minefields.



#### MUSEUM NOTES

It has been pleasing to see a number of ex sappers making a point of calling in at Linton Camp to visit the Corps Memorial. In the last few weeks we have been visited by sappers and sapperesses from as far north as Kaitiaki and from the deep south. It is warming to know that they have been bringing their friends from overseas with them as well.

Recently we have been upgrading the security of the building but it is not yet complete. It is hoped that it will be finished before the Christmas leave break.

We have recently received a fine original oil painting as a gift to the Corps from Mr James McGregor from Masterton. He has portrayed a sapper sweeping a street for mines in Faenza, Italy during the later stages of the Second World War. Another recent addition has been a degrees prismatic compass which also dates from WW 2. Mr Sherwin from Timaru recently visited the Corps Memorial and noticed that there wasn't such an item in the display of measuring instruments.

The advertisement on the back cover is aimed at increasing the number of regular donors who assist our funds by the use of the Army Allotment scheme. This is a painless way of giving to the project and the donor receives at the end of each year a tax certificate which earns a rebate of 31 cents in the dollar. Unit orderly rooms should be aware that a fortnightly allotment to the ENGINEER CORPS MEMORIAL can be made on MD221. As a guide the average donation per fortnight is \$2.00. We in the Corps Memorial Association would be pleased to know that YOU are sufficiently interested to want to join us. Don't be afraid to support your Corps Endeavour.

#####

#### TOKELAU NOTES

Extracted from telexes sent by Capt A.M. Skinner

Almost typically of overseas deployments in the South Pacific area, this tour has been dogged by the problems associated with shipping of heavy equipment and stores to the Islands where the tasks are located. Food has been pilfered at various locations and on at least one occasion approximately 50% of fresh food ordered did not arrive. Several crates and tins had been opened. Communication has not been easy in some respects which in turn has not helped matters.

Drilling on the job has continued and tests have been carried out to find the most effective way to attack the underwater target. A blast carried out had good results and future blows will be based on the method employed.

The team has been showing video movies to the locals, and have run disco evenings on 21 and 23 November. The team is disappointed that their mails have not arrived.

\*\*\*\*\*



# Letters to the Editor

\*\*\*\*\*

After the last Liaison Letter was issued a number of letters were received stating that a number of overseas deployments had been missed in the article of our current history. To Lt Col Jameson, Maj Jones, and WO2 Everson "Thank you" for sending that information. Although the additional information has not been printed here it has been included on a master disc and a master copy has been printed. Without these extra pieces of information our record would have been incomplete.

\*\*\*\*\*

Would you please publish in the next Liaison Letter that the history of the Auckland (Now NZ) Sapper's Association is available from the Sappers Association, P.O. Box 12-566, Penrose, Auckland.

J.S. Hollander

Major

\*\*\*\*\*

## Australian forces to appeal over pay offer

THE CHIEFS of Australia's armed forces are planning to appeal against what they consider a disappointing pay increase granted to their men by the Defence Force Pay Tribunal.

The services have not had a pay rise other than cost-of-living adjustments for four years and were angry to receive a rise of only 5.9% after that period.

The Armed Forces Federation of Australia (AFFA) described the rise as disillusioning. AFFA had argued a case for a rise of between 10 and 12%.

The Chief of the Air Staff, RAAF, Air Marshal Jake Newham, advised all RAAF bases that he would discuss an appeal with the other service chiefs. The chiefs' pay is not affected, being tied to increases granted to members of the Federal Parliament.

Some lower ranks in the forces are claimed to be below the official poverty line.

JANE'S DEFENCE WEEKLY 14 SEPTEMBER 1985

## Mathematic Answer

$$\begin{array}{r} 7 \times 5 - 5 \times 2 \div 15 + 1 = 5 \\ + \\ 3 + 4 \times 3 - 1 + 3 - 20 = 3 \\ + \\ 20 - 5 \times 2 + 10 \div 10 - 2 = 2 \\ + \\ 18 \div 3 + 2 - 4 \times 3 - 10 = 2 \\ \times \\ 6 \times 4 \div 4 + 3 - 8 \times 3 = 3 \\ - \\ 21 + 4 \times 2 \div 10 \times 3 - 5 = 10 \\ - \\ 16 - 5 + 9 \div 4 \times 2 - 2 = 8 \\ \hline 0 \end{array}$$

## Sapper Wayne Tarbard

Dear Sir — As it is three years ago this month since the Falklands war ended, I thought you might like to see a poem written by my 13 year old sister as a tribute to those killed, including our brother Wayne.

As she was only 10 years old at the time she did not really understand it, and this poem expresses the way that she saw it. I think she shows she has learnt to accept what we had to three years ago. In fact, it is the first time she has either written or spoken about our brother since his death.

'Twas in the year of '82  
The Falklands war began,  
The Army sent off soldiers  
That were fathers, husbands, sons.

Amongst the soldiers was a lad called Wayne,  
He was happy and joyful too,  
But his life did end one dark dull day  
When the ship got hit on the ocean blue.

As the ship sat on the ocean blue  
There was not much for the soldiers to do,  
They laughed and talked as the ship did sway,  
Not all of them survived that day.

The lad called Wayne and one of his mates  
Volunteered to do a job,  
To sit with some men at the bottom of the ship.  
They were a right laughing mob.

As the boat did sway,  
That dark dull day,  
Way up in the sky a 'plane dropped a bomb.  
That's what made many a soldier die.

So remember them as you think of the war,  
Remember them oh so well,  
Remember what happened on that dark dull day  
That caused a lot of hell.

Kirsty Tarbard (aged 13)

Yours sincerely,  
Maxine Tarbard

'Midway',  
40 Sutton Lane,  
Hilton,  
Derbyshire DE6 5FB.

The Sapper (UK)  
June 1985







SEPARATE THIS PAGE AND RETURN PROMPTLY TO:

The Sappers Association (NZ) Inc.  
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Penrose  
AUCKLAND 5

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voluntary comments:

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Address: (print)

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Date:

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The personal details you give beside "Roll" above will enable us to  
do a final check of your listing in the Rolls of Members.  
For this reason please include any honours and awards you have earned.

Please delete/complete detail on this page, as required.








The person  
on a line  
The only one  
Piano Bridge





Maj Barrett  
Lt Dalton  
Lt Cassidy

Maj Tymkin (MFO)  
Capt Lock (UN)

NZWSU  
Capt Williams  
WO1 Hawkins  
WO1 Hendrick  
SSgt Henderson  
Sgt Henry  
Sgt De Breuk

RNZIR  
Lcpl Thompson  
Spr Little  
Spr Edwards  
Spr Williams  
Spr Clarke  
Spr Ballantyne  
Spr Meredith  
Spr Edwards  
Spr Hewer-Hewitt

Spr Batt  
Spr McIvor  
Spr Favel  
Spr Te Puni  
Spr Solomon  
Lcpl Rowlandson

Lt Col O'Brien  
Capt Begley

Fiji

Major Stewart  
WO2 Leach  
SSgt Boyle

Tokelau

Capt Skinner  
Sgt Scott  
SSgt Toia  
Cpl Cooper  
Cpl Sturgess

Lt Gibbons  
Sgt Bryce  
Spr Stewart  
Spr Hotop  
Spr Ross  
Cpl Williscroft

Spr Murdoch  
Spr Whitehouse  
Spr Grigg  
Spr Mohi  
Spr Trodd







# ENGINEER LIAISON LETTER







# THE CORPS OF ROYAL NEW ZEALAND ENGINEERS



## COLONEL IN CHIEF

Her Majesty Queen Elizabeth the Second

## COLONEL COMMANDANT

Col G.W. Butcher MC, ED, RNZE

## CHIEF ENGINEER

Lt Col R.A. Barrett RNZE

ROYAL NEW ZEALAND ENGINEERS  
THE CORPS OF



COLONEL IN CHIEF

Her Majesty Queen Elizabeth the Second

COLONEL COMMANDANT

Col G.W. Butcher MC, ED, MBE

CHIEF ENGINEER

Lt Col R.A. Barrett MBE



\*\*\* FOREWORD \*\*\*

by

Lieutenant Colonel R.A. Barrett, RNZE  
Chief Engineer

The current Defence Review must inevitably result in questions as to the shape, size and nature of the RNZE. The 1984 restructure had a profound effect on the Corps - particularly as it resulted in a reduction of our allowable posted strength. However, this prompted a series of studies which culminated in the CGS, in February 1986, approving an increase in our strength of 30 posts. I believe that a further manpower increase is justified - not at the expense of other functions of the Army - but to enhance our capability to support some of these functions.

The Corps must remain operationally fit and capable of adapting to changes in both technology and role variety. The quality and numbers of both officers and soldiers in the RNZE remains my prime concern. Nevertheless, the acquisition of appropriate 'kit' will increasingly determine our ability to produce results both on the battlefield and in support of civil assistance tasks in the Pacific, Antarctica and New Zealand. In this respect we have had some notable success - the introduction of 30 new items of plant and the improvement in tradesmen's tool kits being among recent highlights.

I believe that the RNZE may need to remain lean in resources but I am satisfied that Sappers are sufficiently adaptable to meet the challenges of the changing scene. On balance the Corps has survived some moves that would, in my opinion, have harmed it. Needless to say, the challenge remains in explaining and convincing a whole range of opinions of our true worth, and the complexity of our multitudinous activities. All sappers have a part to play - two fold: by study of the art of military engineering and pursuance of excellence in every endeavour undertaken by the Corps.

U B I Q U E

\*\*\* FORWARDED \*\*\*

Lieutenant Colonel R.A. Barrett, RNZ  
Chief Engineer

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U R I P U S



## EDITORIAL

Since the beginning of 1986 the Corps has had a new captain at the helm in the form of the new Chief Engineer, Lt Col R.A. Barrett. Needless to say we are all part of the same crew, and, as before we must continue to give of our best. Often we find that new leadership gives new impetus, new ideas and new direction which may or may not be most agreeable to us. However we are sappers one and all and our job is to "muck in and get on with the job".

The Corps also says a hearty "thank you" for the work done, and farewell to Col Ken Christie MBE, ED, who has been the Colonel Commandant of the Corps for the past six years. We know that he will continue to maintain a close interest in the activities of the Corps.

It is also time to welcome Col George Butcher MC, ED, who now takes up the appointment of Colonel Commandant. Col Butcher has been long known to the Corps and has maintained a close interest in our activities, particularly in relation to the Corps Memorial. As a Corps we are bound to see him as he visits our units in the coming months.

H.E. Chamberlain  
Editor

\* \* \* \* \*

Deadlines for copy to reach the editor are:

1 October 86 for the December 86 issue.

1 April 1987 for the June 87 issue.

\* \* \* \* \*

### NOTE

Articles accepted for publication are not necessarily the opinion of the editor nor the accepted doctrine of the Corps.

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\* \* \* THE APPOINTMENT OF COLONEL COMMANDANT \* \* \*

\* \* \* \* \*

Lt Col G.W. Butcher, MC, ED, Retired List, is appointed Colonel Commandant, The Corps Of Royal New Zealand Engineers, for a period of four years with effect from 1 April 1986, vice Lt Col K. Christie MBE, ED\*, Retired List.

The above announcement published in the New Zealand Gazette honours Lt Col Butcher and recognises his contribution to the Corps.

\*\* \*\* \*

Lt Colonel G.W. Butcher, MC, ED, BE(Civ)  
FIF MASCE

Lt Col Butcher was born in Wellington on 25 July 1927. He attended schools in the Lower Hutt area and whilst at secondary school was a member of the Cadet Corps reaching the rank of WOII. He enlisted in the Territorial Force as a Corporal on 14 June 1950 and was posted to 5 Assault Squadron. At that time he was attending the National School of Engineering at the University of Canterbury in Christchurch. On 1 December 1950 he was transferred to 2 Field Squadron (Linton) and commissioned as a Second Lieutenant on 23 Jul 1951.

Shortly thereafter he applied for a posting to Korea and was posted to active service on 19 March 1952. During his two year tour in Korea he served as OC Base Services Construction Section which was part of a British engineer unit. He was promoted to Lieutenant on 19 March 1953. Lt Butcher served with distinction and received commendations from two separate battalion commanders. In June 1953 he was awarded the Military Cross for an action which included the removal of flood debris from round the pier of a bridge which was threatening to cause its collapse, all the while under fire from the Chinese Communists.

On his return to New Zealand in March 1954 Lt Butcher transferred back to the Territorial Force returning to 2 Field Squadron. He remained in this unit for the next seven years, being promoted Captain on 19 March 1957 and temporary Major on 19 March 1959. On this latter date he assumed command of 2 Field Squadron. On 26 October 1961, Maj Butcher was posted to 1 Field Engineer Regiment as Second in Command and on 1 February 1964 he was promoted temporary Lieutenant Colonel and was posted to 1 CRE Works as CO and Commander Royal Engineers (CRE an appointment known as an RNZE appointment not RE as it would appear to some more junior members of the corps). He held this post until he was transferred to the Reserve of Officers RNZE Regimental List on 21 February 1966. He subsequently was employed on a part time basis on special projects for Army General Staff until his retirement in 1971.

Since his retirement, Lt Col Butcher has retained a close link with the Corps. He is a member of the Sappers Association (NZ) and is a life member of the Engineer Corps Memorial Association (ECMA) and is currently a member of the ECMA Executive Committee. In the civil field he is a senior partner in Morrison, Cooper and Partners, a well respected firm of consulting civil and structural engineers in Wellington.

Honours and Awards recently bestowed upon RNZE personnel recognises the service they have given which is beyond the ordinary daily duty and tasking. The Corps is pleased to see these personnel so honoured.

Content removed due to copyright

Capt Barry Knowles, 1 Fd Sqn awarded the Members badge of The Most Excellent Order of the British Empire (MBE) in the Queen's Birthday Honours List June 1986.

\*\*\*\*\*

#### Armed Forces Award;

|     |                |           |
|-----|----------------|-----------|
| Maj | J.S. Hollander | 26 Aug 85 |
| Maj | S.G. Heaton    | 14 Feb 86 |
| Maj | B.A. Stewart   | 14 Apr 86 |

#### Long Service and Good Conduct Medals

|           |                                                                                    |           |                     |
|-----------|------------------------------------------------------------------------------------|-----------|---------------------|
| Cpl       | B.J. Bennington (Smokey)                                                           | 29 Aug 85 |                     |
|           | (Sorry we didn't get that one sooner.)                                             |           |                     |
| WO2       | L.K. Langdon                                                                       | 10 Sep 85 |                     |
|           | (Sorry we didn't get that one either. 3 Fd Sqn YOU will have to keep us informed.) |           |                     |
| WO2       | A.A. Gladstone                                                                     | 7 Oct 85  | Keep in touch Tony! |
| WO1       | W.K.M. Leach                                                                       | 7 Oct 85  | Another late notice |
| Capt & QM | E.W. Bruce, and                                                                    | WO1       | G.J. Blackburn      |
|           |                                                                                    |           | 8 Oct 85            |
| WO1       | D.W. Mardle, and                                                                   | SSgt      | S.D. Boyle          |
|           |                                                                                    |           | 8 Oct 85            |
| WO1       | H.J. Gallagher (Rtd)                                                               |           |                     |
| WO2       | R.D. Everson                                                                       | 25 Oct 85 |                     |
| WO1       | K.S. McEwen                                                                        | 21 Nov 85 |                     |
| WO1       | D.L. Berry                                                                         | 22 Nov 85 |                     |
| SSgt      | B.J. Clark                                                                         | 20 Jan 86 |                     |
| Cpl       | S.J. Gallagher (Rtd)                                                               | 5 Feb 86  |                     |
| WO2       | K.G. Smith                                                                         | 5 Feb 86  |                     |
| Sgt       | T.W. Oakes                                                                         | 24 Feb 86 |                     |
|           |                                                                                    | 25 Feb 86 |                     |

#### Third Clasp for the Efficiency Medal

WO2 T.J. Hamilton - well done Terry

#### Efficiency Medal (Territorial Force)

WO1 A.J. Oliver BEM 1 Apr 86

An award was received early in 1986 from the Building Research Association of New Zealand for the most meritorious results of the Stage Three subjects in Building Technology. SSgt G.T. Abernethy received a Certificate of Merit as well as a cheque for \$120.00. Well done.



\*\*\*\*\*

# RECENT PROMOTIONS

\*\*\*\*\*

Promotions since the last issue of the Liaison Letter must of course begin with the new Chief Engineer.

Major R.A. Barrett CE To be T/LtCol 21 Jan 86

The last Liaison Letter remarked on the posting of Major Barrett to the appointment of Chief Engineer but we were unable to note his promotion at that time.

|      |        |           |          |          |     |           |
|------|--------|-----------|----------|----------|-----|-----------|
| Capt | J.L.C. | Alabaster | 3 TF     | T/Maj&QM | wef | 26 Dec 85 |
| Capt | P.W.   | Howard    | MFO      | A/Maj    | wef | 11 Jan 86 |
| Capt | S.G.   | Ransley   | 1 Fd Sqn | A/Maj    | wef | 3 Mar 86  |
| Capt | K.M.   | Lang      | ACDS Sp  | A/Maj    | wef | 2 May 86  |
| 2Lt  | J.A.   | Armstrong | SME      | T/Lt     | wef | 22 Dec 85 |
| 2Lt  | J.D.   | Peacock   | WTD      | T/Lt     | wef | 11 Dec 85 |

|     |        |           |          |       |     |           |
|-----|--------|-----------|----------|-------|-----|-----------|
| WO2 | G.     | Findon    | 1 Fd Sqn | T/WO1 | wef | 18 Nov 85 |
| WO2 | W.K.M. | Leach     | 25 ESS   | T/WO1 | wef | 21 Jan 86 |
| WO2 | M.A.   | Pettersen | 3 Fd Sqn | T/WO1 | wef | 11 Mar 86 |

|      |      |          |          |       |     |           |
|------|------|----------|----------|-------|-----|-----------|
| SSgt | B.N. | Akari    | SME      | T/WO2 | wef | 2 Dec 85  |
| SSgt | P.G. | Packer   | Def Wgtn | T/WO2 | wef | 7 Jan 86  |
| SSgt | K.C. | Jones    | SME      | T/WO2 | wef | 14 Jan 86 |
| SSgt | B.N. | Marshall | SME      | T/WO2 | wef | 14 Jan 86 |
| SSgt | B.J. | Clarke   | 1 Fd Sqn | T/WO2 | wef | 10 Feb 86 |

|     |        |                |           |        |     |           |
|-----|--------|----------------|-----------|--------|-----|-----------|
| Sgt | S.C.   | Hansen         | Bham Fire | T/SSgt | wef | 10 Oct 85 |
| Sgt | C.     | Whakatope      | SME       | T/SSgt | wef | 13 Jan 86 |
| Sgt | G.T.   | Abernethy      | SME       | T/SSgt | wef | 3 Feb 86  |
| Cpl | C.M.T. | Kauika-Stevens | HQ T'ham  | Sgt    | wef | 13 Dec 85 |

(we did not catch up with your promotion to T/Sgt - keep in Touch)

|     |         |          |           |       |     |           |
|-----|---------|----------|-----------|-------|-----|-----------|
| Cpl | B.W.    | Jackson  | SME       | T/Sgt | wef | 16 Oct 85 |
| Cpl | S.P.T.H | Peretini | Nga' Fire | T/Sgt | wef | 16 Oct 85 |
| Cpl | G.R.    | Nicol    | 3 WAT     | T/Sgt | wef | 8 Nov 85  |
| Cpl | M.K.    | Anderson | NZWSU     | T/Sgt | wef | 3 Dec 85  |
| Cpl | J.W.    | Hopkirk  | SME       | T/Sgt | wef | 13 Dec 85 |
| Cpl | R.J.    | Kirton   | SME       | T/Sgt | wef | 14 Jan 86 |
| Cpl | P.F.    | Le Pou   | SME       | T/Sgt | wef | 24 Jan 86 |
| Cpl | M.      | Masi     | Def Wgtn  | T/Sgt | wef | 27 Jan 86 |
| Cpl | P.J.    | Gardyne  | 1 WAT     | T/Sgt | wef | 29 Jan 86 |
| Cpl | J.      | Te Whata | 25 ESS    | T/Sgt | wef | 18 Feb 86 |
| Cpl | B.D.    | McLean   | 25 ESS    | T/Sgt | wef | 23 Feb 86 |
| Cpl | M.D.    | Owen     | LTN Fire  | T/Sgt | wef | 17 Jun 86 |

Do keep in touch chaps. We like to know what promotions occur especially amongst officers and senior NCOs, as these personnel are now in positions of responsibility within the Corps.. If your name is not here then it is your unit or yourself who is not keeping in touch.

\*\*\*\*\*

## UPDATE ON CORPS FLAG

The Corps flag removed from the SSM's office has not yet been recovered. RNZE personnel are requested to keep a watch for this item.



# RECENT ARRIVALS

2Lt WJ Vince. Ex RMC Duntroon posted to SME as officer under training. May your stay with the Corps be long and happy.

## \*\*\*\*\* POSTINGS \*\*\*\*\*

The following personnel have been posted to the appointments shown:

|                                                                |                            |               |
|----------------------------------------------------------------|----------------------------|---------------|
| *****                                                          |                            |               |
| Lt Col SD Jameson                                              | Ex CE to JSSC Australia    | wef 8 Jan 86  |
| Maj JA Tymkin                                                  | Ex MFO Sinai to Spt Comd   | wef 29 Jan 86 |
| Maj SG Heaton                                                  | Ex 1 Fd Sqn to CE office   | wef 10 Mar 86 |
| Maj PW Howard                                                  | Ex Def HQ to MFO Sinai     | wef           |
| Capt DJ Begley                                                 | Ex 7 Fd Sqn (AS) to SME    | wef 8 May 86  |
|                                                                |                            |               |
| Lt PJ Curry                                                    | Ex 3 Fd Sqn to 2/1 RNZIR   | wef 1 Apr 86  |
| (Its OK sappers he's going to lend some tone to the Infantry.) |                            |               |
| Lt CJ Faulls                                                   | Ex 1 Fd Sqn to ACDS Sp     | wef 29 Apr 86 |
| Lt JA Hill                                                     | Ex WTD to 1 Fd Sqn         | wef 21 Apr 86 |
|                                                                |                            |               |
| 2Lt CD Birch                                                   | From WTD to 25 ESS         | wef 14 Apr 86 |
| 2Lt AR Frizzell                                                | From WTD to 3 Fd Sqn       | wef 1 Apr 86  |
| 2Lt RA Lloyd                                                   | From WTD to 25 ESS         | wef 12 May 86 |
|                                                                |                            |               |
| WO 1 PA McKeany                                                | Ex SME to RSM Papakura     | wef 16 Sep 85 |
| WO 1 DC Cunningham                                             | Ex 1 TF to NZWSU S'Pore    | wef 17 Dec 85 |
| WO 1 MG Holt                                                   | Ex SME to 1 TF Wks WO      | wef 2 Dec 86  |
| WO 1 KS McEwen                                                 | Ex Spt Comd to CE Office   | wef 24 Feb 86 |
|                                                                |                            |               |
| WO 2 SM Ross                                                   | From 25 ESS to SME         | wef 7 Apr 86  |
| WO 2 WN Stirrat                                                | From 6 Fd Sqn to Fiji      | wef 14 Jan 86 |
| WO 2 RW Bulman                                                 | From SME to Spt Comd       | wef 3 Feb 86  |
| WO 2 BE Meade                                                  | From SME to 6 Fd Sqn       | wef 2 Dec 85  |
|                                                                |                            |               |
| SSgt PG Packer                                                 | From SME to ACDS Spt       | wef 11 Nov 85 |
| SSgt CD Brickell                                               | From SME to 1 Fd Sqn       | wef 3 Feb 86  |
| The appointment is to be from 9 Jun 86.                        |                            |               |
| SSgt RB White                                                  | From 1 Fd Sqn to SME       | wef 12 May 86 |
| SSgt DR Greeks                                                 | From 1 Fd Sqn to 25 ESS    | wef 12 May 86 |
|                                                                |                            |               |
| Sgt MM Turoa                                                   | From SME to WTD            | wef 25 Feb 86 |
| Sgt IJ Lowe                                                    | From SME to UK (plant Cse) | 3 Feb 86      |

## \*\*\*\*\* DEPARTURES \*\*\*\*\*

In approximate order of release.

|     |          |                                           |
|-----|----------|-------------------------------------------|
| WO2 | J. Greig | Ex HQ FMG. Now working for MWD at Linton. |
| Sgt | ASF Kyle | Ex Linton Camp fire Bde/ FMG HQ           |

\*\*\*\*\*

A lady went into a pet shop and asked the man behind the counter "Do you have any small dogs going cheap." He replied "No lady. Only small birds going cheep."



## OTHER CORPS MATTERS

The Corps Memorial was visited on 20 MAR 1986 by Brigadier W Lindsell RE (Rtd) and his son in Law. It was most interesting to have a retired Royal Engineer officer who specifically requested that part of his holiday would include a visit to the RNZE Corps Memorial. Brigadier Lindsell has taken back to the UK with him a good impression of our memorial and showed his delight with the standard of presentation.

Many of the Corps will by now know that WO 1 Jim Hendricks suffered an heart attack recently. We hear that he is on the way to recovery.

### MAP Course 1985/86

The award for the Best Student on the MAP Basic Course 85/86 went to Spr A Baogo who now has his name engraved on the Langdon Trophy, and as a memento of his stay received a Corps Plaque from the RNZE Corps Funds Committee.

The Most Improved Student trophy of an SME plaque, provided by the SME UPF, was awarded to Spr Fatiaki.

## SPORTING ACTIVITIES

\*\*\*\*\*

RFMF personnel at present on course at SME won the Manawatu sevens. Both the "A" team and the "B" team combined to make a very successful runner up to the Competition.

Cpl M.P. Henderson was to have gone on tour to Japan as Captain of the Manawatu Rugby team in March however a collar bone injury prevented that trip. WO2 K.G. Smith was also a member of the Manawatu team and was able to make the tour. It is understood that the first game produced a result of 54 - 7 in Manawatu's favour. Will KG Smith now be known as "Hashimoto"?

\*\*\*\*\*

\*\*\*\*\*

### PERSONNAL PROFILES

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\*\*\*\*\*

### Cpl Geoff Robinson

The following is an article extracted from a report in the Evening Post (Wellington) newspaper in March. The article was written by Lorraine Vincent. However it was not to turn out this way as Cpl Robinson contracted a heavy bout of some glandular fever and was laid low by the bug.

Triathlete Roger Nevatt has found a partner for the Double Brown biathlon next month. The New Zealand ranked exponent was considering "two or three options" last week but has now settled on a local man to fill the vacancy. Nevatts team mate is 29 year old Geoff Robinson, the New Zealand Services marathon champion, and a clerk in the Royal New Zealand Engineers at Linton Camp.

Although Robinson has little triathlon experience, he is no stranger to the biathlon, having finished second



in the Auckland BI last year. A former professional cyclist, Robinson is a former second placegetter in the 100 mile Timaru to Christchurch road race. For the past few years his major interests have been in scratch riding.

It is in running, however, that Robinson most excels. As well as his services title, the former Manuwera Harrier Club runner has won three NZ Army marathons, was a 1 hr 10m 46s victor in February's half marathon, and has also competed in the Wang and Wiri marathons. A regular competitor in recent Palmerston North hosted round the ranges relay events, Robinson's best 26 mile time is a creditable 2 hr 25 min.

He was alerted to Nevatt's search after reading his newspaper last week, "being on the lookout, myself, for somebody with whom to compete." "I saw the story and immediately contacted Roger. We both believe that we can win an without wanting to sound arrogant, aren't prepared to travel to the South Island for anything but a top three placing.

Born in Balclutha and having spent most of his life in and round Oamaru, Robinson believes his knowledge of the biathlon course will be a big advantage. Nevatt and Robinson are both training 18 hours a week - nine running and nine cycling. Nevatt faces a total of three rides and two runs when the biathlon begins on March 28, with Robinson handling a more running oriented diet of two ride and three runs.

The biathlon, a 1000 km running and biking relay for two-man teams, has attracted athletes from all over the country. It will cover the length of the South Island and offers prize money totalling \$12,000. The event starts on Good Friday and continues for the next five days, finishing at Picton on Tuesday 1 April.

\*\*\*\*\*

Since that Article was printed RNZE have been well represented in the Australian Sydney Sun Anzac Day Marathon, which was run in conjunction with the Australasian Interservices Marathon. Cpl Robinson took forth place overall and second place in the Services part of the marathon with a time of 2 Hours 26 minutes and 18 seconds. Cpl C. Glen (1 Fd Sqn) took 21st place overall and eighth place (services) with 2 Hours 40 minutes and 40 seconds whilst Spr S Green (1 Fd Sqn) brought further honour to the Corps with a 35th place overall (14th place Services) in the time of 2 hours 44 minutes one second.

\*\*\*\*\*

Cpl Murray Henderson (see last Liaison Letter's article) has been chosen for All Black trials team. Unfortunately a knee injury is going to prevent his taking part in the game in June. We are proud to see one of our Corps achieving this high standard in the game.

\*\*\*\*\*

#### OLD COMRADES NOTES

\*\*\*\*\*

Within hours of the Liaison Letter No 31 being sent out a letter was received by the editor informing him that a number of RNZE personnel were currently to be found at Massey University. Should we call Massey an out station of SME and take over some of their facilities?  
Former Sappers are:-



Andy Anderson (Maj MBE), Tony Shorter (Maj), Dick Denby (WO2), Paddy Schofield (Cpl), and Jim Blithe (Spr).

Keep in touch chaps - its good to know that you are still in the area. It is also noted there there are a number of other ex-service personnel at the same place.

Possibly another take over bid should be made on the Dominion Breweries. SME was visited just after the last issue went to print by the works and property personnel from Palmerston North and Wellington. Included in this group of ex-sappers were:-

Glynn Davies (Capt), Cliff Parker (Maj MBE), Ray Wills (WO1 MBE), Harry Gallagher (WO1). Interesting to note that they were accompanied by Mr Cedric Harvey who was a RNZVR fighter pilot during the Second World War.

It is good to receive news that former sappers are well and prospering.

Sappers should also note that an ex Colonel Commandant of the Corps, Col Gordon Lindell DSO, OBE, ED, has been in hospital but is now recovering at his daughter's home in Manuwera.

Col Dick Pemberton MC\* has been appointed the Sappers Association Representative on the Corps Committee with effect from 9 May 1986. Col Pemberton was a former Colonel Commandant of our Corps and it is good to see the continued interest shown.

# # # # #

#### IMPORTANT NOTICE

Copy for publication in the Liaison Letter should be typed on one side of the paper only and be double spaced. Black and white glossy photos may be included with the article, but should be accompanied with the names of personnel, location and date. Articles should be written in a conversational manner rather than presented as a staff paper. Paragraphs should not be numbered.

All personnel should be encouraged to write articles for this Liaison Letter for it is from such food that the magazine draws nourishment.

# # # # #

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# LETTERS TO THE EDITOR

\*\*\*\*\*

\*\*\*\*\*

To date we have received few letters from which we can gauge the acceptance of the Liaison Letter as a vehicle which can reach members of the Corps and bring them closer together, or inform the readers of some military engineering trends. We need these letters to know if we are on the right track. Again the need for involvement of YOU the reader is needed to keep this LL going.

+++++

Thank you Cpl Matehe for your letter. Part of your letter is quoted here.

"When I first arrived at RF Company (WTD) there was only one other engineer instructor - Cpl Andy Jordan. He is now working for the Justice Department as a Prison Warder at Rangipo Prison. At Present there are seven Sappers at WTD, (All Arms Instructors) namely SSgt Moe Turoa, Cpls 'Sooty' Davis, Noel McCarthy, Terry Uiarau, and LCpls Barry Donaldson, Sam Marsh and (W) Mac Aitken who is a Clerk All Arms."

It is easy to overlook the sappers who are serving in units outside the major ones of our Corps. A letter such as Cpl Matehe's has reminded us of our separated members.

Editor.

Congratulations LCpl(W) Julie West (another of our separated members). You were the only person to send a reply to the Weapons Quiz in LL No 31. Keep it up - you are showing that you know your weapons better than the male members of the Corps.

\*\*\*\*\*

LCpl P.S. Licence  
PO Box 2174  
Lae, Papua New Guinea.

O.C.

1 Field Squadron

Just a quick note of what I am up to in PNG. Myself and one other geologist are currently running an exploration camp off the coast of New Ireland, PNG. We are currently in the middle of a drilling programme (gold exploration) on a small island about 90 square Km. Engineering skills and logistics are used to the fullest out here.

Our workforce is made up of about 30 islanders. We use a 20 foot fibreglass boat with 25 hp Yamaha outboard motor for island transport. Coastal shipping brings in our bulkier supplies such as fuel, cement, drilling mud etc. Barges are used for the drilling rig and bulldozer and so on.

For Transport we have two Toyota Landcruisers, one four wheel drive Suzuki, a four wheel drive Mitsubishi tractor, two Honda trail bikes and one tracked vehicle. Endless mechanical problems as most are about two years old now. For our roading and trenching we have a D6 Dozer on site. We also have chopper support and fixed wing aircraft are on a regular schedule.

Regards

Lcpl Licence.



## AN RSM'S PRAYER

\*\*\*\*\*

Dear Lord help me to become the kind of Warrant Officer my students would like to have me be.

Give me the mysterious something which will enable me at all times to explain policies, ruling, regulations and procedures to my students, even when they have to be explained to me.

Help me to reach and train the uninterested and dimwitted student without ever losing my patience and temper.

Give me that love for my students which passeth all understanding, so that I may lead the recalcitrant, obstinate, no-good student into the paths of righteousness by my own example and my soft persuading remonstrance instead of busting him/her on the nose.

Instill into my inner being tranquillity and peace of mind, that no longer will I wake from my restless sleep in the middle of the night, crying out "What have the students got that I haven't got, - and how did they get it?"

Teach me to smile - even if it kills me.

Make me a better leader of my students by helping develop larger and greater qualities of understanding, tolerance, sympathy, wisdom, calmness, coolheadedness, perspective, equanimity, mind-reading and second sight.

And when, dear Lord, thou hast helped me to achieve the high pinnacle my Chief Instructor has prescribed for me, and when I have become the paragon of all supervisory virtues in this mortal world - dear Lord,

move over.

I am now the RSM of SME.

Author Unknown.

## THE OPERATION OF THE CHAIN OF COMMAND

The Colonel to the Executive: At nine o'clock tomorrow there will be an eclipse of the sun, something which does not occur every day. Get the men to fall out on the parade ground in their fatigues so that they will see this rare phenomenon, and I will explain it to them. In case of rain, we will not be able to see anything, so take the men to the gym.

The Executive to the Captain: By order of the Colonel, tomorrow at nine o'clock there will be an eclipse of the sun; if it rains you will not be able to see it from the parade ground so then, in fatigues, the eclipse of the sun will take place in the gym, something that does not occur every day.

The Captain to the Lieutenant: By order of the Colonel in fatigues tomorrow at nine o'clock in the morning the inauguration of the eclipse of the sun will take place in the gym. The Colonel will give the order if it should rain, something which occurs every day.

The Lieutenant to the Sergeant: Tomorrow at nine the Colonel in fatigues will eclipse the sun in the gym, as it occurs every day if it is a nice day; if it rains, then on the parade ground.

The Sergeant to the Corporal: Tomorrow at nine the eclipse of the Colonel in fatigues will take place by cause of the sun. If it rains in the gym, something which does not take place every day, you will fall out on the parade ground.

Comments among the Privates: Tomorrow, if it rains, it looks as if the sun will eclipse the Colonel in the gym. It is a shame that this does not occur every day.

— Attributed to a Peruvian Army publication.

## NZ notes

• The Minister of Defence, Mr F.D. O'Flynn, and the president of Lear Siegler International, Mr C.S. Sikes, have signed the contract for updating the RNZAF Skyhawks.

Approval for the transfer of American technology was given late in December after a normal and unimpeded passage through Congress.

• For the first time in five years the number of those enlisting into the Army has exceeded those leaving.

The Army's senior personnel officer, Colonel Bret Bestic, says this is a result of a positive recruiting campaign mounted by the Army after the Government authorized an additional 300 soldiers for the Regular Force early last year.

• The 29-man RNZAF helicopter detachment has been replaced by a NZ Army training and advisory team with the Multi-National Force and Observers (MFO) in the Sinai.

A New Zealand Army lieutenant-colonel and warrant officer have taken up new posts at the headquarters of the MFO in el Gorah. Their postings will be for 12 months.

This is the text of a report from Spr McLean (TF 1 Fd Sqn).

# EX TASMAN RESERVE 86

Spr Pikett and I arrived at Landguard Bluff Saturday morning. Most of that day was spent doing administration. At 1630 hrs the contingent of 120+ pers went on an RFL I believe one person failed - so he didn't go to Australia. All engineers passed. After the RFL it was back to more administration. Reveille was at 0545 next day, went into a bit of a P.T., had breakfast, Coy parade and then more admin. After lunch we went back into the field to learn "how to live" and to practice flotation then back to camp for more P.T. After dinner we had films "Fire and Manoeuvre" and a good film on ambushing.

Next day some one slipped up and got us at 0530 hrs which gave us more time for P.T.

I found P.T. in the morning wasn't much use to us as the N.C.O were still half asleep so we weren't pushed hard enough for it to do any good, But the P.T later in the day made up for it.

Most of our training in NZ was fitness and soldiering. We practised harbouring, navigation, fire and manoeuvring drills, contact drills, ambushing by day and by night. All training was at section, platoon and company level. Most of the training was physically demanding and we did not have much time to ourselves which was good because it did not give you any time to think of things to complain about. For example, food or the barracks, eight guys in a four man room made things difficult at times. We looked forward to leaving camp for a few nights and living it "Rough" in the field.

The training itself was good as we learnt new formations for contacts which is more effective than the old methods.

After our week in New Zealand we flew to Australia on two C130's. We landed in Rockhampton passed through customs and boarded a bus to Samuel Hill Camp which is Australia's Waiouru.

I found that the Australian camps are not set up as well as NZ camps. I think that the NZ Army looks after their men better, that goes for training as well. The Australian basic training for TF was only 2 weeks long.

At Samuel Hill we set up as they don't have hatches, Barracks or large tents. The site allocated to us by the Australians had me worried as it had

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rained the day before and you could see the run off flowed right through our sleeping area. It didn't rain that night - in fact it didn't rain for a few nights. Next day we left camp for 3 days and went bush for acclimatisation and to learn about conditions in the Australian tropical bush. Temperatures reached between 32 - 38 degrees C. You sweat constantly even when you are sleeping. Our first day out was hell as we weren't used to the





Next day we force marched about six kilometres to a position to be airlifted by Chinooks. We were annoyed to find that on arrival the Chinooks turned out to be International and Unimog helicopters. Anyway that night we hit the beach - and we hit the cans as well. Next day was pay day and then into town.

The day after that we all went to Great Keppel Island for the day. The island is like a little Club-Med where the women wear next to nothing and the beer is expensive. We were confined to camp that night but half the camp went to town again. Next morning we loaded up to head back to New Zealand with one man short but he arrived just as we were pulling out.

The flight back to New Zealand was half an hour shorter than going over - something to do with it being down hill all the way.



Continuing their highly successful export drive, Windsor Engineering recently commissioned two conventional timber drying kilns for the Pacific Lumber Company at Lautoka, Fiji.

Built locally to Windsor civil and structural designs, each concrete block chamber is of 40m<sup>3</sup> capacity to handle 50 mm boards.

All circulating fans, heater coil assemblies, controls, vents, doors and other equipment were manufactured in Wellington and shipped to Lautoka. Two specialist Windsor staff who installed and commissioned the equipment readily acknowledge the contribution of local Fijian assistants. They all had the satisfaction of seeing steam turned onto the kilns right on programme date.

"Although for many purposes aluminium high temperature panel kilns are recognised as the coming thing, conventional concrete kilns still have their place," says Windsor Managing Director, Bill Studd. The new Lautoka kilns are used solely on Fijian native timbers and operate up to 80°C. Drying results are proving excellent.

**Quick  
on the  
draw**

ENJOY the joke on the left and then see if you can spot the differences between

the two cartoons. There are at least 12. The solution is on Page

## Manufacturers at defence seminar

Representatives from some 260 New Zealand companies attended a special defence manufacturers' seminar in Wellington late last month.

The seminar, the first of its type, was held at the Royal New Zealand Air Force Base at Shelly Bay.

It was organised by the Ministry of Defence in a bid to involve the New Zealand manufacturing industry in defence programmes.

The Minister of Defence, Mr Frank O'Flynn, said the response was extremely encouraging.

Mr O'Flynn said the Defence Department was not advocating the development of a defence industry in New Zealand. There was, nonetheless, potential for wide-ranging local manufacturing input into existing programmes which would benefit local industry and result in a saving of overseas funds.

Mr O'Flynn said the Ministry had given several briefings to various firms over the years. These had generally involved com-

panies and groups which had formally registered interest in specific defence equipment or other projects.

The aim this time had been to alert companies across a wide spectrum, to the opportunities available for defence contracts.

A range of defence hardware was on display for inspection.

Alongside Shelly Bay wharf were two naval craft built at Whangarei plus a British-built patrol craft largely fitted with New Zealand-made equipment.

At nearby Wellington Airport were an RNZAF Orion maritime aircraft, a Skyhawk strike jet, an Iroquois helicopter, a Cessna light transport aircraft and a locally-built Airtourer trainer.

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## ATG PLANT TEAM

As all Corps members are aware, the Army Training Group (ATG) Plant Team has been established in Waiouru. It is time to let all Corps Personnel know the role and function of the unit, as well as to pass on our survival rate to date.

The unit was established on 26 November 1981 with the role of providing plant support to the Army Training Group, as it was the only major camp in New Zealand without its own dedicated engineer unit. It has a complete Regular Force manning with one officer and fourteen other ranks. At formation the unit was placed under command of 25 Engineer Support Squadron for the 84/85 Argo Road works season and worked until 31 March in this capacity. On 1 April 1985 the unit assumed its role under command of Headquarters, Army Training Group (HQ, ATG) and is tasked for works by that headquarters.

The unit has taken over a number of works tasks in the ATG which include:

- a. Taken over control of all quarries in Waiouru from the Ministry of Works and Development, Wanganui. Proper development and management of these former 'borrow pits' has begun and is an ongoing time consuming works project. Face heights are being reduced in the Daba Pits to meet national laws.
- b. Construction of an earth bund at the grenade range to enable both throwing bays to be used at once and to allow an ambulance to be parked on site.
- c. Construction of an earth bund at Helwan Camp for POL operations.
- d. Building demolition at both 26 Weir Terrace and the Battery Shop.
- e. Construction of 4x100 metre and 2x50 metre rifle ranges in the Home Valley.
- f. Construction of new foundations for a new ATG Skating Rink, and
- g. Upgrading the Engineer compound surface and improving unit works accommodation from our own resources.

During October 1985 the unit was once again placed under command of 25 ESS for the 85/86 Construction Season and has to date been responsible for all quarrying operations on the road and has in the two seasons produced some 63,000 cubic metres of crushed rock.

At the conclusion of the current Argo Road works season the unit will begin another works programme in ATG which includes further development of the Daba pits and upgrading the Paradise Valley and Burma Road quarry. Other tasks planned include the RNZCT Schools Carpark, and AVTUR installation and some works on Shawcroft Road (to the airstrip).

The unit is in good heart and we are currently developing a unit plaque with the Polar Bear as its symbol. As you all know the ATG Plant Team took out honours in the Sappers Day 85 competition and look forward to some

stiffer opposition this year. To those of you who fear a posting to Waiouru, once you get here it really is quite nice. As we pull on our winter coats of fur we wish you all a good year.



THE ARMY TRAINING GROUP PLANT TEAM  
FOUNDATION MEMBERS AS AT 26 Nov 1986

Back Row: Spr WP Blumers, Lcpl JR Taylor, Cpl TTR Morehu, Spr T Pinga,  
Lcpl RP Paul, Spr RG Pettersen, Lcpl TH Dargie, Lcpl AM Kelly.

Front Row: Sgt CJ Wilson, Lt PN King, SSgt LW Ward, Cpl JG Bassett.

%%%%%%%%%



Extracted from: Army General Staff Sitrep

It is not often that the end of the road gives rise to proud celebration, but this will surely be the order of the day for RNZE on 11 Apr 86 when the CGS will formally declare the Argo Road open.

Construction of the Road began in 1968 and today the Argo Road extends 34 Kilometres from Waiouru to the eastern (Kaimanawa Forest) boundary of the Waiouru Training Area. Given that 26 Kilometres of the road varies from 2,200 feet to 4,500 feet above sea level, combined with Waiouru's infamous climatic temperament, it is indeed a fine tribute to the expertise of our sappers (both past and serving) that the construction of this road has been constructed without fatality.

## Air New Zealand promotes military conversion of F27

► AIR NEW ZEALAND was promoting military conversion of the Fokker F27 airliner for the first time at Singapore.

The RNZAF brought a converted F27 100 navigation trainer to Changi. Purchased from Air New Zealand in 1979, this comparatively elderly airframe has been converted by the addition of two pupil positions and an instructor's seat in the forward fuselage.

Operated by the navigation and air electronic training squadron at Wigram, the aircraft flies 60% training duties and doubles as a EEZ patrol aircraft.

Air NZ was offering a range of conversions, including a more-capable radar-equipped version and an armed development which could carry out ASW duties.

The aircraft on display had accumulated more than 45 000 hours, but Air New Zealand says that the F27 is cleared for a life of 90 000 hours and beyond.



▲ Fokker F27 Mk 500 Friendship — promoted by Air New Zealand for military conversion

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# THE CORPS OF ROYAL NEW ZEALAND ENGINEERS

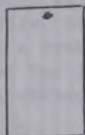
CORPS SUPPLIES AVAILABLE  
FROM THE SCHOOL OF MILITARY ENGINEERING  
LINTON CAMP



Christmas/Greeting  
cards.  
\$0.25 each



Corps Pads  
Letterhead A4  
\$2.00 each



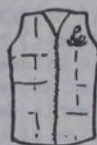
Corps Folders.  
16 plastic pages.  
Suitable for A4 pages.  
\$11.50 each.



Bomber Jacket.  
Corps Hat badge.  
\$47.50 each.



Lapel/tie pin  
\$2.20 each.



Vests \$40.00  
Each with Corps  
Cypher



Standard Jacket  
With Corps Cypher  
\$47.50 each.

(Generally a size  
smaller than you  
normally wear, e.g.  
order size 42 for  
your normal size 40)



Corps Ties  
\$7.00 each.  
Be proud to wear  
one with your  
civvies.



Wine or fruit juice glasses to grace  
your table. RNZE hat badge design.

140ml set of six \$22.00  
200ml set of six \$23.00



Transfers  
20 cents each

Cloth pockets  
\$6.75 each.

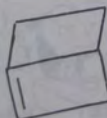
Wire pockets.  
\$11.00 each.



Leather key ring  
holder. Embossed  
Corps cap badge.  
\$4.30 each



Corps Plaques  
\$16.50 each.



Soft leather  
cheque book holder  
Embossed Corps cap  
badge.  
\$10.45 each  
(Suitable for BNZ  
ANZ cheque books)



Soft leather  
DOUBLE cheque book  
holder. Embossed  
Corps hat badge.  
\$11.15 each  
Suitable for Trustee  
Bank deposit/cheque books.



We are proud to announce that we have received permission, from Mr Denis Warner, Editor of the Pacific Defence Reporter, to reproduce articles from PDR. We are pleased to receive this permission and thank PDR for their kindness.

## The Pacific isn't pacific

*France is deeply engaged in a nuclear modernization program and has no intention of abandoning the Mururoa tests, serious trouble lies ahead in New Caledonia, and the South Pacific generally is suffering from acute problems that may encourage outsiders to fish in its troubled waters.*

By Denis Warner — Noumea

SINCE THE announcement by President Mitterrand last July that France intended to build a new strategic base in New Caledonia, things have moved ahead sufficiently to assess what Paris has in mind. In terms of installations, the plans are modest. Implicit in them, however, is a declaration of intent that has its roots in the major program to upgrade the *force de frappe* on which France expects to be engaged until well into the 1990s, and an indication of the clear determination to continue nuclear testing at Mururoa atoll.

The plans include the construction of a new quay for naval vessels, which these days are often obliged to use the commercial port, the lengthening and strengthening of the runway of Tontouta international airport to take Jaguar bombers, and the separation of military and civilian facilities there, including the construction of a military parking area.

Command of the French forces in the Pacific is vested in Vice-Admiral Rene Hugues at Tahiti. The French military commander of the forces in New Caledonia is Major-General Franchesci. The forces stationed in New Caledonia now number about 8000 and include a marine infantry regiment and an infantry company, supported by a C-160 transport aircraft, a small Fleet Air Arm detachment, with two Guardian jet reconnaissance aircraft, and a small number of Super Puma helicopters.

While these forces are likely to be reinforced again as the confrontation between the Kanak Socialist National Liberation Front (FLNKS) and French residents increases in intensity this year over the issue of independence, the French strategic planning — and the decision to build the New Caledonia base — rests primarily on what Paris sees as the necessity for maintaining the quite fragile chain of communications between France and the Pacific testing ground.

"If France believes that it should maintain a presence in the Pacific, then the geographical situation of New Caledonia and of Polynesia assumes a strategic importance," Admiral Hugues told *Agence France Press*. "But if France takes the view that it has no political role to play in the region, then the two territories don't have any strategic interest for us." Since France has made the political decision to upgrade its nuclear forces, and Mururoa is the only apparently feasible weapon testing site, then *ipso facto*, both Polynesia and New Caledonia are strategically important.

If the connection between New Caledonia and Mururoa, 4000 kilometres to the east across the Pacific, may seem obscure, the sig-

nificance becomes apparent in the logistics of the nuclear testing program. Component parts of the weapons tested at Mururoa are flown from France to the island of Guadeloupe in the Caribbean, then non-stop across the narrow isthmus of Central America, and on to Mururoa, 18,000 kilometres from home.

Much of the maritime and naval backup comes the other way round the globe through Djibouti, which is no longer French territory, and Mayotte in the Indian Ocean, where the French have continued to maintain a naval presence.

### Vulnerable lines of communications

THE FRENCH are acutely conscious of the vulnerability of these lines of communication. There have been riots in Guadeloupe. New Caledonia is deeply troubled and is likely to be even more deeply troubled in the not too distant future. The first stirrings of an independence movement are apparent in Polynesia. And the sinking of the Greenpeace vessel, Rainbow Warrior, in Auckland Harbor by secret service agents, far from achieving its goal of ridding France of a nuisance, has served to intensify the campaign against continued French nuclear testing.

Since the French military aircraft flying to Mururoa deliberately avoid flights over the continental United States and through the Hawaiian islands, a much more convenient passage, the notion expressed last year by former Australian Prime Minister Malcolm Fraser that France might use the US nuclear testing ground, and thus avoid upsetting Pacific sensitivities, scarcely seems likely to become reality. Australia has been tilting in the Don Quixote manner against the French nuclear tests ever since the Whitlam Government was elected to office more than a decade ago with conspicuous lack of success.

In the absence of any comprehensive test ban, or serious disruption to its lines of communication, France is bound to continue testing, as Paul Quiles, the Minister of Defence, made abundantly clear in answer to a question in the National Assembly on October 2 last year.

"We mean to continue our tests," he said. "The object is to test the quality and reliability of the nuclear warheads on our missiles. The five nuclear powers in the world are conducting this kind of test and will go on doing so, and I repeat that there is no environmental risk whatsoever ... France has never accepted, and

will never accept, that any organization or country whatsoever should be able to influence her defence policy. That is particularly plain in the nuclear sphere, which, as you know, is the ultimate guarantee of our independence. In accordance with the directives of the President of the Republic, I have given categorical instructions. We shall not postpone the next nuclear tests, or indeed the subsequent one, by one week, by one day, by one hour. The timetables have been fixed. They will be scrupulously adhered to."

Among the nuclear powers, Britain and France must surely be regarded as the least likely ever to launch a nuclear war. The French emphasis credibly is heavily on *dissuasion* (deterrence). The French argument that it cannot be sure that the United States will ever use its nuclear weapons in defence of France is also credible. In the face of continuing US and Soviet nuclear developments, the French Government concluded that real *dissuasion* could be maintained only by a comprehensive modernization program that would not aspire to compete with the superpowers but would, to quote a former Prime Minister, produce enough tactical and strategic weapons "to brandish the strategic nuclear threat if an armed conflict should, in spite of everything, be triggered by the aggressor in the European theatre."

The French SSBN force is being increased from five to seven and the submarines will be equipped with new generation MIRVed SLBMs with longer range and greater sophistication. Total SLBM warheads will be increased from the current level of 176 to about 600. Also on the drawing boards are plans for an additional six nuclear-attack submarines.

In addition, the French are creating a land-based nuclear force and are replacing the Mirage IVs with the Mirage 2000Ns armed with air-to-surface tactical nuclear missiles with a speed of Mach 3 and a range of about 100 kilometres. In short, the French nuclear modernization program is both qualitative and quantitative, and will not only multiply the number of strategic weapons by something like fivefold, but will improve the accuracy and range of its missiles.

### France won't budge

IF ONE can foresee problems arising from this with the Soviet Union, and the United States in any new arms limitation agreement between the superpowers, there is no room to



doubt present French intentions to continue the nuclear modernization program, and hence nuclear tests at Mururoa, at least for the foreseeable future. The elections in France next month will not change this.

If it were possible to divorce nuclear testing from other considerations in the Pacific, this might constitute little real cause for concern. If France feels compelled to test nuclear weapons, Mururoa, environmentally, seems to be as good a choice as any. The Sahara Desert, where the first French tests were conducted, is no longer available. Testing in metropolitan France is unfeasible, and, the use of the US testing grounds for such an ambitious program would be to identify the *force de frappe* with US nuclear capabilities in a way that would lend some grist to the Soviet mill — and probably be unacceptable to either France or the US.

The clamor against French nuclear testing by Australia and New Zealand, the sinking of the Rainbow Warrior and, of course, the testing itself is now adding to the factors working towards the destabilization of the South Pacific.

Despite the genuine moves by the Mitterrand Government to move New Caledonia towards some sort of autonomy that will allow the continued use of the military installations by France while it persists with its long-term nuclear modernization program, there is no room for optimism that this situation will be resolved peacefully. The regional council elections last September were intended to be a first step towards transferring some governmental responsibility to the indigenous Melanesians, and in this they were successful. Three of the four regional councils in New Caledonia are now under Melanesian control. But Noumea, and its surrounding area, home for more than half the population, is dominated by the French settlers and their minority allies. New Caledonia's anti-independence groups also predominate in the new Territorial Congress, which, pinning its hopes on a change of government in France next month, refused even to debate the Paris-dictated ordinances intended to form the basis for the next move toward independence.

#### Fine racial balance

THE COMPLEXITY of this situation is fully reflected in the census figures. At the end of 1983 there were 145,368 inhabitants of New Caledonia — 61,870 Melanesians (42.52 per cent), 53,974 Europeans (37.12 per cent), 12,174 Polynesians, 5319 Indonesians, 5249 of miscellaneous origin, and 1212 Vanuatuans. Eighty per cent of the Melanesians indicated they wanted independence in the September polls, but 61 per cent of the total population indicated with no less clarity that they were in favor of the *status quo*.

Instead of an orderly process of decolonization, what now seems all but certain to emerge, if on a much smaller canvas, is a situation comparable with that in Northern Ireland, South Africa or the Middle East. In the clash of the irresistible force of Kanak nationalism and the immovable mass of entrenched French settlers, the fallout will affect all the South Pacific. Both sides are busy buying guns.

Since France took possession of New Caledonia in 1853, the territory has been administered as part of the French Republic. New Caledonians are regarded as French citizens and participate in the French presidential elec-



tions as well as electing two deputies and a senator to the French parliament.

The militant Kanak Socialist National Liberation Front wants that there will be bloodshed if there are any hitches on the way to independence. "There will be violence and blood," says a FLNKS spokesman, "It will be very violent, very bloody."

The French view is put by Jean Leques, the moderate chairman of the Noumea regional council. "The best thing is for France to stay," he says. "I don't want this to become Communist."

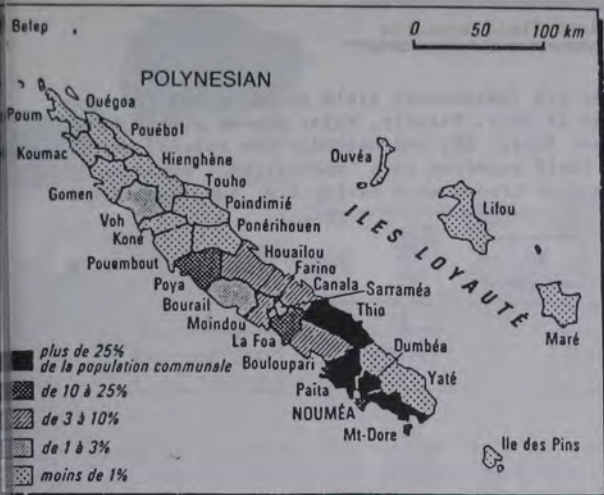
Mr Leques draws an analogy from the Pacific War when New Caledonia was what he describes as an unsinkable aircraft carrier: "If the Japanese had ever come here, Australia would have been in much trouble, and might even have been invaded." The Communists, he adds, have followers in New Caledonia.

All of this is no doubt true, but what Mr Leques, and many of the 61 per cent of the French and others who oppose independence do not appreciate is that in the coming confrontation, the almost inevitable bloodshed must lead to a situation in which the Melanesians — if they are denied what they believe to be their natural rights — will turn to almost any quarter for support.

The situation may not be insoluble, but it is probably insoluble by any means that do not contribute to the destabilization of the South Pacific.

For convenience sake, this is defined here as embracing an area of about 29 million square kilometres, or approximately the size of the continent of Africa. But unlike Africa, its land mass is less than 2 per cent of the total area, and much less if Papua New Guinea, which occupies 84 per cent of the total, is excluded.





if Papua New Guinea is excluded, there are only two million people in the South Pacific. If you exclude Fiji, less than a million and half scattered over no less than 20 countries and dependencies, all of them fly spots on the maps, and some scarcely even that. Pitia with a population of 58, occupies an area of five square kilometres. Tuvalu has only 5 square kilometres of land into which 30,000 people are jammed. The Marshall islands with a population of 32,000 crowded into 33 square kilometres are not much better off.

#### "Something of a garbage dump"

ISLANDS under protectorates, trusteeships or continuing colonial authority seem to be better off economically and otherwise than those that have won independence. In the 20th Century has come to the Pacific and turned it underfoot, in the process turning it into something of a garbage dump. Coral reefs have been destroyed by dredging, siltation, pollution, dynamiting, the poisoning of fish and the disposal of waste and toxic chemicals. Mangrove swamps, once thought to be useless, are appreciated now that so many have gone away. They are valuable for subsistence fishing, for firewood collection and to prevent coastal erosion, have been eroded by dredging and filling.

More than half the countries have erosion problems. More than half are short of water. Freshwater lakes have been polluted and their fertility degraded, resulting in one case in an outbreak of cholera. Overuse of ground water has also led to contamination by sea water. Efforts have been indiscriminately cut, adding not only to erosion, but to acute shortages of timber. Many of the problems of the Pacific are now reflected on a smaller scale in the Pacific islands. Shanty towns have appeared, overcrowded, lacking in infrastructure, with both high crime and unemployment.

The improvement in the construction of roads and the modernization of fishing

techniques have led to extensive coastal overfishing in more than half the islands, while the local population lack the capital to pursue the vast shoals of tuna and skipjack far out to sea.

The American tuna fleets, often equipped with helicopters to locate their catch, and far too fast for local patrol boats, wander in and out of the islands' exclusive fishing zones, causing the bitterness and resentment now evident in Kiribati's decision to grant the Soviet Union fishing rights for a couple of million dollars.

In five of the island groups or territories the per capita income is less than \$300, on a par with poor African countries like Somalia and Tanzania.

The population of the entire region increased by some 23 per cent in the last decade, and although unemployment figures are not available, youth unemployment is described by South Pacific Commission officials as increasingly serious. In 1981, the only year for which figures are available, only American Samoa had a surplus in its balance of trade.

In the struggle to survive, Kiribati's decision to enter into a fishing agreement with the Soviet Union should occasion no surprise. It will be much more surprising if others do not follow its example. ■

• Lieutenant-Colonel R.N. (Bob) Upton of Nelson is shortly to assume command of the 1st Battalion, Royal New Zealand Infantry Regiment (RNZIR) which is based in Singapore.

Born in Christchurch in 1945, Colonel Upton was educated at Christchurch Boys' High School (1959-60), Nelson College (1961-63) and the Royal Military College at Duntroon in Australia.

Graduating from Duntroon in December 1967, he was commissioned as a lieutenant into the Royal New Zealand Infantry Regiment.

Colonel Upton saw active service in the Republic of Vietnam during 1970 as an infantry platoon commander with the 6th, and later the 2nd, ANZAC Battalion.

## Concrete technology

For the third year the New Zealand Concrete Research Association (NZCRA) is offering a correspondence course on Concrete Technology and Construction for people directly involved with the concrete industry. Already 20 people have taken advantage of this unique opportunity and applications are now open for the current year.

The course is in two parts (General Principles and Practice) and is based on the City and Guilds of London Institute (CGLI) but modified for New Zealand conditions. The CGLI examinations can be taken in New Zealand, leading to the award of a widely recognised certificate throughout the western world.

Each part of the course consists of 36 lectures, supported by technical bulletins and a number of extracts from relevant NZ Standards. The material is issued over a nine month period, commencing in July, and each lesson contains a summary, self test assignment and a written assessment to be sent to the NZCRA for marking.

The fee for each part of the Concrete Technology & Construction Course is \$325.00 plus GST.

## Computer slip sends anchor to army base

BECAUSE of a misplaced number, the US Army's supply system has delivered a seven-ton ship's anchor to a base 1000 miles inland.

A supply clerk entered an order into the computerised system at Fort Carson at Colorado Springs for a \$6 headlight. Instead of typing in the last four numbers 4972, the clerk put 4772 into the system. The result was the \$28 560 anchor, Fort Carson officials have ruefully admitted.

Spokesmen said the computer then in use had no provision for printing out a description of the item being ordered. And no-one down the line wondered why a landlocked fort on the Continental Divide had need for the anchor.

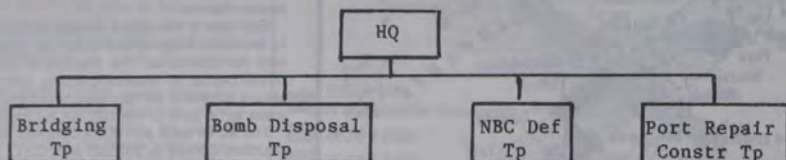
Officials at the base let the anchor stay put in case someone might show up and claim it. When that did not happen, the anchor was trucked to Pueblo army depot, some 64 km away, for disposal, possibly to a location nearer water.

## LINI'S WARNING TO TRADE UNIONS

Vanuatu's Prime Minister Father Walter Lini has warned the country's trade unions not to behave like unions in industrialised countries. Specifically mentioning Australia, Fr Lini said Vanuatu's unions must be careful to avoid what he called the bad influences of unions in developed countries. He

## 6th Independent Field Squadron

Since the beginning of the year 6th Independent Field Squadron has had a change in leadership and a change in role. Firstly, Major Graeme Wilson has taken over command from Major Dave Tovey, ED, and secondly the role(s) have changed from those of a 'mere' field squadron to a 'specialist' squadron. The unit is now organised into four troops each having its own specific role.



For those in the Regular Force who have in the past had reservations about being posted to 6, the world is now your oyster. The opportunities are there to specialise in fields of an extremely technical nature.

Also in the past few months the 'coloured hats' of the army have again seen the light and restored some of 6 Independent Field Squadron's Regular Force appointments. With effect 17 March 1986 they are:

|           |         |                                                |
|-----------|---------|------------------------------------------------|
| Tp Comd   | Lt/Capt | Lt John Peacock ex SME Casula<br>wef 28 Jul 86 |
| Tpt NCO   | Sgt     | Cpl R.M. Darroch ex 1 Fd Sqn<br>wef 23 Jun 86  |
| Sect Comd | Cpl     |                                                |
| Clerk AA  | Spr     |                                                |

By the end of this year all these appointments will be filled. For former 6th personnel you will recognise this as getting back to the stage it was about three years ago.

### \* \* \* \* \* RETIREMENT OF MAJ DAVE TOVEY \* \* \* \* \*

Maj Tovey recently retired from Territorial Force Service and transferred to the Reserve of Officers. With the requirement to devote more time to his civilian employment Maj Tovey decided that he could not dedicate himself fully to the appointment of OC of 6 Indep Fd Sqn.

Maj Tovey had served with 6 Independent Field Squadron since 1970. He was commissioned as a Second Lieutenant and soon afterwards was posted to 2 Field Squadron. He was for a time 2 i/c of 2 Field Squadron but relinquished this appointment when he was posted back to 6 Field Squadron. In 1982 he was promoted Major and assumed the appointment as OC. Maj Tovey served the unit well and will be missed by those who know him, who now wish him well for the future and the best of luck with his computer.

\* \* \* \* \*

In lighter vein.

Q: What do you call a Phillipino contortionist?

A: A manilla folder.





6th Independent Field Squadron paid their first official visit to the Petone Borough's new Civic Centre in Britannia Street on Saturday 31 May. They exercised their right to march through local streets with billygoat mascot Corporal Truby King in attendance, as part of their annual Charter Parade ceremony. They were then inspected by Mayor Ron Marston (accompanied by Capt N.K. Gattsche) - here speaking to Spr Darryl Angus - who also presented Efficiency Medals to five members of the unit. In the afternoon local people were able to visit the Pattie Stree Barracks to view activities engineers are involed in, and also take rides on large Army pontoons in the harbour.

\*\*\*\*\*

## What Do You know

TEST your general knowledge with these questions. Answers on Page 23

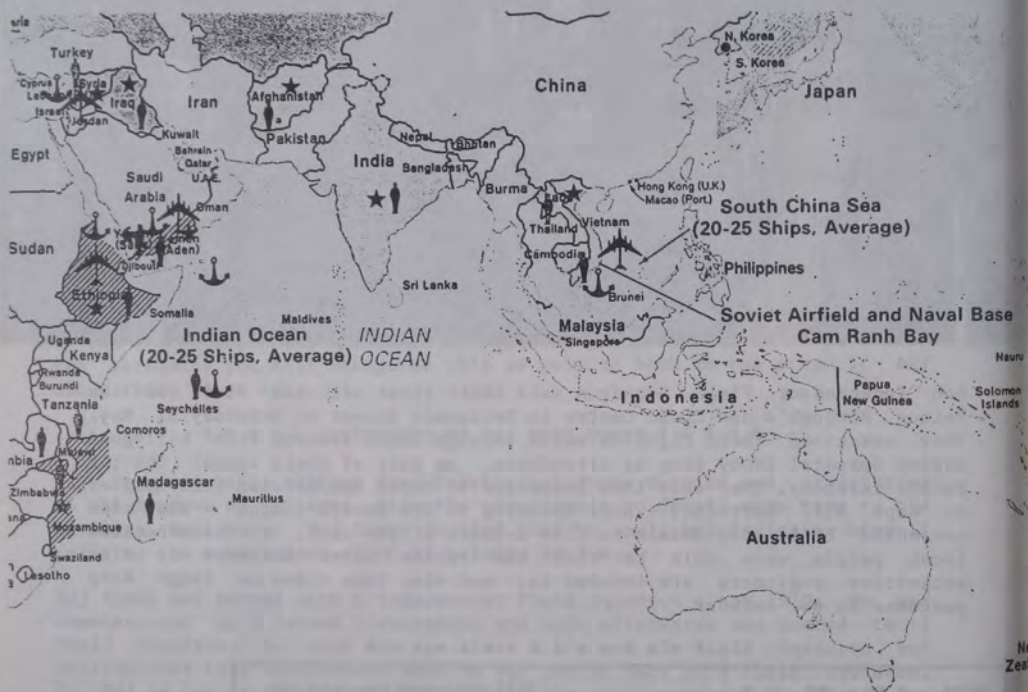
- |                                                                       |                                                                                  |                                                 |                                                              |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------|
| 1. Name the three Baltic States that became part of the USSR in 1940. | 3. In Rudyard Kipling's <i>Plain Tales From The Hills</i> , where are the hills? | involves knotting thread or cord into patterns? | 8. Name the Roman god of war.                                |
| 2. Which part of America is partly within the Arctic Circle?          | 4. What was the original juggernaut?                                             | 6. Who were killed at the Glencoe Massacre?     | 9. Which country presented the Statue of Liberty to America? |
| 5. Which handicraft                                                   |                                                                                  | 7. Into which ocean does the Amazon flow?       | 10. Which English poet translated the poems of Omar Khayyam? |

# NEIGHBOURS

By the Editor

The map shown below gives each of us something to think about. The buildup of a potentially hostile environment to the north of New Zealand should not go on with our recognition of that fact. Because of New Zealand's isolation we often think that world or even Asian events do not concern us. Yet it is at this time that we should take cognisance of the events on our 'borders'. It pays us to keep a close lookout now - and then repeat the scrutiny in six months time and see what has developed. It may be that the information is not forthcoming in six months so a year perhaps might show up a trend or direction of events to the north and west.

It should not take much brainwork to discover that the former American base at Cam Ranh Bay has now become the largest concentration of Soviet forces in South Asia. This means that we in New Zealand are within strike range of Soviet aircraft, submarines and surface units, given the facility of in flight refuelling and tanker and other support vessels accompanying surface units.



## Soviet Arms Transfers (1980-1985)

|                                                         |   |
|---------------------------------------------------------|---|
| \$5 billion-\$10 billion                                | ■ |
| \$1 billion-\$5 billion                                 | ■ |
| \$100 million-\$1 billion                               | □ |
| Soviet Treaties of Friendship                           | ★ |
| Soviet Military Personnel (Excluding Military Attaches) | ♂ |

|                                    |   |
|------------------------------------|---|
| Mutual Defence Treaties            | ● |
| Major Soviet Naval Operating Areas | □ |
| Deployed Soviet Naval Forces       | □ |
| SSB/SSBN Operating Areas           | ▨ |
| Soviet Naval Access                | ⚓ |
| Airfield Access                    | ✈ |



Ponder a moment on your ability to do your job should a movement south be detected. It is appreciated that we do not have examples of current or even obsolescent Soviet or Warsaw Pact country mines - but we do (or should) have the basic understanding of minewarfare. Coupled to that we should also be prepared to take note of developments in current defence oriented publications which bring to the fore some information which we should take to heart. Merely the fact that we may have done a basic field course does not make us experts. We need to constantly monitor events about us and use the information gained. It is too late to say "I should have noted that some time ago." Tomorrow is too late.

### WHAT DID YOU KNOW?

Page 21 Quiz

1. Estonia, Latvia, Lithuania.
2. Alaska.
3. India.
4. Hindu or Indian god.
5. Macrame.
6. The MacDonalds.
7. Atlantic.
8. Mars.
9. France (in 1884).
10. Edward FitzGerald.

Content removed due to copyright

How many readers of our series on *Diploma Mills* are aware, we wonder, of the abysmal standard of many genuine Indian University degrees. The *Statement of Marks* of Nagpur University reproduced here shows that the minimum pass mark is 20 per cent. Presumably British Universities are required to recognise such degrees as an entry qualification to a higher degree in this country? What worries us much more, however, is whether the General Medical Council recognises them as a practising qualification.

### NAGPUR UNIVERSITY - STATEMENT OF MARKS

8.COM II MARCH-1984 25/06/84

| ROLL NO. | NAME OF THE CANDIDATE | CENTRE NO. | COLLEGE NO. | MEDIUM |
|----------|-----------------------|------------|-------------|--------|
| 23280    |                       | 034        | 401         | E      |

| SUBJECT GROUP | SUBJECT ABBREVIATION | MAX. MARKS PER PAPER |        | MINIMUM FOR PASSING |        | PREVIOUS EXEMPTION FULL / TH. / PR. | THEORY PAPER MARKS |    |    | PRACTICALS MARKS | DISTINCTION / COMPARTMENT EXEMPTION IN |
|---------------|----------------------|----------------------|--------|---------------------|--------|-------------------------------------|--------------------|----|----|------------------|----------------------------------------|
|               |                      | THEORY               | PRACT. | THEORY              | PRACT. |                                     | 1.                 | 2. | 3. |                  |                                        |
| GRP III       | ENG                  | 50                   |        | 10                  |        | F                                   | 018                |    |    |                  |                                        |
|               | S/E                  | 50                   |        | 10                  |        | F                                   | 018                |    |    |                  |                                        |
|               | S/P                  | 100                  |        | 20                  |        |                                     | 051                |    |    |                  |                                        |
| GRP II        | B/M                  | 100                  |        | 20                  |        | F                                   | 052                |    |    |                  |                                        |
|               | A/A                  | 100                  |        | 20                  |        |                                     | 042                |    |    |                  |                                        |
| GRP I         | STS                  | 100                  |        | 20                  |        |                                     | 021                |    |    |                  |                                        |
|               | ECO                  | 100                  |        | 20                  |        | F                                   | 042                |    |    |                  |                                        |

| PARTICULARS | MARKS OBTAINED | OUT OF | RESULT | REMARK                 | DIVISION |
|-------------|----------------|--------|--------|------------------------|----------|
| GRAND TOTAL | 244            | 600    | PASS   | AGR. CONDONED, EXEMPT. |          |

RANK

SEE NOTES ON THE REVERSE

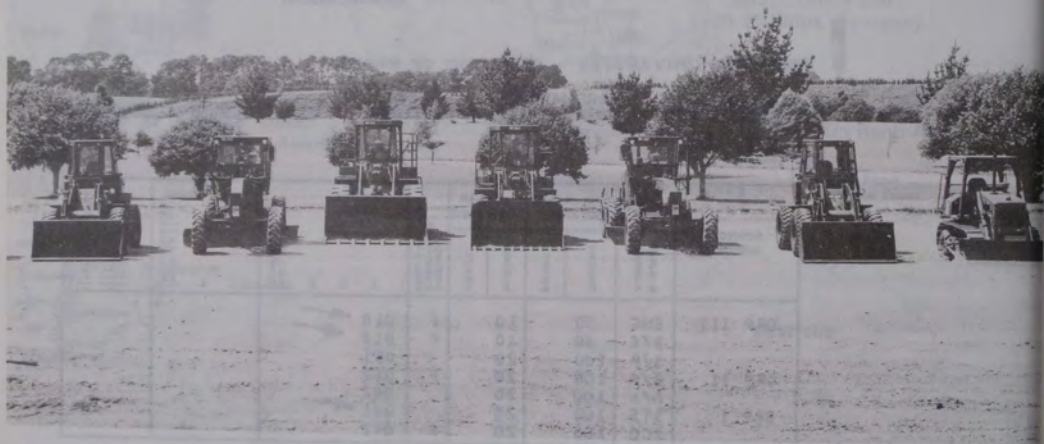


*[Signature]*  
ASST. REGISTRAR (EXAMBS.)  
NAGPUR UNIVERSITY

# NEW PLANT FOR RNZE

Approval has been given for the purchase of \$13 million worth of earthmoving equipment for the RNZE over the next ten years. The new equipment will be allocated to RNZE units throughout the country and will greatly enhance the Corps' ability to perform construction tasks. The first items in this buy include compaction equipment, loaders, graders and bulldozers, and have already been delivered to Linton Camp.

Some readers will already be aware that the equipment has been used on the Argo Road, and certain of the plant operators are gaining operational experience on course at the SME as this Liaison Letter goes to print.



An impressive display of new plant for RNZE on the plant park at SME. These are the first of a total purchase of \$13 millions.





by

Major J.S. Hollander

This is the second in a series of articles prepared by Maj Hollander for the Liaison Letter. Major Hollander is a keen proponent of management and related studies and has been a past National President of the New Zealand Institute of Management Services.

Editor

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In the last issue of the Liaison Letter (No 31), I introduced you to Industrial Engineering (IE), Management Services (MS) and Productivity, also generally how these areas relate to activity within our Corps. I did promise to address the description of an element of work in this issue, to provide an understanding of how activities must be examined for potential improvement. Before I start, however, I want to cover some definitions of common terminologies used in the previous article and which relate directly to IE and MS alike.

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copyright

**Effectiveness** - is the system accomplishing the 'right' things, or doing the 'right' things.

**Efficiency** - is the system using the 'right' amount of resources to accomplish the 'right' things, or doing things 'right' (perhaps the ratio of resources expected to be consumed to resources actually consumed).

**Quality** - conformance to specifications, user or customer needs/requirements, desire and expectations. This can also be expressed as the degree of the systems conformance to, etc.

Hardly the time, Desmond and certainly not the place

**Quality of Work Life** - how do the people in the system feel about their jobs, management, their leadership, their work environment, etc. This is the way participants in a system respond to the sociotechnical aspects of the system.

**Innovation** - the introduction of new products and/or processes. Are we creative and action oriented in product, service and/or process (ie what we do and how we do it)?

**Profitability/-** is the relationship between what we make (income, Budgetability revenues, budget, or perhaps training value) and what we spend (costs, actual expenses or resources of money, manpower, materials, time etc) acceptable?

**Flexibility** - is there adaptability to new products, processes, materials, procedures, techniques and to changing demands.

Finally we come back to the crux of the matter, that of Productivity - is



the ratio of what comes out of the system to resources that were consumed to create the output, a competitive one? Simply the relationship of outputs to inputs.

If you apply any of these definitions to the various functions you perform within your trade or unit you will start to get the drift of what productivity is all about. More importantly, how you can improve your productivity and relate this improvement to any of the six definitions explained above. To do this effectively however, what we do and how we do it must be examined in fine detail. This is so that we can analyse our operations in a very objective manner and select alternatives, change our priorities and improve our output all the time. We will obviously achieve greater productivity, if we increase and improve our outputs and maintain the same input levels.

A chart showing the description of element is included at the end of this article. This is for a 'DO' operation and covers the consideration of the facts, alterations and selection for alternative development. When you think about the basic questions in each section, it is a simple operation and may or may not come up with the alternative solutions to your improvement of the element. The element may be anything you do as part of your job and should be obvious to all sappers. In some respects, I suppose it is a simple appreciation process, something we do many times a day. Pick a simple example in your own job, ask yourself the questions and see if you can come up with the right conclusions and/or solutions, if you are interested and spend a little time on this simple consideration process.

The greater part of an IE's job is to analyse. This is the only way to break an operation down to its various parts and examine each part separately and in detail. Before we start, we must select a common denominator that is known and can be measured. Time is the most common of all, as it is the basis to what we do - everything takes time. You will see in the next diagram, that time is the basis for analysis. The example I have used here is a simple sequence of the steps in a work measurement study. This is the analysis stage:

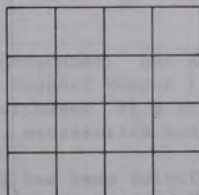
over >>

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* * * * *
*                               *
*                               *
*                               *
*                               *
*                               *
* * * * *
  
```

Diversión

## Four Square



ARRANGE 16 letters into four-letter words which read the same across and down (see example left). The solution is on Page

|   |   |   |   |
|---|---|---|---|
| F | O | R | T |
| O | B | O | E |
| R | O | L | L |
| T | E | L | L |

HERE are the 16 letters for this week's puzzle and a clue to one of the answers—but we're not saying which one.

CLUE: Terminates

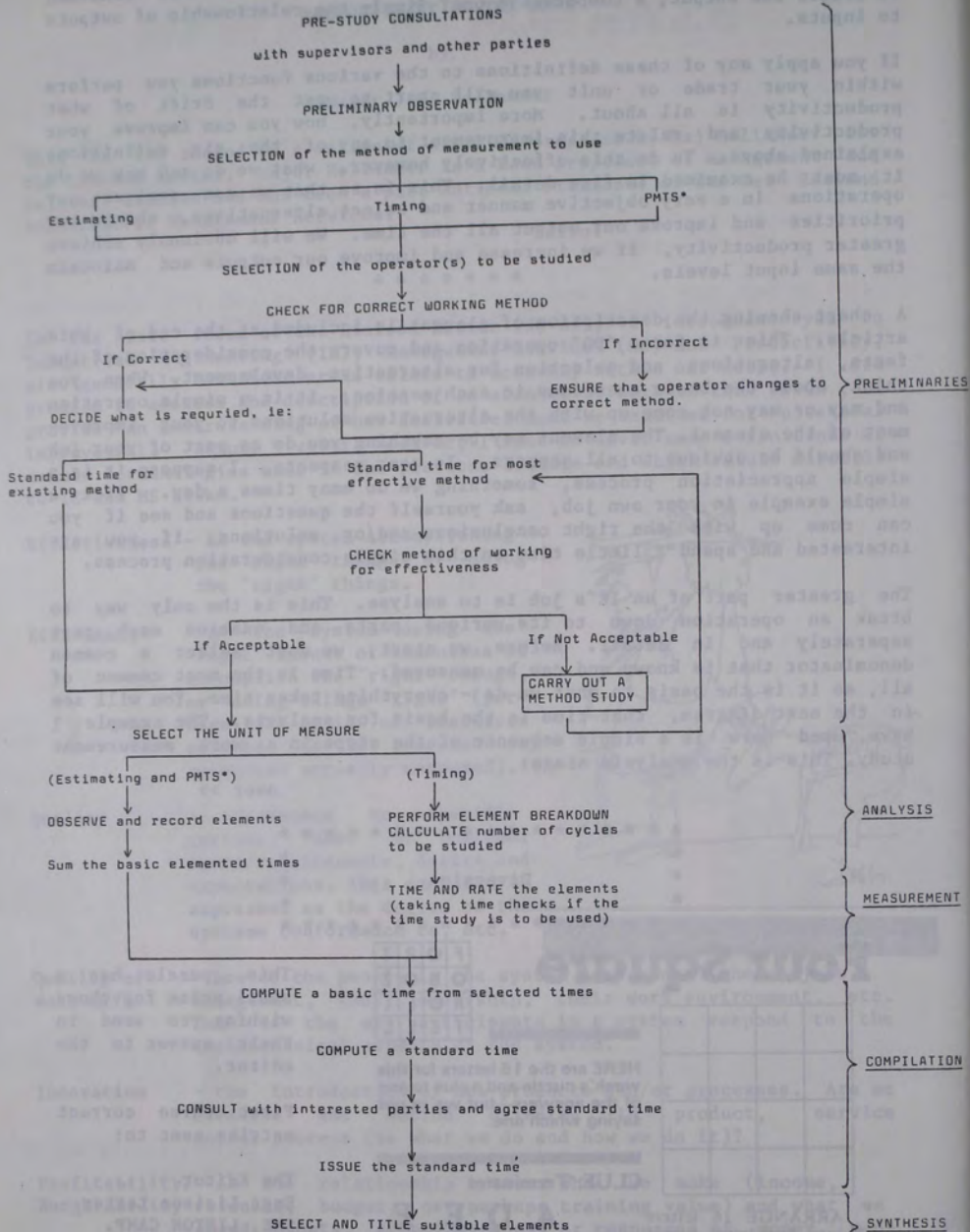
A D E E  
E E F L  
L N N S  
S T W W

This puzzle has a small prize for those wishing to send in their answer to the editor.

First three correct entries sent to:

The Editor  
Engr Liaison Letter  
SME, LINTON CAMP.

will receive a small  
RNZE Leather Gift.



\*PMTS = Predetermined Measurement of Time Standards



A Lot of work you may suggest, but not all that difficult if you follow the steps and sequence correctly. Probably no more difficult than constructing a single story MGB, except that the work effort here is not lugging bridge parts about, but "lugging" figures (times) and procedures or techniques about. By the time you come to the "synthesis", you must know what basic and standard times are to complete an element of work. It is in this way, that you can improve on time and thereby improve your performance and/or productivity. The "Method Study" mentioned in this diagram, is another analytical process to improve the method of doing things. I would like to address this subject area, along with productivity measurement in the next issue.

I cannot stress enough the simplicity of these studies as they were designed to assist, not confuse. You could relate this to a carpenter, setting out a construction site for the foundations of a garage. For that matter, how about a field troop setting out a bridge site, or the erection of field defences. Get the time right first, then examine the quality aspects and if you meet all of the other definition areas, you are on the right track. Once all areas are examined and you achieve the right balance between quantity and quality, you will be very near the optimum productivity. That is what we should always be aiming to achieve in the RNZE, with everything we do!

The Editor reckons that I have taken up enough of your time, so I will conclude now by informing you that this article only took about four hours to write. Had I done it during daylight hours, with a clear head and perhaps using a word processor, I probably could have reduced the time to three and a half hours. What of my productivity?

In the next issue, I will address both method study and productivity measurement. As an aside and to show you just how much detail the IE goes into, I have also included a diagram of the human body with all the limitations of movement and function shown. This is how a motion study can be conducted using arithmetic constants to ensure that the task or workplace is suitably designed for maximum productivity and minimum disruption through stress, strain, injury etc. Another tool used in IE and MS, which ensures a better quality of working life and improvement in output. If you find this too confusing, please write to the Editor. If I have managed to capture your interest, why not try some of the examples and analyses suggested. It could (will) help you in your job and if so, please let me know.

\*\*\*\*\*

STOP PRESS

The Government has approved the purchase of the Belgian FN 5.56mm MINIMI Light Support Weapon for the New Zealand Army. A total of 100 weapons will be purchased at a cost of \$8.3 millions including ammunition, special tools, accessories and initial spares.

MINIMI has been selected by Australia, Canada, and United States armies. It fires the standard NATO SS109 5.56mm ammunition in link belt, 30 round magazine or 200 round box magazine.

Distribution will be one per rifle section or equivalent in the RRF, IEF and FMG units. MINIMI will replace ALL FIVE machine guns currently in service with some of the L7A1 GPMG being retained in sustained fire role within the infantry battalions. The purchase will include weapons for the RNZN, RNZAF, Training units and pools, the R & M Pool and the War Reserve.

DESCRIPTION OF ELEMENT - A SELECTED '00' OPERATION

| The Present Facts                                                                                                                                                                                                                                                                                           |                                                                                                              | Alternatives                                                                                                                                                                                                                                                                                                                      | Selected for Alternative Development                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose - WHAT is achieved?<br>Consider this operation in isolation (bear in mind the subject of the Chart).<br>NOTE:<br>What is ACHIEVED, not what or how it is DONE.                                                                                                                                      | IS IT NECESSARY? YES/NO.<br>If Yes - Why?<br>Reason given may not be valid. True reason must be uncovered.   | What ELSE could be done?<br>Can the achievement be ELIMINATED?<br>Can the achievement be MODIFIED?<br>All alternatives to the purpose should be stated including those which may require long term investigation. The answer to this section is never 'nothing'. There is always an alternative even if only the non-achievement. | What?<br>Helpful to divide into short term and long term. Under long term can go suggestions for future research and development.                                                                                                                                                 |
| Place - WHERE is it done?<br>The location with reference to:<br>1. Geographical position.<br>2. Position within factory, plant, training area etc.<br>3. Detailed position under 2. When appropriate, give reference to location and distance from preceeding and succeeding activities.                    | WHY THERE?<br>The reason for siting the operation there.                                                     | Where ELSE could it be done?<br>Consider alternatives under each heading.<br>Can working areas be considered or distances reduced?                                                                                                                                                                                                | Where?<br>Where appears to be the most suitable situation with present knowledge? Answer may be in relation to some other operation. Consider limitations of building design and services (electrical, water, air, steam, telephones, lighting, protection, special outlets) etc. |
| Sequence - WHEN is it done?<br>What are the previous and subsequent significant activities and what are the time factors involved?                                                                                                                                                                          | WHY THEN?<br>The reason for the present sequence and time factor in the present process or operation.        | When ELSE could it be done?<br>Can it be done either earlier or later in the process? If the sequence is fixed, can it be moved back to the previous operation? For example, 'Immediately after'.                                                                                                                                 | When?<br>As soon as possible in the process or immediately after the previous activity.                                                                                                                                                                                           |
| Person - WHO does it?<br>1. Grade, rank, band level, etc.<br>2. Employment or trade area.<br>3. Name(s), etc.                                                                                                                                                                                               | WHY THAT PERSON?<br>Reason for choice under each heading.                                                    | Who ELSE could do it?<br>All alternatives under each heading. Can a disabled person or some one with low medical grade be employed?                                                                                                                                                                                               | Who?<br>It may not be possible to select the individual without Work Measurement.                                                                                                                                                                                                 |
| Means - HOW is it done?<br>All relevant details are required of Material, Eqpt. Manpower, etc engaged in the operation.<br>Information should be tabulated as simply as possible under the following main heading:<br>1. Materials employed.<br>2. Equipment employed.<br>3. Manpower/operator(s) employed. | WHY THAT WAY?<br>The reason should be investigated for each of the tabulated items, under each main heading. | How ELSE could it be done?<br>Investigate all alternatives for each main heading.                                                                                                                                                                                                                                                 | How?<br>Decide the alternative for each item separately and knit together at the development stage. Consider safety. Consider posture and environment of operator or person.<br>Consider other limitations.                                                                       |





# Soviet Spetsnaz at Greenham

By Yossef Bodansky in Washington

THE SOVIET UNION has maintained a secret detachment of female Spetsnaz special forces in the area of Britain's Greenham Common Air Base since the deployment of the US Air Force land based Tomahawk cruise missiles there in December 1983.

Soviet defectors have disclosed that three to six trained agents, from Warsaw Pact and West European countries, including the UK, infiltrated women's protest groups at Greenham Common and were present "at all times".

The defectors and informants disclosed the information in conversations outside, and after, official de-briefings.

Although the agents are not now outside the perimeter wire, the Soviet Union still maintains a presence in the area which can be mobilised at short notice.

Defectors and informants have given details to *Jane's Defence Weekly*. They are not being identified because they fear their lives are at stake and some still have relatives in their country of origin.

After extensive inquiries in Washington, London and Greenham Common, *JDW* can exclusively reveal that:

● **THERE HAS BEEN** a regular rotation of agents to enable a large number to gain field experience. The operation is controlled by the GRU, the Main Intelligence Directorate of the Soviet General Staff. They are attached to the Western Theatre Military Command, headed by Marshal of the Soviet Union Nikolai Vasil'evich Ogarkov.

● **THE WOMEN AGENTS** are trained in camps situated in the Rovno-L'vov-Lutsk area of the Carpathian military district and the Ural and Volga military districts (see p84). They contain mock-ups of elements of the Greenham Common camp like the heavily guarded inner defence zone. There the women are trained to attack the missile sites under war or surprise conditions in a pre-emptive strike. They will act as 'beacons' for other Spetsnaz and airborne troops who would be used to attack the missiles in war.

● **THESE SPETSNAZ** women receive emergency cash via 'dead drops' when needed or they travel abroad to meet their paymasters. The members of the network 'holiday' overseas to meet a controller — those who go to Austria go on to Czechoslovakia for a meeting; others who reach Yugoslavia, enter Bulgaria.

It is emphasised that the units are supposed to finance themselves beyond the initial investment by the GRU.

The defectors say the Soviets would not maintain any contact with a network in its country of operation and as a rule would not permit the controlling officer out of a friendly country except in extreme emergencies.

The initial purpose is to incite protesters



▲ A close up view of the GAMA (GLCM alert and maintenance area) zone at RAF Greenham Common showing the defences and one of the six bunkers housing a flight of BGM-109G Tomahawk cruise missiles.

to mount protests and demonstrations to test the defending forces' reaction times and to monitor security arrangements and timings of cruise missile convoys leaving Greenham.

There are 96 ground launched cruise missiles (GLCM) now at Greenham Common, stored in six underground silos. They are administered, manned and maintained by 1300 USAF personnel of the 501st Tactical Missile Wing. These men were, last year, issued with Mark 19 Mod 3 automatic grenade launchers which fire anti-personnel and armour piercing grenades for use against anything up to a light armoured vehicle.

Overall security at the station is the responsibility of the Royal Air Force. The inner defensive ring around the silos comprises one third UK personnel and two thirds USAF staff. The inner 'hard' area is under US command and an American officer, who can, in the extreme, give the order to fire.

This has not deterred demonstrators at the gates, who have sometimes forced entry through the perimeter fence.

Several sources have indicated that the Soviet activities around Greenham Common are a "near perfect" example of Soviet preparations to deal with the GLCM threat.

Western security is concerned that Spetsnaz troops have started using passive miniature radio homing-devices in operations

in Afghanistan (and in exercises in the USSR) in which a three-man team inserts such a beacon into an enemy installation.

Soviet bombers and fighter bombers activate the devices and then launch air-to-surface missiles which home in with devastating effect. Aircraft used in the exercises are Tu-16 Badgers, Tu-26 Backfires, Su-24 Fencers and MiG-27 Floggers.

Such beacons could also be used to guide AS-15 air-launched nuclear-armed cruise missiles, which have a range of up to 3000 km, launched from Bear-H aircraft.

● In London, a spokesman at the UK MoD said: "The MoD is fully aware of the threat which could be posed in time of crisis or war by enemy special purpose forces operating in this country."

"Exercise BRAVE DEFENDER last September was specifically designed to test our plans and procedures for the protection of vital installations against such a threat. In peace time, security arrangements at military establishments are kept under constant review in the light of the assessed threat — including that from potentially hostile intelligence services."

"However it is not the practice to discuss details of intelligence-related matters."

● A spokesman for the US 3rd Air Force said: "We see no reason to add anything further to what the Ministry has said."



# WORKS WORKS



By : The 'Scribe'

For those people who may not be aware the Directorate of Works is alive and still kicking.

It is to the credit of the Corp, that Works seem to have an elite group of soldiers gracing the 9th floor of the Freyberg Building. If it wasn't for recent postings and promotions, the cream, now in the saucer, could well have been split over the country.

## Directorate of Works Manning as at 28 Feb 86

Engineer appointments only are expressed here:

|                   |                                              |
|-------------------|----------------------------------------------|
| Director of Works | - Col R.K. Rutherford                        |
| ADW4              | - Maj K.M. Lang                              |
| ADW4A             | - Capt E.W. Bruce                            |
| ADW6              | - WO2 P.G. Packer (Phil) (Chief Draughtsman) |
| W6A               | - Sgt M. Masi (Tui) (2IC)                    |
| W6B               | - Cpl G. Wilson (Willie)                     |
| W6C               | - Spr A. Wilson (Al)                         |
| W6D               | - Spr K. Ripia (Rip)                         |
| W6E               | - Spr M. Darrall (Murray)                    |
| W6F               | - Spr B. Green (Ben)                         |
| SOW Fire          | - WO1 G. Blackburn (RSM)                     |

## Forecast of Activities for D of Wks for 1986

February - Hangi, to be held before end of day-light saving.

March/April - D of Wks exercise 'Sky Hire', to be held in Malborough area.

April - Anzac Day dawn parade, Wellington and remembrance activities.

August - D of Wks exercise, Army to arrange.

October - Sappers Day?

December - Xmas function.

During the year fellow sappers from the Directorate of Works will be visiting various camps for many and varying reasons and do look forward to meeting old acquaintances again.

If you are ever in Wellington, either staying over or passing through, please call up to the 9th floor of the Freyberg Building for a friendly chat or what ever.

#### Production of Working Drawings

At present the Draughting Office of the Directorate of Works is working on the production of working drawings of the following tasks:

- a. New HQ Bldg - School of Military Engineering, RNZE.
- b. New HQ Bldg - 3 Field Regiment, RNZA, Burnham.
- c. Timber Rack - NSD, Devonport.

Tasks recently completed are:

- a. 1 Field Sqn HQ Bldg, Papakura.
- b. Battery Charging Shop, Papakura.

Editors Note: If you want to know what all the abbreviations mean, I'm sure Defence Draughting Office (Def 8771) will be able to tell you.

## ***Assistance To Solomon Islands***

Three Army Personnel were involved in New Zealand's relief efforts in the Solomon Islands, after tropical cyclone Namu caused widespread devastation there in mid-May.

Cyclone Namu raged through the 1600 km chain of 200 islands for a week, killing approximately 130 people and making one-third of the population of 300,000 homeless. The resulting floods and mudslides destroyed whole villages and most of the island's food and cash crops.

Two Army engineers, Major George Jason-Smith and Warrant Officer Class Two Ron Everson, spent ten days in the Solomon Islands. Their tasks were to evaluate the damage caused by the cyclone, to advise local authorities and to report back to New Zealand on possible aid projects.

Also on the RNZAF Hercules flight, which left New Zealand on 22 May, was Staff Sergeant Tim Hopkins. Ssgt Hopkins was a member of the defence medical team which was deployed to the

Solomon Islands to assist with disease prevention and the establishment of first aid clinics. An environmental health officer with the Defence Environmental Medicine Unit at Hobsonville, Ssgt Hopkins was able to provide expert advice on hygiene and sanitation.

The Prime Minister of the Solomon Islands, Sir Peter Kenilorea, expressed gratitude for New Zealand's emergency aid, particularly the work done by Army engineers and the defence medical team.

### **FLNKS TO STEP UP LIBYA LINK**

New Caledonia's pro-independence party FLNKS is to step up its ties with Libya by attending a summit in Tripoli of "liberation movements", including the Palestine Liberation Organisation. In early 1985 17 young FLNKS members took part in a para-military training course in Libya. Leading FLNKS figure, Yann Uregei, de facto foreign minister of the organisation, will lead the delegation to Tripoli, probably in March. He said Libya would pay the group's expenses, but that the FLNKS had no plans to seek

aid from Libya. Mr Uregei said his movement was dissatisfied with regional support for its liberation struggle, and wanted closer ties with Libya and other groups fighting for independence around the world. "The West might regard Libya as the devil, but for the people of New Caledonia it is France that is the real devil. The political situation here is no different from what happened in Algeria and Vietnam. That is why we must maintain the struggle at the international level." Mr Uregei said the FLNKS was prepared to talk to

anyone to aid its objectives. "We want to speak with all countries, capitalist and socialist," he said. "The only aim is to propagandise our struggle." Mr Uregei said the Tripoli conference would be "anti-imperialist, anti-colonialist and against militarism ... issues we are concerned about in this region." He said "The presence of the French in this region is creating all these problems now with their colonialism, their military bases, and their nuclear testing." (See later report, p.13.)



Occasionally non-sappers get themselves into a horrible muddle because they have not understood some engineer terminology - and don't ask those who do. A recent example is the officer in a headquarters here in New Zealand who refused a request for finance for timber for bailey chessex - until he was told "no money for bailey chessex - no bailey bridge. Unless of course you want to drive along the steel bearers and there are not many drivers who can do that!"

The following is an extract from a book telling the story about the tunnellers during World War One. The British were tunnelling under the front line with the object of blowing up the German strongpoints and trench systems to ease the work of the infantry.

"...However, the branch tunnel was not going too well. Finally, with only a few days in hand, Cassels discovered it had run so badly off course that it would miss the smaller redoubt altogether. Was there time to make the correction? Cassels pondered the question anxiously and decided that the answer was No. For a moment the situation seemed hopeless. He cursed the primitive surveying instruments and poor sighting conditions that had caused the error. Then an alternative plan occurred to him - one that he admitted was "bold and risky": If he placed a very large charge beneath the right redoubt, it should heave enough material into the air and bury the other post nearby.

Urgently he talked the idea over with Cowan, a much more conservative officer and persuaded him to back it. For Cowan it cannot have been an easy decision. Cassels had to admit that he was not sure of his depth and had no idea of the weight and quality of the concrete in the redoubt above him; nor was he entirely sure, even, what the effect of a large charge at a shallow depth would be. But a desperate situation required a desperate remedy and Cowan said Yes - subject to approval from the 5th Corps Headquarters. And while making one experiment they decided to dare another: they would use an explosive seldom (possibly never) used before by the Army, though it had been known for about fifteen years. This was ammonal. It had three and a half times the lifting power of gunpowder. After further anxious discussion they decided to use 3,500 lbs of it - if as much as that could be supplied by stores in time.

5 Corps gave its permission and the rush to put the scheme into practice began. Cowan sent a written requisition to the Quartermaster General at G.H.Q. for the ammonal while Cassels set off to complete his arrangements at the tunnel face.

Unknown to either of them, a minor drama broke out in the Q.M.G.'s office at St Omer on the receipt of the requisition slip. Nobody there had ever heard of ammonal and a check was ordered. A message was sent to the 5th Corps Quartermaster asking:

Can you please say if you have made any use of ammonal and if so, whether the results are satisfactory?

But the 5th Corps Quartermaster was equally at loss and passed the inquiry on to his Camp Commandant who, after a brief pause for thought, replied:

This is not understood. For what purpose is it used, please? Is it a drug or an explosive?

Hopefully the 5th Corps Quartermaster signalled back:

Perhaps the Medical Officer attached to Corps HQ will be able to give you all the required information.

The Camp Commandant took the advice and a period of silence followed. Then came the reply:

In accordance with your Minute 4 I have consulted the MO... He informs me that ammonal is a compound drug extensively used in America as a sensual sedative in cases of abnormal sexual excitement. So far as I am able to ascertain this drug is not a medical issue to Corps HQ ... At the present moment the MO states that no cases have occurred among 5th Corps personnel indicating a necessity for administering the drug.

Both GHQ and 5th Corps had confused AMMONAL with AMMONOL."

Footnote:

In spite of this snafu the ammonal eventually arrived and was loaded with guncotton, and gunpowder into the mine chamber. When exploded the mine made a crater 120 feet across and buried between 200 and 600 German soldiers as well as ten British soldiers who had moved too close to the mined area.

\*\*\*\*\*

#### THE RNZE CAP BADGE

\*\*\*\*\*

Several times a year the Editor is asked by personnel both within Linton Camp and from outside, about the history of the RNZE Cap Badge. Most of the requests come from junior soldiers who are about to embark on a Junior NCO course or senior personnel who are about to attend the Warrant Officers course.

The RNZE Cap Badge has its origins in the design and history of the badges worn by the Royal Engineers. The badges only differ in the minor difference of NZ spaced between the 'Royal' and 'Engineers'. A much more noticable difference is that the RNZE badge is the only Commonwealth Engineer badge to have the text on the scroll of the Garter superimposed on a royal blue background. The sealed pattern of our badge and buttons is held in the Chief Engineer's Office and is signed personally by Her Majesty, Queen Elizabeth the Second.

The present RE Cap Badge seems to derive from the Royal Cypher worn on the Officer's cross belt plate in 1782. In 1823 the men of the Royal Sappers and Miners wore on their breastplate the Royal Cypher, circled by the Garter bearing the name of the Corps, and surmounted by a crown. The Laurel leaves were probably added for honours gained after Waterloo. At the beginning of the reign of King Edward VII the words Royal Engineers which had hitherto appeared on the Garter, were placed, as they are today below the Royal Cypher and Garter.

An embroidered Grenade of nine flames (as opposed to the Royal Artillery grenade of seven flames) was introduced about 1824 and was worn by RE officers on the tails of the full dress scarlet coat. The following year a brass grenade was introduced for the ORs of the Royal Sappers and Miners. The grenade was later worn on the collar and with the badges of rank on the epaulette. This is possibly where we gain our order of wearing the grenade on the collar of the Service Dress jacket and on Mess Kit.



The article below was extracted from a recently discovered publication called "LESSONS LEARNED FROM THE BORNEO OPERATIONS" which was published in 1969. It is particularly important that we as engineers take the points raised herein to heart. The knowledge of them could well save us time, energy, and valuable man hours should we have to relearn them.

## ENGINEERS

### Introduction

Early in Confrontation the potential of engineers was not properly appreciated. Engineer work was confined initially to the provision of engineer defence stores, assault boats and outboard motors, and to comparatively minor tasks. As techniques were evolved for introducing plant into the forward areas, progressively more and larger tasks were undertaken.

At the peak of operations in Borneo there were usually at least five field squadrons deployed throughout the theatre. Of these only about five field troops could be allotted to direct brigade support tasks. It was not uncommon to find a field troop, or more, working in a battalion area on brigade or higher formation tasks whilst the battalion might only have the occasional support of a section of engineers when the situation demanded.

This chapter aims at recording the major engineer lessons learned or relearned during the BORNEO operations and to indicate how sappers might best be used in similar operations.

### Command and Control

Centralised control of engineer effort is a proven principle. Less than one third of the effort available in BORNEO was placed in support of brigade, the remainder being centralised under the CRE as force troops.

No CRE was posted to BORNEO until operations had been in progress for twelve months, by which time there were elements of six RE units in the area. Until the appointment of a CRE of a series of squadron commanders and other majors did double as 'OCRE'. This was a mistake. The CRE must be on the ground from the beginning to assess the engineer tasks, provide technical advice to the commander, estimate stores requirements (including establishing an organisation for local purchase), and finally to allot his resources efficiently. He should be a Lt-Col already serving in the theatre.

### Scale of Support

In any campaign of this type in a country as under-developed as BORNEO a considerably higher proportion of engineers is required in other theatres. The ideal scale is not less than one and a half field squadrons per brigade, but a more important point is that a properly balanced engineer force must be provided right from the start, complete with field park backing, specialist teams and resource elements. The BORNEO campaign was nearly over before some of these essential units materialised and the engineer organisation was able to function efficiently.

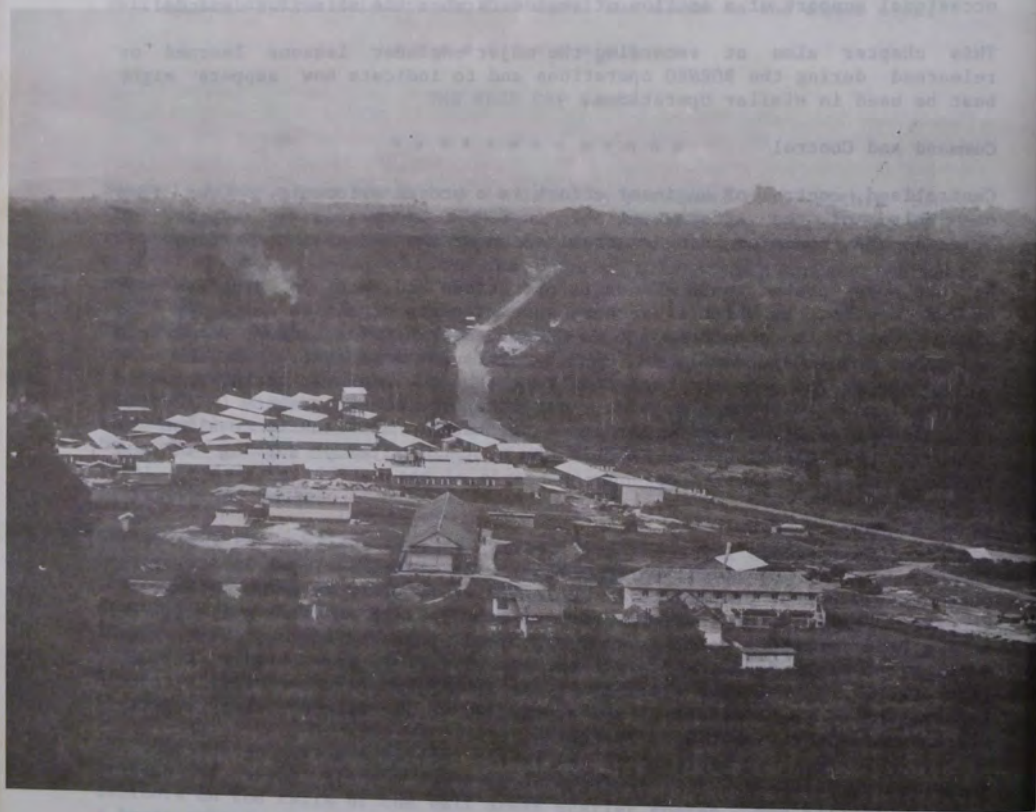
### Road Construction

At least one third of all engineer effort was devoted to road construction. Mistakes were made and lessons learned. In an environment like BORNEO where climatic conditions are adverse and the quality of natural materials in most locations poor there is a minimum standard of construction below

which a road will not survive. This standard must be established and maintained. The government construction organisations (Public Works Dept) have built up a body of knowledge in this field which cannot be ignored. By trial and error they have established minimum viable standards, termed in this instance feeder roads. Their specifications place emphasis on adequate drainage, minimum depth of fill and intelligent stepping of cut slopes. To ignore any of these requirements is to invite complete failure.

Roads will not and must never be the sole means of access for army units because of the ease with which an enemy can deny them. However whereas service units can call on air supply it must be remembered that for the civil population a road represents the only means of contact with the rest of the country. In an under-developed country like BORNEO there will always be a demand for more and more roads to propagate government control.

A sound planning figure for a balanced road construction force of roughly squadron size is one mile per month to PWD standard. Most estimates were too ambitious.



Balai Ringin Base on the border of Sarawak and Kalimantan Utara was occupied by 1 RNZIR during 1966. It had been carved out of the jungle as had the airstrip (suitable for light fixed wing aircraft) about a mile down the road.



## Airstrip Construction

Airstrip construction absorbed approximately one third of the engineer effort. These averaged 1,200-1,400 ft x 75-100 ft strips for use by SRT aircraft. The most interesting and demanding projects were those where all equipment had to be moved to the site either by boat and/or by air drop. As a principle the best equipment to use is the heaviest item that can be moved to the site provided that adequate spare parts and repair backing are readily available in the event of breakdown. A forward airstrip can involve a field troop with light equipment and local labour for about nine months.

## Plant

The incompatibility and age of most RE equipment, particularly C vehicles, posed continuous problems. It is no use going to the considerable expense of moving a piece of equipment to the end of a tenuous air L or C and then having that equipment lie idle because a critical spare part cannot be procured to the theatre. With old and incompatible equipment this happened repeatedly. It is essential that only equipment of types commercially available and adequately backed with spare parts be used in remote locations.

The need to place REME "C" vehicle repair teams under RE control was repeatedly illustrated during this operation. This ensures that the correct priorities were determined. All repairs need to be undertaken as far forward as possible. Construction engineers without reliable equipment are an administrative liability.

## Water Supply

A plentiful and clean supply of water is essential in every company base for reasons of health and morale. The planning figure of 5 gallons per man per day, whilst acceptable for restricted periods, proved totally inadequate for protracted operations. The actual demand was nearer to 30 gallons per man per day.

The degree of impurity of all water in BORNEO represented a treatment problem from start to finish and no ideal solution was found. Usage rates of filter medium were abnormally high and in several cases chemical content inhibited the forming of a filter bed against the filter candle. Double FARELF filters were developed to speed up treatment in the field but these are far from the optimum. Sand filtration is superior in larger static locations but is not applicable to forward bases and camps. It was the filtering rate that determined plant output; in all cases the pumps were adequate.

## Resources

Resources detachments were set up in BORNEO for the local procurement of GCI and timber for field defence and general building stores. Their tasks included issue direct to units including preparation for air drop. The manpower available for resources detachments were inadequate for the job they asked to do. The degree of dependence on local purchase simplified the stores problem to the point of unreality. It may not always be possible to satisfy demands within the immediate locality. In such circumstances the resources organisation would have a far greater problem in obtaining and holding material for on-movement to the point of demand. These problems tend to be obscured where local supply is adequate, but must not be overlooked in planning.

The demand for boats and outboard motors was large. In a country where rivers are a prime method of communication the resources organisation must be able to produce and maintain boating equipment. Although a large number of service issue boats were used it was also necessary to employ significant quantities of local craft which were better suited to navigating restricting waterways.

#### Works Services

Experience in BORNEO has shown that MPBW are not staffed or equipped to assume responsibility for works services in operations where British forces are deployed in an emergency outside base areas.

#### Field Defence

The forward operational base concept used in BORNEO calls for a special design of bunker suitable as both a fighting position and for living and sleeping. Such a bunker (Bowen) was evolved during the course of the campaign but not without difficulties which included the lack of a clear statement of the design criteria. In the future the necessary design for this type of construction should be available at the start, and all the necessary arrangements for its quick provisioning and financing should be preplanned.

#### Mine Warfare

Mines were not used in BORNEO on any but the smallest of scales. In all incidents scattered nuisance mining was used by the enemy and a few casualties were suffered. It was quite some time before suitable training aids were available for the three types of devices encountered. It was perhaps fortunate that the enemy did not use either anti-tank or anti-personnel mines in this campaign. Use of the American Claymore mine was restricted to its command detonated function.

#### Summary of Lessons

The following lists of the major engineer lessons of this campaign:

- a. An engineer command and control element (CRE) must be appointed from the start of an operation.
- b. Centralised control of all engineer effort under the CRE is still the best normal method of employment.
- c. In an under-developed theatre of operations the scale of engineer support needs to exceed the 'normal' of one squadron per brigade.
- d. Road construction represented one third of all engineer effort, airstrip construction another one third; the remainder being devoted to brigade support tasks such as field defences and water supply.
- e. In road construction in tropical areas much can be learned by studying developed local civil practice. Lack of attention to drainage problems is still the major cause of construction failure.



- f. Engineer plant must be modern, compatible with locally available equipment and adequately backed with forward repair teams and spare parts.
- g. The quality and treatment of water posed continuous difficulties. As yet we do not have an ideal clarification and purification method for highly impure sources.
- h. Local purchase could solve many of the resources organisations problems but to rely too heavily on local supply tends to create unrealities within the service system of supply.
- i. MPBW are not staffed or equipped for operations in an emergency in forward areas.
- j. Standard designs for camp structures must be determined in advance and provisioned accordingly.

## pacific report

### DARK SECRET OF 'ILE DE LUMIERE'

In vivid confirmation of the boast made shortly before his death last year by long-time mayor of Noumea Roger Laroque — "Yes, we have arms, and we will fight" — 25 crates of munitions were discovered in Auckland at the end of December aboard the Noumea-registered freighter, *Ile de Lumiere*. A 29-year-old cook aboard the ship was arrested in early January charged with illegal possession of explosives. New Zealand police said the munitions, loaded in Sydney, were designed to be used against the Kanaks by anti-independence French settlers. They had at first feared the munitions were part of a plot to rescue the two French secret service agents jailed in Auckland in November for their role in the July, 1985, bombing of the Greenpeace protest ship, *Rainbow Warrior*. Plastic-wrapped crates found hidden in the ship's bilges and fuel tanks contained 5500 rounds of ammunition and parts — mainly magazines — for automatic pistols. Part of the wrappings were Sydney newspapers dated December 3, the day after the ship arrived in Sydney from New Caledonia on what turned out to be a 16-day stay. The 1530-tonne freighter was on its normal run between Noumea, Sydney, Lord Howe Island, Norfolk Island, Auckland, Norfolk Island, and back to Noumea. The seizure was the third major French arms smuggling attempt uncovered in 1985. The previous two were in Australia, the first in March when Customs seized \$A44,000 worth of weapons on a Noumea-bound ship berthed in Brisbane, and again in November, when 36 rifles and ammunition were found in Sydney on a ship destined for the French territory. Six French nationals have appeared in court charged with illegal possession of explosives. Hearings of the charges are pending.



*Ile de Lumiere* in harbor in Auckland (above), and (below) the ship's owner, Michel Cordier (left), and the arrested ship's cook, Michel Four. — New Zealand Herald, AP, AAP, photos.

SAPPERS  
(Royal Engineers)

By Rudyard Kipling

When the Waters were dried an' the Earth did appear,  
("It's all one," says the Sapper),  
The Lord He created the Engineer,  
Her Majesty's Royal Engineer,  
With the rank and pay of a Sapper!

When the flood came along for an extra monsoon,  
'Twas Noah constructed the first pontoon  
To the plans of Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

But after fatigue in the wet an' the sun,  
Old Noah got drunk, which he wouldn't ha' done  
If he'd been trained by the Royal Engineers  
With the rank and pay of a Sapper!

When the Tower o' Babel had mixed up men's 'bat'(\*),  
Some clever civilian was managing that,  
An' none of Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

When the Jews had a fight at the foot of a hill,  
Young Joshua ordered the Sun to stand still,  
For he was a Captain of Engineers  
With the rank and pay of a Sapper!

When the Children of Israel made bricks without straw,  
They were learnin' the regular work of our Corps,  
The work of Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

For ever since then, if a war they would wage,  
Behold us a-shinin' on History's page -  
First page for Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

We lay down their sidings an' help 'em entrain,  
An' we sweep up their mess through the bloomin' campaign,  
In the style of Her Majesty's Royal Engineers,  
With the rank and pay of a Sapper!

They send us in front with a fuze and a mine  
To blow up the gates that are rushed by the Line,  
But bent by Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

They send us behind with a pick an' a spade,  
To dig for the guns of a bullock brigade  
Which has asked for Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

We work under escort in trousers and shirt,  
An' the heathen they plug us tail up in the dirt,  
Annoying Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

Content removed due to  
copyright



We blast out the rock an' we shovel the mud,  
We made 'em good roads an' - they roll down the Khud (\*\*)  
Reporting Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

We make 'em their bridges, their wells, an' their huts  
An' the telegraph wire the enemy cuts,  
An' its blamed on Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

An' when we return, an' from war we would cease,  
They grudge us adornin' the billets of peace,  
Which are kept for Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

We build 'em nice barracks - they swear they are bad,  
That our Colonels are Methodists, married or mad,  
Insulting Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

They haven't no manners nor gratitude too,  
For the more that we 'elp 'em, the less they will do,  
But mock at Her Majesty's Royal Engineers,  
With the rank and pay of a Sapper!

Now the Line's but a man with a gun in his hand,  
An' Cavalry's only what 'orses can stand  
When 'elped by Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

Artillery moves by the leave o' the ground,  
But we are the men that do something all round,  
For we are Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

I've stated it plain, an' my argument's thus  
("It's all one," says the Sapper)  
There's only one Corps which is perfect - that's us;  
An' they call us Her Majesty's Royal Engineers  
Her Majesty's Royal Engineers  
With the rank and pay of a Sapper!

(\*) 'Bat' - language

(\*\*) Khud - road

One of the poems in the collection called "BARRACK ROOM BALLADS"

\*\*\*\*\*  
 \*  
 \* MUSEUM NOTES \*  
 \*  
 \*\*\*\*\*

Since the publication of the last RNZE LIAISON LETTER some items of interest have occurred with and in the Corps Memorial. Firstly we have received a most welcome gift of papers, photographs, and the medals of Col WG Morrison OBE. The medals are now on display in the Kitchiner Room. Of particular note is a "scrap" of paper which in fact enabled the greater part of a New Zealand Engineer Field Company to escape from Crete during the Second World War in order to fight another day. The piece is in fact just a page from a field notebook and has simply the message,

"Pass for Maj Morrison and 100 NZE tonight."

The production of that message allowed the men of the Field Company to board a Royal Navy Destroyer and be taken back to Egypt. There would no doubt be a number of those who went aboard that ship that night who owe their lives to a "Scrap of Paper".

\*\*\*\*\*

In the last few weeks the museum has had the security enhanced by the installation of an electronic surveillance system. This is to be linked in the near future to the Fire Station. Coupled with this enhanced security is a fire protection system consisting of smoke and heat sensors which are to be installed in both the Chapel and the Museum/Library during next week. These too are to be linked directly to the Fire Station and should hopefully provide early warning of any untoward event.

\*\*\*\*\*

The Library continues to be used daily though there remains the problem of staffing. Hopefully in the not too distant future this problem may be resolved. The Library certainly is in need of a person just to keep control of the passage of books, amendments, demands for new books, cataloguing, maintaining accession lists, maintaining the card system and extending the index. It will be no sinecure for it has been left too long and much has to be done just to reach a "catch up point".

\*\*\*\*\*

A great many readers may not know that the Corps Memorial Museum/Library building is wholly owned by the Engineer Corps Memorial Association. This is an Incorporated Society registered with the Registrar of Incorporated Societies. It is wholly funded by donations and the Corps Golf Competition which does not appear as if it will be run this year. This means that our funds are going to be cut by about 50% unless we can encourage more members of the Corps to join the ECMA and make regular contributions through the Defence Allotment Scheme.

The Defence Allotment scheme is the means by which any sapper can make a FORTNIGHTLY donation - which is TAX DEDUCTABLE. Currently there are only 63 donors (Corps strength is over 470 sappers) in the Corps embracing all ranks who donate \$135.88 per fortnight. Some of these personnel have over the years donated near \$500.00 (at least one person is over that sum) and are still prepared "to put their money where their mouth is". They believe in the Corps Memorial Project and are doing their "bit" to see the memorial grow.



ou too can join the ECMA by filling out a MD 221 Allotment form. It is  
easy and painless - and remember - TAX DEDUCTABLE!

ust follow the example below, sign the bottom of the form, and hand it to  
our Orderly Room who will pass it on to your Pay Office.

| Unit   | Reg. | Allotment Number | Class | Total for recovery<br>(Specified Codes) |
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| & Alot |      |                  |       |                                         |

| Pay Period | Chk Ltr | Number | Surname | Ints |
|------------|---------|--------|---------|------|
|            | S       | 123456 | BLOQGS  | RO   |

MINISTRY OF DEFENCE

## ALLOTMENT ADVICE

ALLOTTEE/REMARKS

START ALLOTMENT  
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### STATEMENTS

Code Ident Sp/In Start Amount

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Code Ident Sp/In Current Amount

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| 2 | Cease |  |  |  |  |
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Code Ident Sp/In Current Amount New Amount

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| 3 | Amend |  |  |  |  |
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Crediting Particulars (if required)

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Check Pay Period

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Prepared by:

Checked by:

Signature of Allottee

*R.O. Blags.*

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DUPLICATE - (Pink) - PAYING OFFICE

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# ENGINEER LIAISON LETTER



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## FOREWORD

by

Lieutenant Colonel R.A. Barrett, RNZE

Chief Engineer

The belated completion of this edition of the RNZE Corps Liaison Letter, some eighteen months since the publication of the thirty second edition has been no accident. A review of the theme of our Liaison Letter has been undertaken. The magnitude of the task of compiling a worthwhile Liaison Letter remains daunting. Similar difficulties in deciding a theme for our Liaison Letter are discussed in the Editorial to the Royal Engineers Journal, Volume 100, of December 1986. Should our Liaison Letter be a serious professional publication we can all admire or should it be more on Corps news about people and units? The debate will continue unabated I'm sure.

In this edition the Editor has rightly given emphasis to publication of matters of military engineering interest, new equipment and new ideas. Nevertheless, matters in the Corps of particular interest to our junior Sappers have not been forgotten. Consequently, this edition is a compromise between a serious professional publication and topical items of interest in units. I hope that this Liaison Letter will be read and enjoyed by all serving and retired Sappers.

I acknowledge the staunch efforts of our Corps Historian, WO1 H.E. Chamberlain, MSM, and the able assistance of the staff of the School of Military Engineering in compiling this our thirty third Edition of the Corps Liaison Letter.

In my foreword to the June 1986 Liaison Letter I highlighted the profound effect the 1984 restructure had on the Corps; particularly as it resulted in a reduction of our allowable posted strength. The increase by 30 establishment Regular Force posts in February 1986 has alleviated significantly our earlier manpower problems. However, as a Corps we remain lean and the challenge remains to correct the surprising degree of ignorance about the Sappers which exists in influential places. Few can appreciate in peace time the extent to which the Sappers contribute towards the fighting effectiveness of the Army.

Senior officers of other Arms and Services have an unconscious confidence in the ability of the RNZE to overcome engineer problems, which they see as only peripheral to the main aim. They have little idea of the complexity of the structure which enables them to have this confidence. They seldom pause to think of the implications for their aim of Sapper failure. There have been few such major failures. Most of the operations in the memory of serving officers have relied ostensibly on the efforts of the infantry and artillery (eg Borneo). Few consider the major Sapper





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\* **NOTES FOR THE GUIDANCE OF THOSE**  
**SUBMITTING ARTICLES FOR THE LIAISON LETTER**  
\*

The Liaison Letter is designed as a vehicle for the dissemination of Corps related news, history, current activities, and movements. It is not designed to be the "PROFESSIONAL" Corps Technical Bulletin, though there may be times when items of a more technical nature are included.

\*

The articles presented for inclusion in the Liaison Letter should be written in an easy reading style, suitable for all rank levels to gain some value therefrom. One should avoid long words where a shorter word would do, - the resulting impact is greater. Also writers should adopt a conversational tone as much as possible.

\*       \*  
\*

Where possible articles should not include long lists of personnel. Credit where credit is due - but don't bore your readers - writers.

\*       \*

Finally do send your articles in for the magazine. Some may not be printed for a number of reasons, but it is the intention to publish as much as we can from as wide a base as we can.

\* \* \* \* \*

Those articles published in the RNZE Liaison Letter are not necessarily the doctrine or policy of the Corps, or the opinion of the Editor.

\* \* \* \* \*

The Corps Liaison Letter is edited at The School of Military Engineering, Linton Camp, by WO1 H.E. Chamberlain.



## HONOURS AND AWARDS

1

Once again it is nearly eighteen months (unfortunately) since the last RNZE Corps Liaison Letter was published. During that time there have been a number of sappers honoured in different ways.

### THE QUEEN'S COMMENDATION FOR BRAVE CONDUCT

From the New Zealand Gazette Wellington Thursday, 27 August 1987.

*Sapper Alan Leslie McALLEY (V751199)(deceased), The Corps of Royal New Zealand Engineers, 1st Field Squadron Sappers Brigade, Papakura Camp.*

For services on 30 July 1985 when he went to the assistance of two women whose car had struck a concrete median wall, overturned and burst into flames on the Southern Motorway near Mount Wellington, Auckland. He directed two colleagues to play a fire extinguisher on the burning car and with total disregard to his own safety proceeded to rescue one of the trapped women. The second woman was rescued by other motorists. His initiative at the scene of the accident was responsible for saving the lives of the two women. (Sapper McAlley was himself killed in a motor vehicle accident on 2 July 1987.)

### Description of the above award

From about 1943 a plastic badge was issued to denote a Commendation. The badge is an vertical oval wreath like arrangement of laurel leaves surmounted by a crown. A straight sword, point uppermost, with its hand grip in the base of laurels, is central through the badge which is gold coloured. Across the centre of the badge and covering part of the sword is a scroll with the words **FOR BRAVE CONDUCT** in three lines. The emblem was worn on the appropriate medal ribbon, or where no medal had been issued in the same position as for a single medal or ribbon. This badge was later replaced by the present design which is a *silver oak leaf* similar to that of the Empire Gallantry Medal or perhaps the more familiar Mention in Despatches insignia.

### The New Zealand Meritorious Service Medal

|        |         |        |
|--------|---------|--------|
| WO1 PA | McKeany | Oct 87 |
|--------|---------|--------|

### The New Zealand Armed Forces Award

|         |           |           |
|---------|-----------|-----------|
| Maj JLC | Alabaster | 29 Aug 86 |
|---------|-----------|-----------|



SSgt V.M.J. (Hub) Hubner, RNZE, receiving the New Zealand Army Long Service and Good Conduct Medal from

the Commander 3rd Task Force Region, Col. A.L. Birks, OBE, on 15 June 1987, at King Edward Barracks.

The New Zealand Army Long Service  
and Good Conduct Medal

|      |     |                                       |           |
|------|-----|---------------------------------------|-----------|
| SSgt | PG  | Packer                                | 16 Apr 86 |
|      |     | Omitted from the last Liaison Letter) |           |
| WO2  | RM  | Edwards                               | 8 Dec 86  |
| WO1  | MA  | Petteresen                            | 4 Jan 87  |
| Cpl  | GER | Taiatini                              | 23 Jan 87 |
| SSgt | C   | Henry                                 | 26 Mar 87 |
| WO2  | BN  | Marshall                              | 28 Jul 87 |

The Efficiency Medal clasp "New Zealand"

|      |    |         |           |
|------|----|---------|-----------|
| WO2  | RJ | Stent   | 27 Jun 86 |
| SSgt | CL | Greenew | 1 Sep 86  |
| SSgt | GB | Randle  | 21 Nov 86 |

THE SAPPERS ASSOCIATION PROIZES FOR 1987  
Lieutenant to Captain Promotion Course

|    |    |           |
|----|----|-----------|
| Lt | JA | Armstrong |
|----|----|-----------|

A prize of Military Books to the Value of \$150.00. This prize was handed over to Lt Armstrong at SNE at a Committee Meeting of the RNZE Corps Committee on 21 Oct 87, by the Colonel Commandant, Col G.W. Butcher, MC, ED.

Best Apprentice

|     |    |        |
|-----|----|--------|
| Spr | NH | Singer |
|-----|----|--------|

A prize of tools to the value of \$100, presented by the Chief Engineer at SNE on 23 November.

RECENT PROMOTIONS

\*\*\*\*\*

In keeping with the pattern established in the last three Liaison Letters only officer and senior NCO promotions are shown herewith. This is designed to give wider notice of those promotions which may have a greater effect on the Corps. It is in no way intended to lessen the efforts of those who are just starting out on their career and the promotion ladder. Promotions from Corporal to Sergeant are included as this is the major step taken by many soldiers in their service.

This list covers a long period of nearly eighteen months from the issue of the last Liaison Letter.

|           |    |         |             |           |
|-----------|----|---------|-------------|-----------|
| T/Col     | SD | Jameson | Col         | 16 Oct 87 |
| T/Col     | NA | Bradley | Col         | 16 Oct 87 |
| Lt Col    | NA | Bradley | T/Col       | 14 Sep 87 |
| Capt      | DJ | Begley  | T/Maj       | 18 Dec 86 |
| Capt      | KN | Lang    | T/Maj       | 13 Mar 87 |
| Capt & QM | BJ | Knowles | T/Maj & QM  | 24 Apr 87 |
| T/Capt&QM | NA | Oliver  | Capt and QM | 7 Jun 87  |

|         |    |          |             |           |
|---------|----|----------|-------------|-----------|
| Lt      | RP | Cassidy  | T/Capt      | 20 Oct 86 |
| Lt      | PG | Curran   | T/Capt      | 20 Dec 86 |
| Lt      | PM | King     | T/Capt      | 19 Jan 87 |
| Lt & QM | DW | Mardle   | T/Capt & QM | 11 May 87 |
| Lt      | CJ | Fauls    | T/Capt      | 20 Jul 87 |
| Lt      | JD | Peacocke | T/Capt      | 3 Aug 87  |
| Lt      | PJ | Ames     | T/Capt      | 14 Sep 87 |

|    |    |          |     |           |
|----|----|----------|-----|-----------|
| Lt | CD | Birch    | WEP | 20 Dec 86 |
| Lt | AR | Frizzell | WEP | 20 Dec 86 |
| Lt | RA | Lloyd    | WEP | 20 Dec 86 |
| Lt | DB | Vautier  | WEP | 20 Dec 86 |
| Lt | SH | Reynolds | WEP | 9 Feb 87  |
| Lt | WF | McGregor | WEP | 13 Jun 87 |

|      |    |         |         |
|------|----|---------|---------|
| WO 1 | AJ | Brown   | Lt & QM |
| WO 1 | AP | Hawkins | Lt & QM |
| WO 1 | G  | Mitten  | Lt & QM |

|      |    |           |        |           |
|------|----|-----------|--------|-----------|
| WO 2 | LK | Langdon   | T/WO 1 | 24 Apr 87 |
| WO 2 | WT | Wharewera | T/WO 1 | 1 May 87  |
| WO 2 | RM | Edwards   | T/WO 1 | 6 Jul 87  |
| WO 2 | JE | Sparks    | T/WO 1 | 1 Aug 87  |
| WO 2 | KG | Smith     | T/WO 1 | 21 Aug 87 |

|      |    |       |        |           |
|------|----|-------|--------|-----------|
| SSgt | SD | Boyle | T/WO 2 | 11 May 87 |
|------|----|-------|--------|-----------|

|     |    |         |        |           |
|-----|----|---------|--------|-----------|
| Sgt | PS | Free    | T/SSgt | 24 Nov 86 |
| Sgt | AM | Greeve  | T/SSgt | 1 May 87  |
| Sgt | IJ | Lowe    | T/SSgt | 11 May 87 |
| Sgt | NJ | Dew     | T/SSgt | 7 Jul 87  |
| Sgt | P  | Te Wana | T/SSgt | 1 Sep 87  |

|     |     |             |       |           |
|-----|-----|-------------|-------|-----------|
| Gpl | GS  | Stewart     | T/Sgt | 10 Jul 86 |
| Cpl | MP  | Henderson   | T/Sgt | 30 Jul 86 |
| Cpl | BR  | Newton      | T/Sgt | 6 May 87  |
| Cpl | AP  | Williscroft | T/Sgt | 20 Jul 87 |
| Cpl | GPK | Hoerara     | T/Sgt | 3 Aug 87  |
| Cpl | H   | Matehe      | T/Sgt | 2 Oct 87  |

\*\*\*\*\*

RECENT ARRIVALS

\*\*\*\*\*

Over the past eighteen months the officer strength of our Corps has been augmented by the arrival of graduates from RMC Duntroon, Officer Cadet School Portsea, both in Australia, and from our own Officer Cadet School in Waiouru. Welcome to the following:-

|      |    |            |                |
|------|----|------------|----------------|
| Lt   | DJ | Pirie      | ex Duntroon    |
| 2 Lt | DW | Baxter     | ex OCS Waiouru |
| 2 Lt | SR | Maindonald | ex OCS Waiouru |

It is understood that there are to be four more officers arriving in the Corps by the end of the year. We will welcome them in the next Liaison Letter once they have been commissioned.



## POSTINGS

Lt Col WA Bradley from Joint Services Staff College to Defence Headquarters (Army)

T/Maj & QM BJ Knowles From 1 Pd Sqn To HQ 1 TF  
 Maj GR Jason-Smith 25ESS to 3 Pd Sqn 15 Dec 86  
 Maj BA Stewart ATG to Def Army 26 Aug 87  
 Capt DJ Begley SNE to 25ESS and promoted to Major  
 8 Dec 86  
 Capt MK Gatsche CE Office to Spt Br 1 Jun 87  
 Capt JD Peacocke Aide de Camp to the Governor General  
 3 Aug 87

Capt R Cassidy 1 Pd Sqn to Vanuatu 2 Mar 87  
 Capt PM King ATG Plant to CE Office 19 Jan 87  
 Capt PG Curran SNE to 1 Pd Sqn 28 Sep 87  
 Capt PJ Amys 3 Sqn RNZAF to SNE 14 Sep 87  
 Lt C Birch 25 ESS to 1 Pd Sqn 12 Jan 87

WO1 G Findon 1 Pd Sqn to Spt Comd 8 Dec 86  
 WO1 RD Everson 25 ESS to 1 Pd Sqn 8 Dec 86  
 WO1 P Munro SNE to Papakura Camp 12 Jan 87  
 WO1 JH Hendrick NZWSU to SNE 2 Feb 87  
 WO1 DG Staines ATG HQ to NZWSU 3 Feb 87  
 WO1 WM Stirrat Fiji to SRT Waiouru 31 May 87  
 WO2 JE Sparks Linton Fire to B'ham 22 Jun 87  
 WO2 RM Edwards Burnham Fire to ATG 6 Jul 87

SSgt BM McDonald Linton Fire to ATG 24 Nov 86  
 SSgt GE Corlett 25ESS to ATG Plant 24 Nov 86  
 SSgt SP Pantham 3 Pd Sqn to SNE 8 Dec 86  
 SSgt CC Henry 1 Pd Sqn to SNE 18 Jun 87  
 SSgt M Vincent SNE to ATG Wks 16 Mar 87  
 SSgt WJ Bryce SNE to NZWSU 7 Jul 87  
 SSgt RL Maber NZWSU to 1 Pd Sqn 24 Aug 87  
 SSgt RI Sinclair 25 ESS to HQ PNG 10 Aug 87

Sgt R Cockburn 1 Pd Sqn to ATG Plant 4 Aug 86  
 Sgt EP Estall SNE to OCS Waiouru 8 Dec 86  
 Sgt RJ Alexander Re-entry 25 ESS 1 Dec 86  
 Sgt R Kirton SNE to 1 Pd Sqn 12 Dec 86  
 Sgt PG Hutson SNE to SRT Waiouru 15 Dec 86  
 Sgt JP De Breuk NZWSU to SNE 15 Dec 86  
 Sgt CMT Kauika-Stevens BAW to SNE 2 Feb 87  
 Sgt TK Hokianga 25ESS to 3 Pd Sqn 23 Feb 87  
 Sgt S Koko 3 Pd Sqn to SNE 3 Mar 87  
 Sgt J Hopkirk SNE to 1 Pd Sqn 8 Mar 87  
 Sgt W Stowers 1 Pd Sqn to SNE 9 Mar 87  
 Sgt TD Rait Linton Fire to ATG 23 Mar 87  
 Sgt IJ Lowe From UK to SNE 11 May 87  
 Sgt MJ Cavanagh 3 Pd Sqn to 25 ESS 2 Jun 87  
 Sgt PP Le Pou SNE to Def Army 15 Jul 87  
 Sgt HM Shields 2 WAT to 6 Ind Pd Sqn 8 Sep 87  
 Sgt MJR Walters 3 Pd Sqn to 25ESS 14 Sep 87  
 Sgt PGD Haines 25ESS to 3 Pd Sqn 14 Sep 87  
 Sgt PJ Gardyne Sinai to 1 WAT 17 Aug 87

## FAREWELLS

SSgt Jack Hadfield, BEM, died mid 1987. Few people in the Army knew that Jack Hadfield was well up the scale in the National Administration of Pipe Pipe Bands in New Zealand.

LCpl GJ "Duck" McDonald, died as a result of a training accident at SNE 20 January 1987.

LCpl Alan McAlley, died as a result of a motor cycle accident, near Linton Camp on 2 July 1987.

## Retirements

Col DJ (Dennis) O'Brien moving to greener pastures. Retired after 27 years service on 30 Sep 87.

Lt Col RA (Reg) Barrett, retiring to take up a position with the Central Districts Catchment Board on 1 Apr 88.

Capt & QM WGW (Wyatt or Willie) Williams, retiring after more than 33 years service on 22 Nov 87. (See Personal Profile.)

WO1 GB (Bruce) McDonald, retired on 22 Apr 87 having served 27 years.

WO1 M (Murray) Aston, retired on 10 Jul 87 after 28 years service.

WO1 M (Murray) Holt retired on 1 Aug 87 after 33 years service.

Lt & QM AP (Tony) Hawkins, retired on 27 Aug 87 after 23 years service.

Lt and QM G (Gerry) Mitten, retired after 25 years service on 4 Oct 87.

WO1 JH (Jim) Hendrick, BEM, retiring after 20 years service (second time round) on 26 Feb 88, a total of 25 years cumulative service.

WO1 LR (Larry) Langdon, retiring after 20 years service on 10 Jan 88.

Capt and QM DW (Don) Mardle, retiring after 22 years service.

WO2 SD (Stu) Boyle, retiring after 20 years service.

SSgt J (John) Taylor, retired after 20 years service on 13 Jun 87.

SSgt VMJ (Hub) Hubner, retired on 28 Jun 87 after 20 years service.

SSgt PL (Pete) Jackson, retired on 21 Jul after 21 years service.

SSgt KW (Kevin) Featherstone, retired after 21 years service on 7 Sep 87.

SSgt RJ (Ron) Hughes, BEM, retired on 24 Aug after 21 years service.

Sgt MM (Moe) Turoa, retired after 20 years service on 30 Oct 87.

Sgt GS (Garry) Stewart, retiring after 7 years service on 11 Jan 88.

# OLD COMRADES NOTES

The Sappers Association held its Annual Church Parade on Sunday 18 October, at St Davids Presbyterian Church in Khyber Pass Road, Auckland. There was a good attendance of about fifty retired sappers, and about the same number of serving sappers "beautifully turned out" (as one lady said) from 1 Field Squadron. The Lesson for the day was read by former Colonel Commandant Dick Pemberton. MC and Bar, ED and the wreath was placed beside the memorial by Spr J. Wingar.

George Bunce, QSM, the President of the Sappers Association (NZ) Inc., has returned from an extended overseas visit to Europe and other places.

Ex WOI Terry Archer, MBE, visited SNE recently. He has given up his dairy in Auckland and is now a building inspector in Greymouth.

A very long serving sapper, ex WOI Keith Walloch has been very ill for some months and has spent a considerable period in Waikato hospital. He is at home now and hopes are held for his continued improvement.

Colonel Gordon Lindell, DSO, OBE, ED, has also been ill. He has to attend hospital every few weeks for blood transfusions. Col Lindell has always been (and still is) a very strong supporter of Corps related activities.

SNE was visited recently by Kieth Hall, one of the very few RNZE officers who served in Korea during the Korean War. It was his first visit to SNE in more than thirty years. Good to see you here Keith.

Ex WOI Gordon Byron also recently visited SNE. Gordon was a former RSM of the School some years ago. He has been for many years the SSM of 10 Pd Sqn (NZ Forest Products) Tokoroa. Gordon's wife Anne passed away earlier this year. We send our condolences to Gordon.

Maj Andy Anderson, MBE, Retd, has recently left his job a Massey University near Linton Camp and is now doing a similar job in a university not far from Melbourne.

Colin Hill, formerly WOI is now a plumbing instructor at Palmerston North Polytec.

Reg King, another long serving sapper and one of the small group of the Corps who served in Vietnam. (Walter Nash Hospital at QUI NHON) visited SNE in September. Reg is now a Chief Inspector with the Papua New Guinea Police, Logistics Branch.

Often seen working (talking to sappers who recognise him) on State Highway 1 with Manawatu Ashpals is Forman

(ex SSgt) Barry Hapeta. He is currently working in the Paraparaumu area.

At the Freedom of Palmerston North parade on 12 November it was almost possible to call the roll. Seen commenting on the drill and turnout were Oma Nepia (ex WOI), Laurie Smith (ex WOI fireman), Jack McDonald (ex Capt and QM) and Ron Denton (Ex WOI RE and SSgt RNZE). Ron Denton is returning to the United Kingdom in 1988 for a re-union at the Royal School of Military Engineering at Chatham in Kent where he was formerly a Quartermaster Sergeant Instructor (WO2). Hope you enjoy your trip Ron.

Bruce McDonald (ex WOI) is now working in the stores world at the Palmerston North Public Hospital.

## PERSONAL PROFILE

Major and QM Wyatt George Watling WILLIAMS, one of the longest serving sappers retired on 22 November 1987, after a career spanning 33 and 3/4 years. Service which has taken him to many places world wide, over the years.

Wyatt, joined the Army in February 1954 as a cadet and after his basic training took the option of a trade and commenced a Carpenter and Joiner apprenticeship. Steady promotion through the ranks came as he lead by example. He served as a section commander in 1 NZ Regt in Malaya between 1961 and 63. A report states "that he would be more than acceptable in the infantry should he want to change Corps". We are lucky that he did not. Prior to going to Malaya, Wyatt had experienced the other extreme of temperature and humidity having spent a summer construction season in Antarctica from December 1959 to February 1960. In 1965 he was posted to the New Zealand Army Detachment in Vietnam where he showed his "initiative and ability to control men". On his return to New Zealand he was posted to 1 Construction Squadron in Papakura where he stayed only for a short time before being posted as a sergeant to the Regular Force Depot. He changed trade in 1969 to Field Engineer and again in 1972 when he became an an Instructor RNZE.

Further promotions and postings came - firstly SNE then RF Cadet School (as STI) then back to SNE. He was the RSM of the SNE from October 1974 until 1976 when he was commissioned. Late in his career Wyatt was promoted Maj & QM and was for a time the OC of 3 Field Squadron. He accepted a reduction in rank for his final overseas posting (to Singapore) with his wife and family prior to returning to SNE in December 1986 where he has been the Senior Trade Instructor and Master of Apprentices.

Thank you Major Williams for your example and service. Best wishes to you, your wife and family for the future.



To the Colonel Commandant,  
Officers, Warrant Officers,  
Non Commissioned Officers,  
and Men of the

## CORPS OF ROYAL NEW ZEALAND ENGINEERS

Greetings

We the Mayor, Councillors, and Citizens of the  
BOROUGH OF LEVIN

fully realising and appreciating the honourable  
record and traditions of the Corps of Royal New  
Zealand Engineers and being desirous of recognis-  
ing, cementing, and fostering the intimate association  
which is now and has for so long been enjoyed between  
the Borough and the Corps in which so many of its  
sons have been proud to serve —

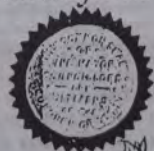
Now, therefore, do by these Presents confer upon the  
said Corps of Royal New Zealand Engineers —

### The Freedom of the Borough

And thereby the right and privilege without further  
permission being obtained, of marching with drums  
beating, band playing, bayonets fixed and swords  
drawn through the streets of the Borough of Levin.  
And do hereby accept the honour of viewing the Corps  
of Royal New Zealand Engineers once in each year for  
the purpose of an inspection by His Worship the Mayor.  
And do hereby accept the further honour of having two  
officers of the said Corps of Royal New Zealand Engineers  
in uniform in attendance upon His Worship the Mayor on  
important official occasions.

THE COMMON SEAL of the body corporate  
called the Mayor, Councillors, and Citizens  
of the Borough of Levin was hereto affixed  
pursuant to a resolution of the said Council  
this seventh day of February 1959 in the presence of—

L. de la Roche, Mayor  
Tom Clerk, Town Clerk



# ONCE A SAPPER ALWAYS A SAPPER

BY

T.M.J. RIORDAN, RE

Tom Riordan is the Author of a small book called "The History of the Seventh Field Squadron RE" and has a great interest in sapper history. The item, originally written for the RE in response to sappers being called "private", has been slightly adapted herein, was supplied by Mr Bob Schoon of Auckland who is also a retired Sapper.

\*\*\*\*\*

The above title, a saying handed down by generations of sappers, holds as good today as it ever did in the past; but it is being denied, along with Corps traditions and honours, by a few who forget and call Sappers, 'Privates'. A demotion if ever there was one, and at the same time a first class job of undermining the traditions of the Corps, and the rank of Sapper bought so dearly over one hundred and thirty years ago.

At the risk of trying to teach Grandfather, a well traveled and long serving soldier, to suck eggs, the following information is given. Grandfather knew that there were no 'Privates', nor had there ever been in the Royal Engineers. Indeed the History of the Royal Sappers and Miners (both First and Second Editions), the History of the Corps of Royal Engineers, the Oxford Dictionary, the Commonwealth War Graves Commission and ex-sappers at large know this. However there are others who need to be educated.

'SAPPER' first appeared as an honour in a change of title from The Corps of Royal Military Artificers, to The Corps of Royal Military Artificers, Sappers and Miners on the 4th of August 1812. The reason for the change was in recognition for their work in the Peninsula War (in Spain and Portugal) under Wellington and with the army where ever it had fought. This rather unwieldy title was changed to The Corps of Royal Sappers and Miners the following year on 5 March 1813.

The next change of title, perhaps long overdue, was deliberately dated 17th October 1856, to coincide with the second anniversary of the opening of the Siege of Sebastopol. On that date The Corps of Sappers and Miners became one body with The Corps of Royal Engineers and at the same time the rank of Private was denominated as

'SAPPER' thereby perpetuating an honour granted in 1812. Furthermore the change recognised the work of both the officers and men during the siege.

The timing of the change shows that our Victorian predecessors, who cherished their honours, knew what they were about. There was no ambiguity - overnight all 'PRIVATES' became 'SAPPERS', the name by which they were universally known in the Army and Navy at the time. A name, let it be said, they had earned due to their continuous presence in the trenches, often leading the way in sorties and attacks. Several Victoria Crosses were won and sappers regularly won commendations in General Orders.

Lance Corporal William Jenkins (Royal Sappers and Miners) had something to say about sappers which immortalised them and their work. During the attack on the Quarries (8 June 1855), when Colonel Waddy of the 50th Foot asked for a guide, Jenkins, using the phrase of the trenches said, "Follow the Sapper", and lead the way there and back; returning to help Sergeant Drew to carry the wounded to cover as the watching infantry stormers exclaimed "Look at those mad sappers".

On another occasion Colonel Shadforth, mindful of the sapper's work in the trenches asked Jenkins, "How is it that so few sappers die?" Quick as a flash Jenkins replied, "They haven't time. They've too much work to do in the trenches." This earned him a stiff glass of grog from the Colonel's canteen.

These few illustrations show that the rank of SAPPER was earned by the Corps and is not something with which to tamper.

\*\*\*\*\*

Readers should also note the Royal Warrants overleaf and the article accompanying them.





# The Royal Warrants

**W**hereas you have represented to Us that it would be of advantage to Our Service that Our Corps of Engineers should be distinguished by the name of the Corps of Royal Engineers, and the rank and post of the said Corps in Our Army should be established.

We, having taken the same into Our consideration, do hereby direct that Our said Corps of Engineers shall in future take the name of the Corps of Royal Engineers, and be so styled and called. And we are further pleased to direct that Our said Corps of Royal Engineers shall rank in Our Army with Our Royal Regiment of Artillery, and whenever there shall be occasion for them to take post with any other Corps of Our army the post of the Corps of Royal Engineers shall be on the right with the Royal Regiment of Artillery, according to the respective dates of the commissions of the officers belonging to the Royal Regiment of Artillery and Corps of Royal Engineers. And for so doing this shall be, as well unto you as unto all other officers and ministers herein concerned, a sufficient warrant.

Given at Our Court at St. James's the twenty-fifth day of April, 1787, in the twenty-seventh year of our reign.

**W**hereas you have represented unto Us that Our Service at Gibraltar has been found to derive great Benefits from the Establishment of the Military Company of Artificers employed in that Garrison, and that like Advantage would arise to Our Service if the Fortifications, Buildings and Repairs in many other Parts of Our Dominions were in like manner Performed and carried on by a similar Corps of Military Artificers to be established for that Purpose; That the whole Expense of such Establishment would be less than what is now paid for an equal Number of Civil Artificers and Labourers, and that the said Corps by being subject to Military Command and Discipline would be both more orderly in their Behaviour, and more to be depended upon than common Artificers. And We having taken the same into Our Consideration, Our Will and Pleasure is that a Corps of Royal Military Artificers, to consist of 6 Companies, be forthwith raised and formed & from time to time recruited with Men duly qualified for the several Trades and Occupations proper for the same, each Company to consist of four Sergeants, four Corporals, two Drummers, Sixty Artificers and Thirty Labourers with the respective Pays mentioned in the Establishment

# Engineers

## Royal Bicentenary



A 1787 RE officer



A 1787 artificer

RE 200 celebrates the 200th anniversary of the granting of the 'Royal' title to the officers of our Corps on 25 April 1787. However it should not be forgotten that in the same year the soldier element of our Corps was formed, also with a 'Royal' title, as the Corps of Royal Military Artificers.

Always remember that the style of the title is 'Corps of Royal Engineers', and not 'Royal Corps' as was later granted to the Royal Corps of Signals, Royal Corps of Transport etc. It is not our Corps that is Royal, but each individual. Every serving member is a Royal Engineer, and when asked 'What job do you do?' the answer should be 'I am a Royal Engineer', and not 'I am in the Royal Engineers', which is the reply that is usually given. This may sound pedantic, but it is not. We were granted a very special privilege, which we should insist on using.

In 1787 the officers of our Corps were very proud of their new honour, and immediately signed themselves as 'Capt J. Smith, Royal Engineer', or 'Lt Col J. Smith, Commanding Royal Engineer'. In later years titles changed, and in many cases the 'Royal' was dropped: Chief Engineer, Engineer-in-Chief, Commanding Engineer, Engineer Brigade. We now have a year of celebration, restoring the pride in our title, and we should use it at all appropriate times. Perhaps we should even change that favourite cry to 'once a Royal Sapper always a Royal Sapper'.

The origins of the officer element of our Corps are well known, but the origins of the soldier element are not. The Corps of Royal Military Artificers was formed on 10 October 1787 amidst considerable controversy, particularly from the civil point of view. Indeed, it was only brought about by political cunning on the part of the Prime Minister.

Since Roman times it had been an accepted military principle that an army needed skilled tradesmen to accompany them on campaigns. For some time, continental armies had included engineer units of tradesmen and semi-skilled labourers trained in the arts of defence. The British Army, however, still relied on hiring civilian tradesmen and labourers, both at home and abroad, when the necessity arose. A Company of Soldier Artificers had been formed in Gibraltar in 1772, but this was regarded as a special case since it was formed from soldiers of other units serving in the garrison who were already working on the defences of the Rock, and it did not depend upon recruiting civilian tradesmen.

From the military point of view, the arguments for and against were simple. Civilian tradesmen could come and go as they pleased, with all the obvious disadvantages in war. On the other hand, soldiers were paid less than half the rates for civilian tradesmen, so that the Army would only be able to recruit substantial tradesmen who were failures in civil life.

There was a strong liberal element in Parliament, and from the civil point of view there were fears that forming a military tradesmen unit, to replace civilians on fortifications and defences, could lead to similar units to replace dock and

shipyard tradesmen and other government employees. It was feared that this might force tradesmen to join the Army and Navy at wages lower than the normal rate.

In 1779 we were already effectively at war with the French, who were assisting the Americans in their revolution. When Spain declared war on us too, there was danger of armed attacks on Great Britain, and even invasion. Lt Col Hugh Debbie, of the Corps of Engineers, considered that it was foolish to rely upon hiring civilians for field defences against an invading army, and suggested to the Master General of the Ordnance that engineer units should be formed by transferring two suitable soldiers from each unit in the Army. The MGO agreed in principle, but considered that there was enough difficulty in expanding the Army to meet the threat of France and Spain and it was not the time to consider new types of units.

In 1783 the Duke of Richmond was appointed MGO, and he put before Parliament his proposals to improve the defences of vulnerable dockyards and arsenals. The expense was considerable, and to keep down the cost he suggested using a part of the Royal Artillery, who garrisoned the defences, as artificers and labourers on the works, giving them half the civil wages. This was approved since it did not involve any new units.

In 1785 the MGO's plans were even more expensive, and they were rejected by Parliament. Again, in 1786, the amount of money made available was far below that required, so the MGO suggested to the Prime Minister that costs could be reduced by forming a corps of military artificers similar to those in Gibraltar. The Prime Minister fully realised the opposition that such a plan would provoke if discussed by Parliament, and so, on 10 October 1787, he obtained a Warrant from the King to raise the unit without presenting the proposal in the House of Commons. When, two months later, the Ordnance estimates were passed, little time was allowed for debate, and the insertion of the costs for the new unit were hardly noticed. Liberal opposition soon realised their mistake, and the following March used the passing of the Mutiny Bill as an opportunity to attack the formation of the unit. They condemned it as a dangerous concept that could be extended to the work of other government employees. They also considered that making tradesmen, and the standard of their work, subject to military discipline was an attack on their civil liberties. In the House of Lords it was argued that if the new corps of 600 men meant a saving of £2,000 per year (about £30,000 at today's prices), this meant that an Englishman's liberty had been priced at £3.50 (about £50). Even so the Bill was passed with a 2/3 majority.

And so the soldier element of our Corps was formed with six companies of 100 men each, to be stationed at Woolwich, Chatham, Portsmouth, Gosport and Plymouth, with a half company at both Guernsey and Jersey. The trades were to be carpenter, mason, bricklayer, smith, wheeler, sawyer, miner, painter, cooper and collar maker, plus 30 labourers per company. □



## DEFENCE HEADQUARTERS

### DIRECTORATE OF WORKS

by Capt NK Gattsche

Amongst the Corps there would be few who know that there is an Engineer cell at Defence Headquarters. To this end therefore the personnel are listed to show that there is quite a busy bunch beavering away with pencils, calculators and estimate sheets.

Current appointments. - as at 10 Nov 87.

|                          |                          |
|--------------------------|--------------------------|
| Director of Works:       | Col RK Rutherford        |
| Army Cell, A/ADW4        | Capt EW Bruce MBE        |
| SOW4A                    | Vacant - any Volunteers? |
| SOW4B                    | Capt CJ Faulls           |
| KUPE Project Officer     | Maj KM Lang              |
| Special Projects Officer | Capt NK Gattsche         |

|                      |                  |
|----------------------|------------------|
| Draughting Office W6 | WO2 PG Packer    |
|                      | Sgt M Masi       |
|                      | Spr MR Darrall   |
|                      | Spr BRJ Green    |
|                      | Spr LW Wordell   |
|                      | Spr GJ Lelieveld |
|                      | Spr ICD Tukua    |

When tasked with a project which is beyond the realms of fantasy and impossible to achieve, the Sappers of Defence Headquarters will come back with a hearty "*No Problem*" Seriously, however, there is a screed of work coming out of this Directorate at present and as many of these as possible will be highlighted.

#### Project KUPE

Project KUPE involves the Development of Linton Camp to accommodate the return of 1 RNZIR from Singapore. A total of approximately \$61 million is being spent over the next three years at Linton Camp. The building work being undertaken includes:-

- 150 Houses
- 6 x 60 man Barrack blocks
- Battalion working, training accommodation and Headquarters building
- Gymnasium
- Fire station
- Officer/SNCO Transit Accommodation (20 beds)
- Telephone exchange
- Rifle range
- Supply PL Warehouse
- Supermarket Shopping Complex
- Community Centre
- SNCO Accommodation (20 beds)
- 2 MP Platoon HQ and store
- Dental Section

Extensions are also be made to:

- 5 Comp Sup Coy Warehouse
- 600 Man Mess/kitchen
- Property Office
- Pay Office
- AGI Store
- Linton Area Workshop
- 10 Tpt Sqn office, Q Store and Vehicle park

#### Army Engineer Works Programme (AEWP)

The Draughting Office have produced a large number of drawings this year for the AEWP. Major project designs completed include:

- 1 Fd Sqn Plant Accommodation
- 2/1 RNZIR Headquarters
- 25 ESS Workshops

Projects under way include:

- 1 NZSAS Group Headquarters
- SME Lecture facilities
- 2/1 RNZIR Stages 2 and 3

The amount of work being produced by the Draughting Office is quite high when you consider that 70% of the staff are under training and attend numerous classes during the week.

#### Army Capital Works Programme

The Army cell under the steady hand of Capt Eddie Bruce is also working hard to ensure that today's and tomorrow's Army is well catered for with modern and comfortable buildings. The AEWP is also controlled from this cell.

Projects under at present include:

- SEME - Trentham
- Base Workshop
- 1BSB Warehouse
- JRs barracks I and II at Burnham
- Gymnasium at ATG
- JRs barracks at Trentham
- Grant barracks at Linton
- Officers quarters at Linton
- Roading for KUPE (a 25 ESS task)

The cell is currently understaffed, so if there are any highly intelligent (?), budding works staff officers short of work they would be most welcome down at the blunt end.

## DEFENCE LAND UTILISATION STUDY

### Exercises

The Director of Works insists on all his staff (including Navy and Air Force) attending field exercises on a fairly regular basis. These exercises are either run and sponsored by one of the service cells within the Directorate or people attend "outside exercises". The exercises participated in this year include:

**Exercise SKILSAW IV** - This was a RNZN sponsored exercise using support from RNZIR personnel and HMNZS Wakakura. The Directorate deployed to the Marlborough Sounds and undertook rappelling, search and reconnaissance training together with Army/Navy joint operations.

**Exercise SKILSAW V** - This exercise involved the escort of 'boffins' to a selected area of Waiouru with APC support from a section of 1 Scots. Personnel practiced minor tactics, APC tactics, APC/Inf deployment drills, winter field training and carried out a SLR range shoot.

### Sailx 87

A most enjoyable and educational exercise where Directorate personnel joined from all three services and from all over New Zealand to sail on leg 2 (southward) of Sailx from Paiaia to Auckland. This exercise was at times referred to as TOWEX (see LL No 30) as the wind conditions are frequently unfavourable for those who have sailed Lasers, Hobie Cats etc. Try whalers and navy cutters sometimes for a lesson in real sailing.



### VANUATU

On 25 October, with just 24 hours notice to move Sgt Masi deployed to Vanuatu for six weeks to supervise the construction of a community facility. This project is being undertaken in conjunction with Captain Cassidy's Construction Troop and is being assisted by prisoners in Vanuatu.

### Computer Aided Draughting

The Special Projects Officer has been working on a special project to introduce a Computer aided draughting system for the Draughting Office. This project has slowed down considerably since it has been passed to EDP to implement.

In February this year the Minister of Defence announced that consultants would be invited to register interest in undertaking a comprehensive study to evaluate and define future use of Ministry of Defence Land and property assets throughout New Zealand. This move was in line with the Government policy of self sufficiency. The objectives of the study are:

- to undertake a detailed evaluation of Defence real estate, buildings, facilities and associated assets, and

- to determine whether such assets could be put to alternative uses, taking into account the specialised nature of Defence.

It is also intended to introduce a management plan for the future use, acquisition or disposal of Defence Land and property assets. Already some Army and Air Force held property comprising 17 land parcels valued at \$1.5 million has been declared for disposal, and it is intended that the proceeds be used to offset the costs of the study.

The study will be split into four stages and take three and a half years to complete. Stage One will be an overview to establish Defence real estate needs. Stage Two will assess the best way to market any property selected for disposal, to plan consolidation of other assets, and make recommendations for developing land that should be kept. An asset management system will be designed in Stage Three and put in place in the final Fourth Stage.

It is proposed that the Land Study will be part of the wider review of Defence Resource Management due to get underway soon. Meantime, proposals by the consultants bidding for the Land Study have been carefully evaluated and it is hoped to be able to announce the successful consultant shortly. It will be important for the consultant to understand the very special nature of the requirements of each of the three Services. Accordingly, special briefings and background papers have been prepared and each Service will have the opportunity to discuss their operational, training and support needs with the consultants in the course of the briefing sessions and visits to all our military establishments in the early stage of the Study. Some of the real estate we own is situated on high value urban land with attractive market values. We will need to be able to justify reasonable returns from the retention or redevelopment of that property for our own shared needs or, otherwise, such property should be considered for sale to release capital for purchase of suitable land or building elsewhere.

The conduct of the study will be directed by a Defence Steering Committee comprising senior Service and Defence



officers. A retired Air Force officer. Gp Capt G Wallingford has been appointed as Defence project officer to coordinate the study under the direction of ACDS (Support). Whereas, matters relating to the study will be dealt with through command channels in the normal way, anyone who has particular personal views or ideas relating to Defence land and property assets is invited to contact the Defence Project Officer at the Directorate of Works, Room 906, Freyberg Building - Ext 8915.

## NEW ZEALAND AND THE SOUTH PACIFIC

New Zealand has long played a major role in the South Pacific. It has a large population of native Polynesians and has accepted many immigrants from the South Pacific. New Zealand is responsible for the defence and foreign affairs of the Cook Islands, Niue and the Tokelau and formerly administered Nauru and Western Samoa. The New Zealand armed forces are actively involved in civil aid projects in many South Pacific states.

New Zealand, like Australia, is reorienting its defence pre-occupations away from South East Asia to the South Pacific. However, as with Australia, the New Zealand government realises that the problem is not one for military solution; it is essentially a need for foreign aid. New Zealand already contributes a substantial amount of aid to the region.

New Zealand's problem is, however, that it has offended the United States over its banning of nuclear powered or armed ships. (The United States is willing to accommodate the nuclear sensitivities of the Japanese but has less tolerance of New Zealand's 'mouse-that-roared' tactics. Had the New Zealanders had the economic power of the Japanese they may have got away with it — but they haven't, and they didn't.)

The problem that the ANZUS row creates is that the US is inclined to ignore New Zealand's role in the Pacific — a sort of 'throwing the baby out with the bath water' approach. It is already clear that the Japanese are limiting their diplomatic dealings with New Zealand because of the ANZUS dispute. Likewise Australia has shown its irritation towards the New Zealanders on a number of occasions.

Here we have a problem — New Zealand has longstanding links with, and experience of, the South Pacific, but its row with the US over nuclear vessels may lead to it being ignored in Japanese-US plans concerning increases in aid to the region. In this process the US and Japan will be ignoring a major actor in the region and adding an element of competition that should and need not be there.

## APPRENTICESHIP AWARDS 1987

The list of awards made to the apprentices for 1987 are as follows:

The Sappers Association Prize of books, tools or both to the value of \$100.00 was awarded to Sapper NH Singers. He also received the Benchmark Trophy (a new award) and a gift voucher for \$25.00, as the top Carpentry Apprentice.

The Most Improved Apprentice award was made to Spr NH August, who received a Benchmark Gift voucher for \$25.00.

The Top Electrical Apprentice, Spr CP Haywood received the Leader and Watt award (another new presentation).

The top Plumbing Apprentice, prize was awarded Spr GWR Stevens. He received a tool package from A and T Burt.

The Langdon Cup was awarded to Pte N Pangupo Tonga Defence Force, as the top Mutual Aid Programme student.

All the above recipients received the SHF Certificate of Achievement, as did the following Tonga Defence Force personnel:

LCpl P Vaka  
Pte AT Sofele, and  
Pte F Tamilau

## THE PROFESSIONALS - THAT'S US.

## THE CORPS OF ROYAL NEW ZEALAND ENGINEERS

1985 Nissan Mobil 500 Series



Building Bridges  
R. Army

## OPERATION RAROTONGA 1987

BY LT J.A. HILL, RNZSE  
1 Field Squadron

### Introduction

Operation Rarotonga started, after the news was received in New Zealand that severe damage had been caused by a hurricane, with a number of long distance phone calls to selected personnel from 1 Fd Sqn during the Christmas Holiday block leave period. Assembling at 1 Fd on the night of Jan 4th; preparations were hurriedly made for a reconnaissance team to leave NZ the following morning for Rarotonga. The team lead by the OC, Major Ransley, was made up with various tradesmen including plant specialists, electricians, plumbers, carpenters and divers. This was found to be of particular value as a quick and accurate damage/repair estimate could be compiled. Amongst the equipment taken were a landrover and four motorcycles. On the various islands, once the C130 landed, the bikes were wheeled out and reconnaissance conducted.

Once all reccees were completed, the team returned to NZ to await a decision as to how much aid was to be provided - and when. Meanwhile back in Rarotonga, Cpl Simonsen, RNZEME, was attached to the local Department of Trade, Labour and Transport Workshop.

The detachment for the major deployment consisted of two Navy and three Army divers, one RNZEME mechanic, one electrician, one plumber, one cook and eight carpenters. As well, the British Army attached six Queens Gurkha Engineers comprising one Clerk of Works, one electrician and four carpenters. On the 23rd of January the detachment emplaned for Rarotonga to begin a number of tasks identified during the initial reconnaissance. These were:

- a. Recover a sunken 20t barge from Avatiu Harbour;
- b. Repair and reclad two portal frame warehouse sheds at Avatiu Harbour; and
- c. Construct a new Fletcher Brownbuilt portal frame shed on Mangaia.



DIVING TEAM RAROTONGA '89.

Back row: Cpl J. YeKowhai, Sgt A. Cook, PO J. Lodge,

Lt J.A. Hill. Front Row: LDvr J. Kira, Cpl K. Fee, Cpl J. Lynch.





The newly raised barge being towed into Avatiu Harbour.  
(Notice air still being pumped in to avoid water coming into the holes and splits in the metal skin).



Barge at Harbour awaiting 'Righting' by heavy plant.  
Lt Hill aboard awaiting for lifting tackle.

## TASKS

**Reclad Avatiu Harbour Sheds.** As has been mentioned above, the sheds at Avatiu were to be repaired, and as well, required seven roller doors to be replaced. The stores for these repairs were due to arrive on 28 Jan 87 but due to unforeseen circumstances, they didn't arrive until 10 Feb. On shed one, three of the four walls were reclad with all walings being replaced, three roller doors installed and a complete re-wiring of the lighting systems.

Shed three, as well, involved recladding three walls, replacing walings, four roller doors and the replacement of a number of ceiling lamp holders and a meter board.

**Barge Recovery.** The barge which was used by the Department of Trade, Labour and Transport as a base for its harbour dredging operations was washed from dry land into the harbour during the cyclone. Before it finally sank 100m outside the harbour mouth, it created extensive damage to other boats moored there and even sank an ocean going yacht. The barge was finally recovered using a compressed air venting system to force the water out of specially designed waitara covers. Once safely moored in the harbour again the barge was fully pumped dry and then recovered to dry land for a thorough inspection.

**Mangaia Portal Shed.** This was a prefab six by portal frame cargo shed which was airfreighted with the detachment to Rarotonga in the C130. This task involved the construction of the shed as well as the pouring of a reinforced concrete floor.

**Repair of Aitutaki Customs Sheds.** This task was undertaken due to the delay of the stores slip from NZ. It involved reframing the concrete column timber truss shed and recladding it. Due to the simplicity of the task, it was completed in three days by LCpl Fee and his team of Spr Mohi and two Gurkas. LCpl Ganesh Rai and Spr Ganga Rai.

## Conclusion

All in all this was an excellent deployment right from the start with thorough reces and good support both in NZ and Rarotonga. The composition of the team was:

|                  |                                |
|------------------|--------------------------------|
| Lt J.A. Hill     | Contingent Comd/Diving Officer |
| Sgt A. Cook      | Carpenter/Job boss, 2IC        |
| Cpl S. Lynch     | Diver/Storeman                 |
| Cpl S. Reilly    | Carpenter/Job boss             |
| LCpl K. Fee      | Carpenter/Job boss/Diver       |
| LCpl K. TeKowhai | Vehicle Mechanic               |
| Spr J. De Silva  | Carpenter                      |
| Spr B. Grigg     | Carpenter                      |
| Spr S. Henderson | Plumber                        |

|                 |                    |
|-----------------|--------------------|
| Spr M. Leech    | Carpenter          |
| Spr R. Mohi     | Carpenter          |
| Spr B. Surridge | Carpenter          |
| Spr M. Walker   | Electrician        |
| Spr J. Wingar   | Carpenter          |
| PO J. Lodge     | RNZN Diver         |
| Ldr J. Kira     | RNZN Diver         |
| WO2 B. Lama     | QGE Clerk of Works |
| LCpl G. Rai     | QGE Carpenter      |
| LCpl P. Sherpa  | QGE Carpenter      |
| LCpl C. Gurung  | QGE Electrician    |
| Spr G. Rai      | QGE Carpenter      |
| Spr A. Thapa    | QGE Carpenter      |

## NO BRIDGE TOO FAR

BY SSgt Derek TOIA  
1 Field Squadron

During 1 Field Squadron's Annual Camp at Mangakahia, Northland during the period 27 Jan - 18 Feb 87 1 Troop was tasked to remove and reconstruct an existing suspension bridge spanning the Kahukuri River.

The bridge had been standing for 68 years and was constructed mostly of native timbers. It had a span of 100 metres with an overall length of 150 metres, including the ramps. Two 40mm steel wire cables anchored by buried concrete blocks and supported by 12 metre high towers carried the suspended superstructure.

The task involved removing the old bridge, prefabricating a new bridge and constructing it using the original ropes and anchors.

On reconnaissance of the bridge it was found that it had too little camber and flare and that the towers were of unequal height and level. As the anchors and ropes were to be used again in reconstruction, no adjustment to the flare could be made but the other discrepancies had to be addressed in the new design.

Planning for the task took three months and involved the production of detailed drawings for each of the prefabricating tasks, purchasing all the materials and manufacturing all the special cleats and brackets.

The initial tasks on arrival at the site were to set up stores and prefabricating areas, and to construct an aluminium foot bridge across the river to facilitate crossing of men and tools when the bridge was dismantled.

Removal of the existing bridge was then undertaken. Explosives were used to drop the superstructure from the main ropes. The best method, of those tried, was



metabel saddle charges attached to the round steel drop-pers with insulating tape. Ten bays of bridge were dropped at a time with a mid section cut to simplify removal procedures. Before detonating the charges it was decided to lash the main cables to the tower caps to nullify any desire they might have to fall down under whiplash. The steel anchor straps were also secured to limit any lateral movement during blasting, which could have bent them. This appeared unnecessary as no such lateral movement was noticed.

With the bridge free of superstructure, the ropes were lifted down one at a time by the Galion crane. The towers were left standing alone with just the support of one 35mm synthetic cordage guy rope front and rear. The ramps were removed by hand and fork-lift.

The towers were dropped simultaneously inwards using the following method:-

Cordage ropes, attached to the capsills, were tensioned using vehicles at opposite ends of the bridge, and well clear of the towers should they accidentally fall in the wrong direction. One vehicle then drove away and as the first tower dropped, the whiplash induced allowed the tension on the second rope to pull the other tower over. Both towers hit the ground within seconds of each other.

After a clean up stage this site was ready for reconstruction.

Prefabrication of bridge components was done concurrently and only three days elapsed before construction could commence. These three days were spent pouring concrete tower footings and rejuvenating/modifying the anchors. 2.5 metres was cut from each main cable due to corrosion, and a heavy steel plate was inserted to maintain the correct cable lengths. A lost was cut into the plate, where it lapped the existing strap, to allow for minor sag adjustments later. Two 'U' bolts were welded to the straps, either side of the slot, to facilitate tiffir attachment.

Work on the concrete tower footings began as soon as the towers fell. Extensive excavation, boxing and reinforcing went on prior to the pour, which used 19m<sup>3</sup> of concrete for both footings. The footing levels were adjusted at this stage to level both towers and high tensile bolts welding to steel frames were set into the concrete to allow for tensioning the towers down onto the footing. As the towers had lateral knee bracing, cantilevered ends were formed on the footings to support these. During the pour, two taunton concrete mixers were used and the galion crane assisted by traversing a pivoting 44 gal drum skip from mixer to boxing. Each footing took 3-1/2 hrs to pour. An accelerant was used

to speed up the curing time.

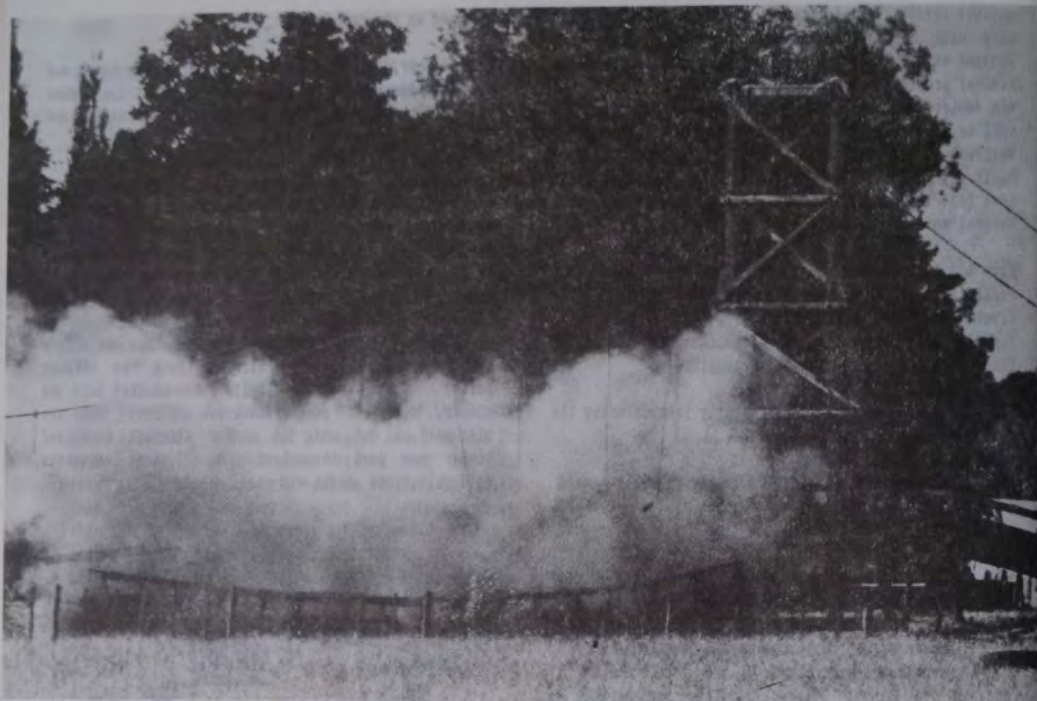
For the prefabrication stage, a 'spida' saw bench was set up. This was normally used for cross cutting timber to length but was also capable of angle cutting and ripping.

Where possible 'pryda' gang nail plates were used to speed up manufacture. They were not used on components subject to flex as there was a risk of the plates working loose, so bolts were used in these instances. In all locations where beams were butted (ie capsills to towers and piers) drift bolts were inserted. Threaded tensioning bolts were used on the tower capsills and groundsills to pull the components together and ensure that load was not bearing directly onto the through bolts. Where nuts and bolts were checked into the timber, a timber preservative was applied. This was also used on cut ends of timber although tanelized timber was used throughout. On all metal components cold galvanised paint was used.

Content removed due to copyright

The 12m towers were prefabricated, then transported to the site and craned into position. 'Expocrete' was used to bed the tower feet onto the footing and was allowed to set before tensioning. After positioning the towers, pipe bending formers (BBS 1-1/2") were placed in checks in the capsills and the main cables were raised by the crane into these. It is important that the towers are square to each other or the bridge will not be level despite an equal sag on each rope (Voice of experience!!)

At this stage, an initial sag adjustment was made using tiffirs on the anchor strap attachments. For future reference, the sag should be adjusted to 'correct sag plus 0.3m per 100 metres of bridge' with only the main cables up. This should produce the correct sag when the superstructure is attached. It was found that for a bridge this size, no further adjustment could be made once the decking went on. To measure the sag, a level from an upside down staff was used, held by a soldier on a traveler or on the bridge, depending on the stage of construction.



Destruction of the original suspension bridge, Mangakahia, Jan-Feb 87

The best traveler devised during this task comprised a 300 x 50 x 4m plank, suspended from two wheel barrow wheel hubs, with foot stirrups and toweling padding for seating on the outsides of the cables for two men straddling the plank. Two tool boxes (wooden) were attached to the ends of the plank for easy access and also to provide a backrest for the operators. The underslung foot stirrups were essential, in conjunction with safety harnesses, to provide a sense of security for the men.

Prefabricated suspender assemblies, comprising two droppers attached to a bay bearer with handrail posts and knee braces attached, were hoisted into position using blocks attached to the traveler hubs, and men on the ground to do the lifting. The traveler men made the attachment to the main cable then cut the haul rope free. Suspender assemblies were laid along the ground, at three metre intervals, beneath their intended position and they were raised in order from one end of the bridge to the other. The traveler was repositioned using haul ropes from each end of the bridge.

As the suspender assemblies went up, a stringer party followed, booming stringers out to the suspended bearers. Decking parties followed behind. The

suspender and stringer parties crossed the gap in two days and the decking took a further two days.

The bridge was to be used as a cattle race so the decking was minimally spaced and the sarking was continuous to the top of the handrails. This produced difficulties as timber sized differed and the bridge changes shape under load. Some ripping was required to match the bridge shape and gaps were left at the hand-rail posts to allow for flex. At 10mm gap was left between decking and sarking to allow for water run-off without allowing cattle to see through the gap.

Where the suspended portion of the bridge met the tower-sills, a sliding lap joint on stringers, deck sarking and handrails was made. This produced a 40mm step down onto the bridge and grease was applied liberally to prevent creaking. During normal trafficking the joint flexes approximately 10mm but a 100mm gap was allowed for extreme situations.

Ramps were constructed as manpower came available throughout the task and were the same design as the bridge proper except that the stringers spanned 6m between piers.



During the task, the arc welder was used far more than expected and three packets of welding rods were expended. Three phase power was required to drive a welder large enough to cope with the work asked of it. Gas welding and cutting equipment also got plenty of use. Some metal items were too large or difficult to be manufactured on site so were done by Avon Industries in Whangarei. This firm was found to be capable of producing every metal item that we had acquired from numerous manufactures for the task and should be considered for any future work in this area.

The bridge was completed in three weeks including weekend work and long hours. This put considerable pressure on the men and it was necessary to give them a 'blow out' at the 9 and 18 day points. This involved canceling the 0600 hrs PT session and extending bar hours the night before.

Although this was a 1 Troop task, the Cook Islands hurricane relief and Antarctic expeditions had left a total of nine pers in the troop. Therefore it was necessary to take 'ringers' from any source possible to complete the bridge. Outsiders employed were OC, 2IC, SSM, 7 Tp (TF) pers, clerks, electricians, a plumber, FEs, a painter, a draughtsman, storemen, cooks, stewards, and an Ordnance Supply NCO.

In light of the lack of experience in this type of work, safety was a serious consideration. Normal safety clothing was enforced with hard-hats and safety harnesses worn as required.

The bridge, and the other tasks, gave the unit PR a boost. Airforce and local paper photographers were common place and visits from the locals were frequent.

The task also provided invaluable experience to all pers involved especially in the fields of man management, task management and suspension bridge construction. As long as the knowledge is retained in the Corps and this experience is applied to future work, this task will have been a success.

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## 1 FIELD SQUADRON

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The Northern Sappers, like the rest of the Corps is busy doing its 'thing'. The new Squadron Headquarters is a two stage development with the first stage being completed at the close of 1986. Stage Two started in April 1988 and is expected to be complete by the end of October. (Is it complete Chaps? No further progress report received to date.)

The building is a timber framed structure with exterior cladding of Hardiplank, long run colour steel roofing all seated on a concrete floor of 1050.8 metres<sup>2</sup>.

Linings consisted of Gibraltar board with Rok fibre panel suspended ceilings. A courtyard off the cafe provides enough room for a barbecue area

### Papakura Battery Shop

This building is being built for 1 Pd Wksp by Lcpl Ross and Sprs Abel. Manion, Wilson. It is located next to the A&G workshop and is to be used for charging and storing batteries.

Extra hardfill was required for this task as the peat soil is known to be unstable, and the use of ground beams was incorporated into the floor slab which was poured in two parts. Due to the low height of the building, sub floor services had to be placed with considerable care. The placing of the pipes was critical.

Framing was for the most part pre-cut and stored at Sylvia Park until required. Construction is progressing well and should be completed by due date in mid January 1988.

The unit computer was used to run a network analysis on this project.

### LSV Garages

Lcpl MJ Leach was the gang boss for a group of five LSVs whose task was to build some sixteen garages in Papakura. The task commenced on 13 April with the first two weeks being almost completely held over for the digging and concreting in of 130 piles on which the pre-cut timber frames were to rest. Luxalon cladding was used throughout with beach coloured walls, tussock roofing and lignite coloured roller doors. The whole design blending in well with the existing camp buildings.

The young LSVs worked well and were an enjoyable and humorous bunch with whom to work. It is to be hoped that they picked up some useful skills which will be of value to them in 'civie' street.

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= A woman clothed in expensive furs went into a
= pet shop and asked the assistant,
= "Do you have any small dogs going Cheap?"
= he replied "No lady. Only small birds going Cheep."
=
=====
=
= Graffiti on a Wall in Wellington.
=
=
= "If sex is a pain in the bun
= you're doing it the wrong way."
=====
```

From: HQ Support Command  
To: 25 ESS and SME

Info: FMG  
Army GS  
Def Wks

Contracts. Construction of Linton Sewerage Ponds and New HQ SME

### SPECIAL CONDITIONS OF CONTRACT

The following supplementary and special conditions shall be read in conjunction with all plans and specifications for this Company's projects and will be strictly enforced:

1. The work we want did is clearly showed on the attached plans and specerfications. Our artitect whose had plenty of coledge, spent one hell of a lot of time when he drewed up these plans and specerfications. But not nobody can think of everything. Once your tender is in that's it brother! From then on, anything wanted by our artitect or by any of his friends or anybody else (except the kontraktor) shall be considered as showed, specifide or implide and shall be provided by kontraktor without no expense to nobody cept th kontraktor.
2. If the work is done without no extry expense to the kontraktor then the work will be taken down and did over again until extry expense to the kontraktor is satisfactory to our architchk.
3. Our architchk is right as drawed. If drawed wrong it should be discovered by the kontraktor, kerricted, and did right at his own expenses. It wont cut no ice with us nor our artitect if you point our mistakes which our artitect drawed. If you do it will be one hell of a long time before the kontraktor does any more work for us or him.
4. The kontraktor is not sposed to make fun of our artitect, his plans, or the kind of work we doing. If he do, its jist to bad for him.
5. Any kontraktor walking around the job with a smile is subject to revu of his tender.
6. If the kontraktor dont find all our artitects misteaks befor he tenders this here job, or if he aint got nuff sense to know that our artitect is goin to think up a bunch of new stuff that got to be did befor the job is completely did, then it is just to bad for him (meaning the kontraktor).
7. The kontraktor gotta use all good stuff on this job, no crapy material.



MEMBER



## \*\*\*\*\* 25 ENGINEER SUPPORT SQUADRON \*\*\*\*\*

Bearing in mind that the Liaison Letter is hopefully to be published before Christmas 1987 all 25 Engineer Support Squadron wish everybody a Merry Christmas and all the best for 1988.

Daylight saving only changed the lunch hour for the squadron in the latter part of 1987 and not the hours of work. Over the year the tasks accepted by the unit have presented a challenge for all trades, testing their professional skills to the limit.

Starting the year with Annual Camp caused all the excess Christmas and New Year calories to be run off. It also set the tone for a year of dedication to both horizontal and vertical construction.

The officer's accommodation at Linton which includes 20 bedrooms, lounges, sunrooms, ablutions and garages started the year's construction works. Car parks and roading at Ohakea shook out the tightness of the new plant. The new sewerage scheme for Linton proved our need for the heavy equipment we have and the plant we are about to receive. 2 Works Administration Team kept everyone well supplied with plans and materials.

25 ESS conducted its unit training for the 1987 training year in four phases from 3 August to 25 September. Phase One was conducted in the Linton area 3-13 Aug and concentrated on revising basic field engineering skills at a level commensurate with rank and experience. Sappers and JNCOs were practiced in the use of mines, obstacles, field defences, demolitions, field machines and watermanship techniques. SNCOs and officers undertook revision in minefield design, demolition reconnaissance, bridge design and tactics as they relate in both the Infantry and Engineer context to the Squadron.

Phase Two Exercise High Tussock was held in the Waiouru training area from 14-27 Aug, and practiced the squadron in all arms skills (SLR, M16, M72, M79 grenades) as well as equipment bridging. A MGB was built and stripped by day and night and included a most interesting and successful reverse bank strip. The biggest teaching point learnt from this exercise was that Troop Sergeants must not leave the other three members of the top panel party holding the panel *just because the billy boiled*.

Week two of Phase Two was devoted to soldier skills with a wide range of fieldcraft, RATEL, navigation and infantry minor tactics being revised. All SNCOs and officers participated in TENTS covering each of the phases of war. These evoked considerable discussion and demonstrated not only the OCs ability to win any argument by firstly shouting louder, secondly pulling rank,

but also his uncanny knack of positioning his Rover in the middle of ANY convoy to avoid opening or shutting

gates.

Phase One and Two provided the basis for Phase Three: Exercise Te Awaite Shores held from 31 Aug to 11 Sep on the Te Awaite Station in the south east Wairarapa area. The squadron operated as two separate troops based roughly on Plant and Construction troops administered by a mobile headquarters. Plant Troop constructed or refurbished a dozen culverts and upgraded 43 km of fern track, while Construction Troop built three permanent Irish crossings and upgraded station facilities. At the completion of the exercise access was possible to all 18000 acres of the station for the first time.

It was not a stated objective to practice troops in living from local resources, however, had it been, the squadron would have passed with flying colours. The supply of paua, fish, crayfish, eel and watercress was a testament to the prowess and vigilance of the section patrols that were deployed.

Basically during this exercise each troop had a section working, a section protecting the works site, and a section patrolling at any one time.

Highlights of Exercise Te Awaite Shores was probably the mini open day held for the local population. During the day various items of engineer equipment were demonstrated, as was a platoon attack after which a combined barbeque was held. Other memories include the rodeo antics of the station manager's son and Spr H<sup>2</sup> and LCpl Kelly's handling of the local livestock.

Phase Four was adventure training. Plant Troop spent a week in the Urewera National Park undertaking boating on Lake Waikaremoana, and horse trekking and tramping in the park. We based ourselves at the Uwhiarae Marae and could not have had better hosts. The troop split into three groups and undertook three small exercises on a round robin basis, returning each night to the Marae. A different person led each group for each activity. Several tracks were upgraded for the Parks Board.

This exercise was enjoyed by all however it must have stretched the patience of the locals to the limit. Tame pigs were shot when they should not have been, and deer were missed at point blank range when they should have been shot.

Incidents which stick in the mind are Spr Mikoz's pride in bringing home the bacon: a certain troop commander's stallion complete with rider trying to mount a certain troops sergeant's mare complete with rider: the sports day versus the locals: Monty Nason's interminable snoring and of course the hospitality shown to us by the locals.

The Construction troop spent a week boating on Lake Taupo which by all accounts was enjoyed by those who participated.

Generally speaking the unit training was a great success with all the objectives being attained. Just as importantly, it raised the level of morale and motivation to that required for the busy works season ahead.

#### Linton Camp

The expansion of the facilities at Linton Camp with the return of 1 RNZIR from Singapore has given 25 ESS the opportunity to select works using to its capacity its men, equipment and supplies and its command structure. 25ESS is now busy road-making in an area where 150 houses will soon "sprout". Mr Tizard the new Minister of Defence turned the first sod of this project. The unit will also be involved in the construction of the 1 RNZIR complex. The unit headquarters is soon to be one of 25 ESS's tasks and will no doubt give the vertical construction lads a chance to show their skills to the infantry.

On Saturday 17 October, 25 ESS ran a Corps Golf competition to assist the Corps Memorial's funds along. The very real assistance of Mr Bruce Malloch (who went round the local golf clubs drumming up support) and Mr Ian Lamb (both ex-sappers) ensured the success of the day. Over \$1,800 were raised from this competition which has not been run for two years. Thanks are recorded to all those involved.

1988 brings the promise of a busier year yet, once more starting off with annual camp. If you are passing this way 25 ESS are only too pleased to see you and show you round both the unit and some of the nearby work sites.

Quote for 1988.

"They have shortened the piece of string again. We still have to tie the same number of knots"

### 3 FIELD SQUADRON

The following material was sent when it was thought that we would have a Liaison Letter published last Christmas combined with material received this year..

The major works tasks with which 3 Field Squadron was involved in 1986 included the construction of a headquarters building for 1st New Zealand Scottish Regiment, completed and handed over in December 1986 - PC Webb can now rest in peace), a headquarters building for 3

Field Regiment, RNZA, handed over in May 1987 owing to repairs having to be effected e.g. doors warping etc), and the removal three buildings from the Ministry of Works and Development site at Twizel and their re-erection within Burnham Camp.

Both the headquarters buildings are of similar construction but that of the 3rd Regt was clad with Oamaru stone and has a slate roof. Sgt (Radar) Nicol was the construction supervisor for the artillery headquarters. The former MWD buildings from Twizel have been re-erected opposite the Scottish Regiment headquarters and now provide three bays for vehicles, one of which has an inspection pit. Included in the building is a mezzanine floor containing offices, stores, and a changing room. Ablutions are also provided in this building. The construction supervisor for this task was LCpl Lark.

#### 3 Troop Annual Camp 18 - 31 Jan 1987

The Troop commanded by Capt Ed Ludbrook, assisted by SSgt Chris Henry, deployed by road with the Squadron to Havelock where we embarked on our assault boats for a wet but enjoyable trip up the Pelorus Sound and thence by road to Clova Bay to start the Annual Camp.

The troop was involved in watermanship, navigation, and survival training, a medical exercise, and the repair of culverts, a woolshed and some minor tasks for the local school. We were also involved in infantry minor tactics at section level with the emphasis on:

- ambushing, and action on being ambushed
- patrolling, and clearing patrols
- range cards
- contact drills, hand signals, and formations
- sequence of orders and fire control orders
- harbouring, sentry duties, and field routines.

Local supplies of seafood were plentiful and of the highest standard. Kinas, pauas and mussels were much appreciated. The highlight of the troop's camp was an after match function against whom? and the smoke concert at which each troop had to give an item.

The exercise was carried out and approached with a lot of enthusiasm with the only thing lacking being a degree of experience.

#### Boatshed at Anikiwa 6 Apr - 29 May

LCpl Moran, assisted by one other carpenter and nine field engineers started the construction of a boatshed for the Outward Bound school at Anikiwa. The task involved the demolition of the existing shed, extending the concrete pad, erecting the steel portals, fitting the purlins and girts and the framing of the end and





Headquarters 3 Field Regiment under construction in Burnham Camp

side walls. The exterior cladding was Trimline colour steel. A 3m x 3m tilts-door and a 6m x 6m folding door were fitted. An interior partition mezzanine floor and stairs were constructed on the interior.

The carpentry experience gained by the FEs was invaluable, and this will assist them when they do their carpentry assistance programme as part of their FD training.

One of the lighter moments was seeing a certain sapper slide from the top of the roof over the lean to, he thought the spouting might stop his descent, flew right over it and landed flat on his rear end. A very white maori was seen to be leaving the site.

## ASSISTANCE TO B COY 2/1 BOATING IN FIORDLAND

by LCpl Kessell

I was employed as a boat handler, for 'B Coy' 2/1 RNZIR. But being a LCpl the OC of the Ex made me responsible for the mixing of the fuel to the correct type.

Maintenance of the boats and engines came under our tasks as well. Sapper Jellyman and myself were attached to 5 Platoon where our main task was to transport the platoon wherever they wanted to go. Our first part of the journey was from Manapouri township to Manapouri dam. Three Unimogs and a V8 Rover were taken across on what was a glorified LTR, a large two piece raft which easily accommodated all four vehicles at the same time. The raft was powered by having a fishing boat of reasonable size, tied to the side of it. This trip took about three hours.

Our trip in the assault boats, of which there were ten, took two hours as some were slower than others. At the

dam the boats were loaded on the trucks again and transported over the hills to Doubtful Sound. Sapper Jellyman and I were on the first trucks over the hills and our first job was to mix up the fuel. We had 6 x 200L drums and 3 x 20L tins of 2 stroke oil. The mixture is 50-1. The fuel was mixed before the boats arrived. As they arrived they were unloaded, all the gear put in, ie packs, weapons, life jackets, bars etc and placing on the motors. The fuel was allocated and the platoons moved out, one after another. My group moved out at around 4.15pm and we made camp around one hour later.

The Sound is a very rugged place, where cliffs come straight down and the depth is over 120 feet. There's not a lot of places to camp and the camp sites have to

be picked carefully as the tide rises about a metre and some places are swampy where the area is flat.

The first day was spent fishing and exploring the surroundings. We had a visit from some dolphins and our boat followed them for about a km or so. The second day we were rained out and we moved on the third day to a new camp site, a small inlet off 'Crooked Arm'. It took approximately an hour to reach the new site but it made no difference to the rain. It continued to rain for the duration of our stay. On day four, two sections went to a lake above the camp site, which was about 3 1/2-4 km away but they never made it. Weapons and live ammo were taken for deer and pig stalking, some signs were seen but no game was sighted. We moved to our last location on the sixth day, which was in the middle of 'Malaspina Reach'. We were supplied with eight days rations, which we didn't need, as we caught enough fish to feed us all. We went abseiling, using Dumars. The Dumars were put up by climbing the rock face, using bushes etc, for leverage, while the boats were held as still as



1 NZ Scottish Regiment Light Aid Detachment buildings being re-erected in Burnham



The Headquarters building for 1 NZ Scottish Regiment as seen on 28 August 1986

possible. While the others were practicing, two drivers and myself went deer stalking, above the camp site. The bush was relatively light for such remote country. We decided to head for one of about four small lakes above us, which was 14 kilometres above, but we missed it by

about 500 metres. We carried on further up but luck deserted us again we had no sightings of deer. The climb took about 2½ - 3 hours and we reached a point approximately 300 metres below the snow line before we began descending on our way back to the camp.



All the supplies for the exercise were boated in from 'Doubtful Sound' village, by the base camp staff. One casevac happened. One soldier broke his leg, twisted the other and received badly bruised ribs after falling 35-40m down a waterfall. The second to last night out we were lashed by 30-40 knot winds resulting in a 0.6m swell which pounded the boats a bit. We had to bail out and re-tie the boats. The trip back was uneventful, although three litres of rifle oil mixed with the last drum of fuel didn't help matters much. On arriving at Manapouri the boats and all stores checked and loaded onto the trucks. The return trip took about ten hours arriving back at Burnham at about 0045 hrs.

### 2/1 RNZIR Battalion Headquarters Building

After receiving financial authorisation for this task on 6 May 87 ordering materials for 2/1 Bn HQ commenced. The carpenters moved on site on 11 May for preliminary site set-up. After moving the four new site huts into position, and putting up the compound for the building supplies, the seven tradesmen and seven apprentices under command of Cpl Hugh Lawrence started the boxing for the first concrete pour.

The building, which was designed at Defence Draughting Office in Wellington, is in the shape of an octagon with a cobblestone courtyard with a covered walkway in the centre. With a floor area of 1310m<sup>2</sup> it is the largest building of its type undertaken by 3 Field Squadron.

It will provide office space for 2/1 RNZIR Bn HQ personnel, along with office space for the Logistics Company, Support Company, and the Regimental Police section. A Medical Treatment Room and Medical Store, and offices for the Battalion Medical staff are also included in the building as is a Conference cum Briefing and History Room. To complete the complex a Lecture/Smoke Room with kitchenette, and Ablutions and showers make a fine building. The construction of this job is expected to be completed by 30th May 88 at a cost of around \$1.3 million.

The floor and foundation walls were poured as one. Accro Metal Shutters, were used for boxing the floor slabs with 150 x 100mm chases bolted on to make the recess for the stone veneer to sit on. The use of metal shutters sped up the boxing process considerably, bringing the pour dates forward sooner than what would have been achieved with wooden shutters. They are also quick to dismantle as was discovered when one side was removed so that the NOW could recover a mains cable that had blown after having been pierced by an OPN pin.

All the floor area was placed by concrete contractors using a concrete pump and finished by the carpenters, who had to wait around until the early hours of the

morning for the concrete to set, due to the cold conditions. One pour finally set about two days after it was poured due to the inclement weather. 210m<sup>3</sup> of concrete will be incorporated in the building by the time the job is completed.

The exterior cladding is a soft white block called Oamaru stone, which is easily cut by a handsaw, will be laid by a sub-contractor. Wooden doors with aluminium door jambs and aluminium windows are used throughout.

High security areas are incorporated in various areas in the building. These involve six inch staggered stud sound proof walls, with double glazing and air conditioning for the comfort of the occupants.

The roof is of colour steel, with cantilevered trusses into the courtyard to cover the walkway. This walkway is of stamped concrete which has proved to be very successful, as well as being extremely cheap compared to using paving stones.

Finally the interior has been colour coordinated by IDU in Wellington, using the standard infantry colour: 'Green', mixed with several other colours. Once finished this should be one of the best buildings in the Army.

### BOATING ASSISTANCE 2 CANTS CABLE BAY EXERCISE by

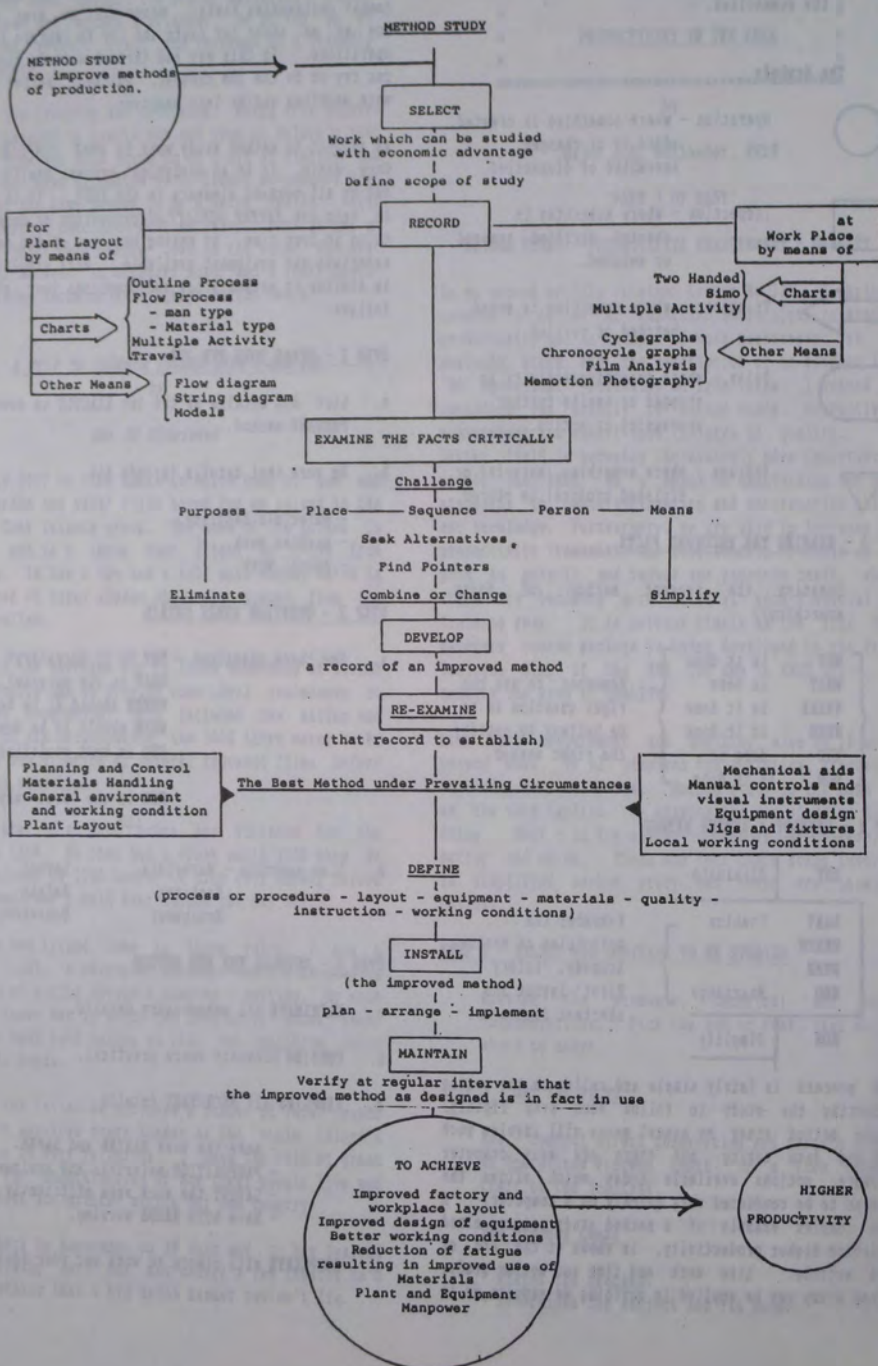
LCpl BA Lovell

During the first two weeks of March this year a small select team of sappers and NCOs, complete with assault boats and lancers, from Support Troop 3 Field Squadron deployed to the Nelson area to assist a 2 CANTS/Australian Territorial Contingent in the finer arts of watersmanship.

Attached to our group during the Exercise was a section of Australian Assault Pioneers. The first obstacle to overcome was the fact that the Aussies' boating commands are completely opposite to our own. Needless to say we had a few close (very close) shaves. The outline of our training was as follows:

To introduce the territorial companies to the assault boats and give them confidence in and on the water. To achieve this we took them 40 metres from the shore in complete marching order and threw them overboard letting them sink/swim to the banks. (Shades of Morgan the Pirate)

To ensure they fully understood the procedures of all types of assault landings and assault pick-ups.





e. **WRITE UP** your proposed new method.

#### **STEP 4 - APPLY THE NEW METHOD**

- a. **SELL** your proposal to the 'Boss' and your 'Workers'.
- b. **FINAL APPROVAL** from all concerned on **SAFETY, QUALITY, QUANTITY** and **COSTS**.
- c. **IMPLEMENT** and use the new method, until a better one is developed.

Why don't you try out the method study and work simplification examples on a task you are involved in at the present time and see how you get on. Unless the task has already been examined and improved, I know that you will come up with modifications that will improve your productivity. Both the British and US Armies are very heavily involved in the whole area of productivity studies and improvements, similarly too with the Australian Army, but on a smaller scale. The respective engineering Corps in these Armies use the process of IE and MS to continually update and improve their operations, methods, equipment and use of resources. Many of the manuals we use as references texts for combat engineering, have been developed through these IE and MS processes. Therefore, we in the RNZE should continue to be aware of what productivity improvement is all about and how to apply some of the more simple and applicable principles in improving our methods and use of resources. By the way, the Army Training System or ATS (systems approach to training) applies many of the same IE and MS principles, but that is a separate field which somebody might like to address in a future article.

**Productivity measurement** is also a very simple and logical process. It can be used separately on each resource employed in an operation, or reflect a total of all combined results. Essentially, we are looking at resources used (input) in a process and relating them to the end product (output). In the two previous articles, I explained the definitions and the process of work measurement. Once we have established a lowest common denominator (time), we can use this standard throughout the examination of our process or job. In the RNZE, we don't often relate time to money, or the cost of our time. However, we can make a 'profit' in terms of time, as with more time on our hands, we can do more or other things.

By conducting work measurement and method studies, we can establish the correct or best methods and times for doing things. Those then become our standards to work to and if then we have increased our productivity.

Certain tasks will have fixed methods, like equipment bridging. However, we can improve on our building times by more training and the employment of plant and machinery, e.g. fork lifts and cranes, etc. On the water point, we can improve our productivity by perhaps employing extra tanks to allow the water to stand before putting it through the Type 10/A5 trailer system: fine tune the chlorocel units to reduce the demand on bulk salt; aerate raw water with pumps and tanks after sedimentation, to reduce the quantity of filter powder required or time lapsed before we have to flush the filter bed. How do we measure this productivity? Simple, we apply a percentage to improved rate of doing the task, or use of resources. Once we have the standard, improve on the standard, work out the difference and show this as a percentage of the original standard.

#### **Example:**

To construct a battalion HQ CP takes say 10 men, 24 hours and 200kg of defence stores to complete the task manually. However, a mechanical backhoe (BH) is available and through its use, the CP only requires eight men for 16 hours (still 200kg defence stores) to complete construction.

Lowest common denominator is time (man-hours). Therefore -  $10 \times 24 \text{ hours} = 240 \text{ man hours}$ . Using BH -  $8 \text{ men} \times 16 \text{ hours} = 128 \text{ man hours}$ . (In this example, don't worry about the BH time!) So, we saved 112 man hours on the task or improved our time (in man hours) by 46.6%. Say using the BH, becomes the standard time.

Another troop examines its methods and still using the BH, manages to prune another hour off the standard time of 16 hours for 8 men, to 15 hours  $\times 8 \text{ men} = 120 \text{ hours}$ . Therefore, by further improving the method, the troop reduced the manpower (and machine) input by 8 man hours. This reflects a 6.25% improvement on standard (128 man hours) time.

Although a simple example, remember there are many other variables and factors to consider, like the condition of the ground, daylight/darkness, state of the men, enemy interference, BH capacity and so on. However, it serves to illustrate how time is used as the basis for measuring performance and once a standard is established, measuring the productivity by improvements on that standard. We can apply this concept to everything we do and more particularly to our construction role and improving on our methods and use of resources to increase our productivity. I must add at this point, that we should balance our productivity against the training value derived from our work and tasks. As training value is difficult to measure in specific terms, nevertheless it should not detract from our





# Clearer communications for NBC-dressed troops



◀A MAN Portable Public Address System (M/PPAS), developed by US company AudioPack Sound Systems, is designed to alleviate troop communication problems during NBC warfare.

The system enables clear, loud speech communication up to a distance of 80 m while personnel wear protective masks and clothing. The US Army has already tested M/PPAS both in the USA and overseas as a solution to command and control in NBC situations.

The equipment comprises a lightweight, self-contained speech amplifier with a snap-on microphone for the protective mask. It is fabricated in durable linear polythene and all internal electrical parts are constructed to withstand combat conditions in all weathers.

Tests have put M/PPAS through temperatures ranging from -40° to 140°C. A reusable 110 V/220 V NiCad battery powers the system and this provides 10 hours of communications after each charge. A 12 V/24 V charger is also under development for field use.

**MANUFACTURER:** AudioPack Sound Systems, Slater Corp, 10011 Walford Ave, Cleveland, Ohio, 44102, USA.

## RNZAF to review pilot training courses

THE ROYAL New Zealand Air Force may restructure its pilot training course after it acquires new trainer aircraft to replace its fatigue-troubled Strikemaster jets.

Op Capt Ken Gayfer told *JDW* the RNZAF would take a close look at training programmes for new pilots after it decides which of the seven candidate aircraft

available to order (*JDW* 27 June).

Gayfer said the present BAe Strikemasters are suffering from wing-fatigue and have only 120 flying hours left before the wings have to be replaced. He said new wings have been ordered, but even so, the aircraft must be replaced by 1990 at the latest.

On a related subject, a reliable source told *JDW* that the Lear Siegler avionics update for the 22 RNZAF A-4 Skyhawks is going ahead as planned and that the retrofit will give the aircraft "better target acquisition capabilities by several miles, than the F/A-18."

The A-4Ks and TA-4Ks are being modernised with new radar, navigation and attack systems, in addition to major structural refurbishment including new wing spares.

First deliveries of the updated aircraft are expected by January 1988.

## N Zealand ups defence spending by 18.75%

NEW ZEALAND has decided to lift its defence spending this year by 18.75% to \$NZ1.30 billion (approx \$US767 million) from 1 April this year.

The budget will allow the Ministry of Defence to increase new equipment spending by \$22 million to \$222.3 million and \$76.6 million extra for operating costs. An additional \$48 million is being charged for goods and services taxation.

Among the projects contributing heavily to increased capital spending are a new defence communications network, a new tanker for the navy and payment for new rifles, artillery and vehicles.

The regular forces' manning ceiling has been set at 13 286 military personnel and 2738 civilian and support staff. The government has also said it will review defence administration and resource management under the guidance of a private sector management consultant.

## Australia to update Nurrungar station

AUSTRALIA is to update the Nurrungar Joint Defence Space Communications station in South Australia, according to Mr Kim Beazley, the Minister for Defence.

Beazley said that one of the large communications antenna dishes and the protecting dome at the Nurrungar facility is to be replaced by a new dish and radome and a small third radome would also be added. Work is expected to start on the project later this year.

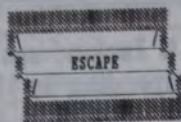
Nurrungar is a joint operation between Australia and the USA. The two governments also operate a larger site at Pine Gap. Beazley said the new technologies being used at Nurrungar would enhance existing measures against deliberate or inadvertent interference with communications.

Australia is also building a major new electronic listening post at Geraldton, some 400 km north of Perth (*JDW* 4 April).

Content removed due to copyright

## NEWS IN BRIEF...

**NEW ZEALAND TRAINER VISIT:** A Royal New Zealand Air Force team has begun a six-week tour of Europe to evaluate potential trainer aircraft replacements for its fatigue-troubled Strikemaster trainers. The Jet Squalus, Short's version of the Tucano, the Pilatus PC-7 and PC-9, the CASA 101 and Aermacchi's MB339 are among the aircraft to be looked at. However, Frank O'Flynn, New Zealand Minister of Defence, has already said that the Pilatus PC-9 being adopted by the Australian Air Force would be suitable and should head the team's agenda.



by

Col. R.C. Pemberton MC and Bar

Being wounded and a prisoner is not much fun, either as a prisoner in enemy hands, or as a prisoner in the most conscientious and zealous care of a British Army Hospital. In the latter you are just a number, just a sick helpless body with no means of escape.

However, there are advantages in being a sapper with the motto *UNIQUE* when indeed you have done training and engineer works in many places and have become familiar with the local communications system. Finally to set the scene, any of us can be grateful for a "friend at court", a mate in the sappers ready and willing to give prompt help as soon as asked.

This true story will tell you.

After being wounded (in the head) at El Mreir in July 1942 we lay at the mercy of shell fire, the heat and flies. Some of us slipped away as darkness fell and guided by Brig. George Clifton, I managed the long and anxious night walk back to our own lines.

Having given the CRE my part of the sapper's story I started on the journey via Dressing Stations and the Casualty Clearing Station firstly to 64 General Hospital at Alexandria and thence by night hospital train to 22 General Hospital near Ismailia on the Suez Canal en route to Palestine. The trip by ambulance back to Alexandria was just a bad dream. It was a long way, much of it over bumpy dusty desert tracks and my head ached abominably.

At 64 General Hospital there was a real bed, and there I was X-rayed and was awake enough to have a jolly good peep at the X-ray plates. I didn't much like the look of the foreign bits in my neck and I tried to persuade someone to send me south to Cairo and Helwan. Not bloody likely! The line of evacuation from that hospital was elsewhere and once in the stream of evacuation of wounded you can't get out of it except by dying.

At 22 G.H. near the canal I suppose urgent cases were attended to but the rest of us were fed and had dressings changed but otherwise just lay for days waiting for the next move. I was feeling really ill and was getting rather worked up about it. I saw no future in my going to Palestine so in desperation I requested an interview with the C.O. of the Hospital.

I explained to him that I was a New Zealander wanting to get back to the Division as soon as possible, my base

was a Maadi (south of Cairo), my base kit and spare gear was all at Maadi, New Zealand's own hospital was at

Helwan a little further south and that was where I wanted to go - NOT to Palestine.

The Colonel was very pleasant but explained to me patiently that his job was to care for the wounded and pass them on along a predetermined route. He understood what I wanted and would like to help, but he had no transport for carting individual patients wherever they chose to go round the Middle East. He could do nothing about it.

"Very well Sir, may I use your telephone please?"

"Oh yes, I suppose so," he agreed, "Help yourself."

It happened that sometime before we had been training on the canal near Ismailia and doing construction work for B.T.E. (British Troops in Egypt). In charge of a detachment of sappers I had frequently phoned my unit headquarters in Maadi Camp to arrange supplies and report progress so I knew the telephone routine.

"Exchange - Ismailia please; Ismailia, put me on to Middle East please; - Middle East? - B.T.E. please; B.T.E.? - Maadi Camp please; Maadi? Garrison Engineer please, I want to speak to Captain Bucknell! Buckle, Dick here. I'm at 22 G.H. near the canal. Will you jack me up a bed a Helwan and get someone to come and get me? I've got shrapnel wounds, head, neck and face. OK? See you later."

How lucky I was that the lines were clear and "Buck" was in his office. It was just as quick as you can read it and the Colonel was mighty astonished. I went back to bed and slept soundly until a few hours later Bucknell arrived in a staff car from halfway across Egypt, signed me out, wrapped me up and took me away.

At Helwan Hospital they were expecting us. I was X-rayed almost forthwith and was then marched up to the theatre for the first extractions. Attention at last, - and all because I knew the Garrison Engineer who was another NZ Sapper. I had become an individual who mattered, among my own people - not just a rather small number.

Three weeks later I was discharged convalescent, two more weeks staying with friends getting stronger daily and it was time to go back to the Desert.

So maybe it is not just what you know or who you know. In a jam things that count are luck, politeness, knowledge of the drill and, above all, knowing a chap who has the authority and resources and who can be relied on to "go the extra mile."



# UK ABLE to bridge the gap

THE British Ministry of Defence is currently evaluating a number of competitive tenders from British industry for a contract to build BR90, a family of military bridge components for the 1990s. This family has been developed at the Christchurch outstation of what was, until 1984, part of the Military Vehicles and Engineering Establishment (MVEE); it has now been absorbed, along with other sections of MVEE, into an enlarged Royal Armament Research and Development Establishment (RARDE).

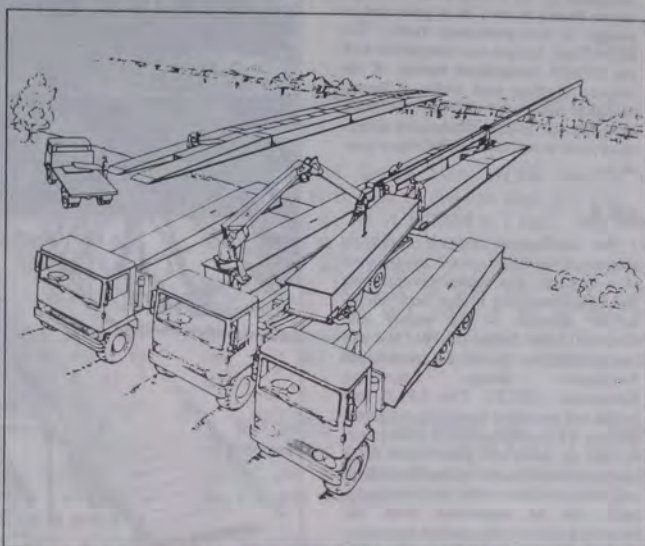
For filling relatively narrow gaps the British Army already uses a system of fascines, or bundles, of tough high-density polythene pipes. This system offers improvements over earlier fascines in terms of weight, making the bundle easier to carry and recover for re-use and, being hollow, the pipes offer reduced resistance to flowing water. The fascines are usually carried on the Centurion-based Assault Vehicle Royal Engineers (AVRE) or on a Combat Engineer Tractor (CET). A 5m gap normally requires one fascine and an 8m gap, two. A smaller version, the Mini Fascine, can be carried and laid by FV 432 and Spartan armoured personnel carriers.

In cases involving wider obstacles, the BR90 family employs identical modules for both close support bridges and deliberate support bridges. The former classification comprises bridges small enough to be carried on, and launched from, a turretless tank. Some may be folded, and they must be compact enough to allow the carrying tank to manoeuvre in villages; and they should not weigh much more than a gun-tank's turret, gun and ammunition. The launching crew is protected by the armour of the tank hull when going into action. Speed of bridge erection and armour protection for the crew are important factors in close support bridging, as the bridge-laying tank will probably be one of the leading vehicles in a tank attack where gap obstacles are encountered.

In contrast, deliberate support bridging is used further to the rear, not within the contact battle, but possibly within the range of enemy artillery. Speed of assembly is still important, but the personnel involved do not require the same degree of protection. Wider bridges may involve the use of a number of spans with fixed or floating piers.

## BR90

Within the BR90 system there will be three tank-launched close support bridges of different lengths, replacing the in-service models which currently consist of the 24.4m No. 8 Tank Bridge, (a scissors bridge which is carried folded on the Chieftain bridgelayer); and the 13.4m



*ABLE being used to erect a 32m bridge. The launching rail, extended across the gap, supports the bridge components. A completed bridge is in the background*

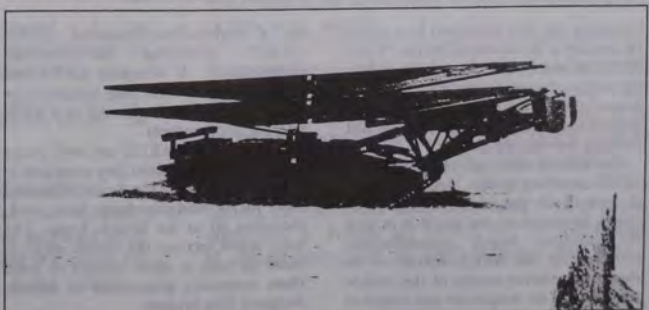
No. 9 Tank Bridge, (which is non-folding, carried inverted on the same bridgelayer, and launched by being swung vertically through 180°).

The new BR90 tank-launched bridges will be the 26m No. 10 Tank Bridge, (folding scissors type); the 16m No. 11 Tank Bridge (non-folding type), and the 13.5m No. 12 Tank Bridge (non-folding type). A system has been developed to allow two of the 13.5m No. 12 bridges to be carried, one on top of the other, on the same launching tank, enabling the crossing of two different gaps, or the same gap in two different places.

If shallow gaps are wider than the available bridges' capabilities, it is usually possible to use two tank-launched bridges successively, with the second being launched to overlap the first. A trestle, to

be attached to the outward end of the first bridge, has been developed for use in crossing the numerous wide and steep-sided canals to be found in the (BR) Corps forward area of West Germany. The use of the trestle will raise the height of the outward end of the first bridge, rendering the laying of the second easier and producing a total crossing with less steep gradients.

It may be noted that whilst these new British bridges capable of carrying Class 70 vehicles are relatively long and fast to lay, there are disadvantages. When being laid they present an observable silhouette in excess of 13m high in the case of the No. 10 and No. 12 Tank Bridges, and 16m high for the No. 11. This is in contrast to the West German Biber system in which the 22m-long Class 50 bridge is launched

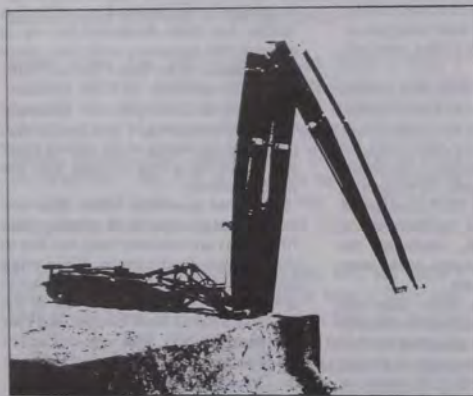
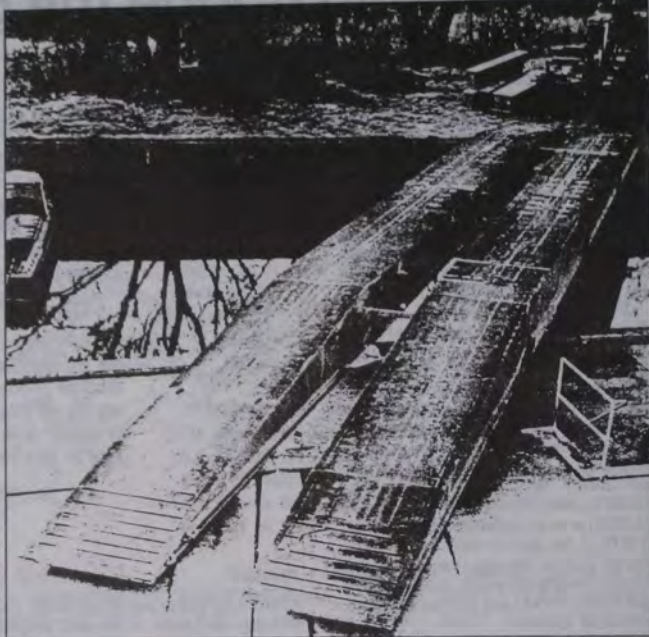


*A model of a Chieftain bridgelayer carrying two 13.5m No. 12 tank bridges*

horizontally. Further, the Royal Engineers do not usually come very high on the British Army's list of priorities for receipt of new-generation tanks. The BR90 Tank Bridges are compatible with the FV4205 bridgelaying variant of the current Chieftain tank which, it seems, will have to be used well into the 1990s alongside, and even in front of, the newer, faster, and more reliable Challenger gun-tanks.

## ABLE

The deliberate support bridging element of the BR90 system has resulted in a quicker, less manpower-intensive and longer-reaching bridge than the in-service solution — the widely sold Medium Girder Bridge (MGB). The new concept involves the use of a truck-based Automotive Bridge Launching Equipment (ABLE). The ABLE first builds and extends a launching rail across the gap. A crane on the ABLE is then used to pick up ramp and girder units from trucks stationed on each side of the ABLE and positions them so that the initial ramp units can be suspended from the launching rail and also enables successive girder units to be linked to the preceding ramp/girder units. As each new pair of units is attached, one on each side of the



A 32m bridge after launching with ABLE on far bank (above); at left, a model of a Chieftain bridgelaying launching a 26m No. 10 tank bridge. The 13m high profile would provide a considerable radar target

launching rail, it is pulled out by a winch via a pulley at the far end of the rail. When all the necessary units have been added, the bridge is lowered slightly to rest on the ground at each end and the launching rail withdrawn. Deck units can then be laid by hand between the girders.

The limit on the length of a single-span ABLE-launched bridge is governed by the length of the launching rail. The design limitation on the length is in turn the cantilever launch counterbalance provided by the ABLE vehicle — in short, the relative weight of the vehicle compared to the weight per unit length of rail and the length of the rail. The current aluminium alloy rail will launch a 44m-long bridge but work is being carried out

on a carbon-fibre-reinforced plastic (CFRP) launching rail concept demonstrator. A 60m-long CFRP rail would enable a 56m long bridge to be launched and this is planned as a BR90 mid-life improvement.

Engineers at RARDE are well aware that for BR90 to succeed they must look to the world market place. Some 500 sets of 30m MGB bridging have been sold, including 80 to the British Army. The table below sets out the relative effort to build (ie men x time) needed to build three successive generations of British-designed 30m bridges:

|            |     |
|------------|-----|
| BAILEY     | 270 |
| MGB        | 10  |
| BR90(ABLE) | 1   |

## CFRP

RARDE is putting a great deal of research effort into carbon-fibre-reinforced plastics. At the end of the rainbow are lighter bridges, or longer spans, which will be quicker to build. The present thrust involves the use of a very high proportion of carbon fibre, (glass or Kevlar may also be used), mostly at 0°, a fibre volume of 50–55 per cent and epoxy resin. Advanced filament-winding techniques are also being trialled. The problems are different from those involved in aircraft production — wings do not need to withstand the wear from tank tracks — and the cost element is also very important.

Much of RARDE's current work is aimed at producing experimental, (ie not for production) replacement components for the MGB system, which are then tested in the field by the British Army. Thus far, three different models of composite sway brace have been developed for trials, as have selectively-reinforced aluminium alloy deck units. Other MGB substitute fibrous composite components structurally tested prior to service entry include a launching rail light, pedestal landing rollers, and ramp units. These components have resulted in weight savings of 20 to 40 per cent over the equivalent welded aluminium items (made of DGFVE 232B aluminium/zinc/magnesium alloy). The results of this practical experience will be used to develop CFRP components for future bridge designs. Robert Barker ■



## ENGINEERS IN GREECE

Col Gordon Lindell, DSO, OBE, ED, RNZE (Retd)

The following article was prepared by Colonel Lindell for the Chief of General Staff's exercise in 1982. It was thought fitting that the information would be of value to the wider body of the Corps rather than just the senior ranks involved in the exercise. Readers will note that there was a different organisation to the present with companies rather than squadrons, and sections rather than troops.

The 2nd New Zealand Division Engineers in Greece during the period March - May 1941, comprised:- HQ Divisional Engineers, 5 Field Park Company, 6 and 7 Field Companies, and 19 Army Troops Company, all units being fully mobile.

There was no special training prior to the move as the sappers included a high proportion of civil engineers, bridge builders, quarrymen with explosive experience and railwaymen, who with their military training were well fitted to meet the tasks which lay ahead.

The principal tasks confronting the NZE in the rugged Greek terrain were:-

- a. Road reconnaissance, maintenance and improvements, and forming new access roads.
- b. Supervision of Greek labour on roads and anti-tank ditches prior to the German attack.
- c. Preparing demolitions in the *ALIARNON*, *OLYMPUS* and *SERVIA* passes and during the withdrawal, demolishing bridges, road blocks, railway tunnels, facilities and plant.
- d. Laying anti-tank mines at demolitions and road blocks and approaches.

Normally companies were under command of the Commander Royal Engineers (CRE) or in support of the Brigades. No 1 Section, 6 Field Company was under command 4 Brigade at the *SERVIA PASS*, and No 3 Section, 7 Field Company came under command 5 Brigade during the final demolitions in the *OLYMPUS PASS*.

After their arrival in Greece during March 1941 and in early April, NZE were deployed on the *ALIARNON-OLYMPUS LINE*, on road works a defensive anti-tank ditch on the coastal sector, and bring forward explosives for demolitions. Demolitions were prepared on the bridges

across the *ALIARNON* river and north of *KATERINI* and on bridges and road blocks near *KATERINE*, and in the pass.

5 Field Park Company store section remained at *LARISSA*. NZE units began to disperse about this time, 7 Field Company arrived at *KATERINE* on 7 April and moved to *KOKINOPLOS* on Mt Olympus improving the road to the village and extending it to provide a withdrawal route for 23 Battalion on the right flank. Eight kilometers of road were completed but the route got beyond the resources and time available and 7 Field Company less No 3 Section was withdrawn to *TURNAYOS* on 15 April.

No 1 Section of 6 Field Company came under command of 4 Brigade and moved to the *SERVIA PASS* 8-9 April and carried out successful delaying demolitions covered by the 4 Brigade rearguard.

The bridges across the *ALIARNON* were blown on 8-10 April and on the 14th the roadblocks and bridges at the eastern end of the *OLYMPUS PASS*. The final roadblock in the pass was blown early on 17 April. These demolitions were carried out by detachments of 5 Field Park, 6 and 7 Field Companies. Unfortunately they did not impose much delay on the enemy.

On 28 March, the Second in Command 5 Field Park Company had reconnoitred the rough track from *KATERINE* to *PLATANON* and reported to the CRE. On 9 April, No 1 Section, 19 Army Troops Company moved up this track to the *PLATANON* railway tunnel on the 21 Battalion defensive line. With insufficient explosives and no plant to drill holes in the tunnel lining the demolition ordered on 14 April was only partially successful. Anti-tank mines laid on the ridge above the tunnel destroyed several enemy tanks. The next tunnel near the *PINEOS GORGE* was successfully blocked with a demolished box-car and cut rails, and the ferries at the *PINEOS GORGE* destroyed. These demolitions effectively delayed the German advance in this vital sector.

On 15 April because of the withdrawal to *THERMOPTILAS* CRE 2 NZ Division met the Chief Engineer "ANZAC CORPS" and was allocated the area back to *LARISSA*, east to the *PINEOS GORGE* and west to *TRIKKALA*, with orders carry out demolitions in depth along the roads and defiles. 7 Field Company had the main road, 19 Army Troops Company *LARISSA* and the *PINEOS GORGE* road, with 6 Field Company supporting 6 Brigade and 5 Field Park in reserve south of *LARISSA* controlling the Royal Engineers dump there.

On 16 April, 19 Army Troops Detachment hurriedly moved from *LARISSA* and demolished the railway bridge at the south end of the *PINEOS GORGE*.

Events speeded up. On 18 April 7 Field Company demolished the bridge at *ELVYTHROKHORION* south of the *SERVIA - OLYMPUS* road junction, on orders from the Divisional Cavalry rearguard commander while under fire from enemy tanks and infantry. The next roadblock, blown and mined in the gorge north of *ELASSON*, and effectively kept under fire, caused the enemy to build an alternative route. 6 and 7 Field Companies carried out and mined many demolitions between *ELASSON* and *TIRNAVOS*, including the ill-fated *TRIKKALA* bridge for which the 5 Field Park Company tried to provide an alternative.

19 Army Troops Company blew the two bridges leading into *LARISSA* on 19 April after the rearguard had withdrawn. 5 Field Park Company demolished the bomb store at *LARISSA* airfield. Also, on 19 April 19 Army Troops Company sappers with railway experience successfully mobilised a train and moved 26 Battalion from *LARISSA* to *KIPISOXHORI* near *LANIA*.

On 18 - 19 April sappers from 6 and 7 Field Companies were sent on urgent repairs to the *LARISSA - VOLOS* road. The 7 Field Company detachment was directed down a blind road from *PHARSALA* and had to turn back.

NZE units reached the *LANIA - NOLOS* area at *THERMOPHYLAE* by 20 April in reasonable order. 6 Field Company being the hardest hit. Further demolitions were done in the *LANIA* railway yards and on the *LANIA - VOLOS* and *LANIA - NOLOS* roads.

On 22 April the CRE received orders for the withdrawal and embarkation. He wrote his Engineer Order to take his units out which read:-

1. CRE Orders to Company Commanders 15 April 1941, waiting at 5 Field Park Company below *KOKINOPOLIS*.
2. Mystery still surrounds the actual events of that day and it is not known for sure whether these two men were killed by the demolition or by the German paratroops.
3. Well known military homily often re-inforced when it is forgotten.

Cover Photo: The new Headquarters of the School of Military Engineering, Linton Camp.  
Commonly known as the 'White House'.

"Engineer units will carry tools and working stores including truck compressor equipment, but apart from personal gear, fighting equipment and transport, everything else will be destroyed. No attempt will be made to salvage vehicles breaking down en route. They will be put off the road and rendered useless but not burned."

The CRE was given command of the rearguard and with a demolition detachment from 7 Field Company he followed the rearguard from *THERMOPHYLAE*, and later south of *CORINTH* carried out demolitions assisted by his adjutant and driver.

On 24 April No 2 Section 6 Field Company prepared the *CORINTH CANAL* bridge for demolition having adequate explosives for the task. Early on 26 April the bridge was captured by German parachutists, but the charges were exploded and the bridge demolished. Two 6 Field Company sappers went missing at this bridge site.<sup>2</sup>

#### LESSONS LEARNED FROM THE CAMPAIGN.

1. Time spent on reconnaissance is seldom wasted.<sup>3</sup>
2. Difficulties of communication and control when units split up during a withdrawal.
3. Adequate plant needed for road works and demolitions.
4. Demolitions must be covered by fire to be effective
5. Some knowledge of bridge structures is a sapper requirement.
6. The uncertainty of written demolition orders during a rapid withdrawal.



COPY  
SECRET (at the time)

CRE 13/3A  
 22 Apr 41

ENGINEER ORDER No 43

Ref Map ATHENS 1:250,000 SHEET S3040

(1.) SITUATION Owing to the collapse of the Greek resistance, NZ Div is withdrawing from present positions commencing night 22/23 Apr and is re-embarking up to night 26/27 either in the vicinity ATHENS or from KHALKIS ISLAND (probably in E49).

METHOD

(2) ROUTE ATALANNI (Y72) - LEVADEIA (60) - THEBES (THIVE) (E08) thence either KHALKIS (E49) or ELEFSIS (E25) - ATHENS.

(3) TIMINGS

(a) 4 INF Bde. Moves night of 22/23 April and occupies covering posn area THEBES. Disengages night 25/26 April and moves to beach not yet determined and re-embarkes.

(b) 5 INF Bde. Disengages after dark on 22/23 April and "lies up" for 23 April in area AGOOS/CONSTANTINOS (Y6635) On night 23/24 April 5 Inf Bde moves by MT to areas ATHENS and embarkes from beaches.

(c) 6 INF Bde. Holds present posn for 23/24 Apr and on night 24/25 Apr disengages and moves in MT to KHALKIS and embarkes from beaches not yet determined.

(d) REAR GD. Comdr Lt Col Clifton  
 Div Cav; Carrier Pls; 5 Inf Bde; 34 A/Tk Bty; One Coy 27(MG) Bn. Takes up posn WEST KNIMIS (Y63) and covers withdrawal to THEBES and ultimately to beaches.

(4) ALLOTMENTS ENGINEER UNITS AND TASKS

(a) 6 FIELD COY. In support of 4 Inf Bde (para 3a) follows this formation on night 22/23 April to THEBES area and thence on night 25/26 to beaches and embarkes;

TASKS - Engineer assistance generally, including urgent road maintains on route and on beaches.

(5) 7 FIELD COY. Coy (less 2 Secs) under Comd rearguard.

Tasks - control of and blowing demolitions excluding KHALKIS BR (E2899) (see below); urgent road repairs.

ONE Sec. In support 6 Inf Bde. Will move to KHALKIS on night 23/24 April prepare bridge for demolition and will blow it under orders Comdr 6 Inf Bde unless Rearguards withdrawn by that route. Other tasks; General Engineer assistance, particularly road maintenance.

ONE SEC. Under Comdr 5 Inf Bde. Will move with that formation night 23/24 and move to ATHENS and embark.

Tasks - Urgent road repairs and general assistance en route and on beaches.

(6) 5 FIELD PARK COY

(a) Will recce and distribute repair material at vulnerable points, on roads in Div Area.

(b) Will return surplus Ammonal to the Corps reserve leaving two (2) tons for demolitions in the Div area.

(c) Will retain a reserve of:-  
     six assault boats  
     six recce boats  
     8 12' bridgeways

and accessories for potential embarkation requirements

(d) Will share MT with 19 A Tps Coy to ensure all latter's personnel are lifted.

(e) Will move on night 23/24 Apr to area THEBES and report at R.V. to be notified later for possible corps tasks. If not required will move on night 24/25 Apr to ATHENS and embark in co-operation with 5 Inf Bde.

(7) 19 A Tps Coy. Assisted by 5 Fd Park Coy will move and act as in para

(6)(e) above.

(b) Command Maj LF Rudd NZE will act temporarily as CRE while Lt Col Clifton is Comd Rearguard.

(8) URGENT ROAD MAINTENANCE Confirming verbal instructions all Coys will complete maintenance present sectors; in particular marking points under two way width with stakes with white tops. Also arranging and marking extra loops wherever practicable.

(9) 7 FD COY will prepare and mark Turnround in are CAPE KNIMIS and notify 4 Inf Bde. On night 22/23 Apr 5 FD Park Coy and 19 A Tps Coy will maintain small maintenance parties at vulnerable points but tpt must be clear of road and NOT moving WEST while 4 Inf Bde is in transit.

(10) DEMOLITIONS Preparations will be completed by night 23/24 Apr when 7 Fd Coy will take over and man all demolition charges in Div Area. Charges are at WATERMILL (Y6038); BLUFF (Y6338); and probably (Y6735). Instruction for KHALKIS Br in para 5.

(11) ENGINEER STORES

(a) 6 and 7 Fd Coys will each carry:-  
     4 assault boats  
     6 recce boats  
     2 bridgeways

(b) 5 Fd Park Coy will make available to Brig RA if demanded:-  
     4 assault boats  
     6 recce boats

(12) DESTRUCTION OF EQUIPMENT. Apart from personal gear, fighting equipment., and transport everything else will be destroyed before withdrawal. Engineer



units will carry tools and working stores for potential tasks, including truck compressor equipment.

(13) M.T. Surplus transport and heavy lorries (such as LAD and other workshop lorries) not required for transporting troops and stores will be destroyed before withdrawal.

(b) ? Coy will ensure that 5% spare and empty carrying space is available. No attempt will be made to salvage vehicles breaking down en route. They will be put off the road, and rendered useless but not burned.

(14) CONCEALMENT To maintain secrecy and safeguard withdrawal:-

- (a) No large fires
- (b) No demolitions prior to move
- (c) No movement to rear by day except by small parties at 5 v.t.m.<sup>3</sup>
- (d) No fwd movement (WEST) by night except staff cars and D.Rs

#### ADMINISTRATION

(15) RATIONS up to time of embarkation will be carried by Coys distributed among transport. Ration dumps on beaches and boats are being provided. Each man will carry emergency rations. Commanders will check this.

(16) PETROL Each vehicle will carry spare petrol on the basis of 4 gals each car and 8 gals per truck.

(17) TRAFFIC No lights WEST of CAPE KNIMIS - side lights only to ??ANATES (Y82); thence full headlights.

(18) MEDICAL Each column has medical staff.  
4 Fd Amb will maintain A.D.S. present location until 6 Bde withdraws.

(19) INTERCOMMUNICATION HQ NZE remains at present at Div HQ until further notice.  
Coys will maintain present D.R.<sup>4</sup> service until they move.

(sgd) G.H. CLIFTON  
CRE NZ DIVISION

Time of signature 1920 hrs  
22 Apr 41

#### Distribution

|                  |   |
|------------------|---|
| 5 Fd Park Coy    | 3 |
| 6 Fd Coy         | 3 |
| 7 Fd Coy         | 3 |
| 19 A/Tps Coy     | 3 |
| HQ NZ Div (G)    | 2 |
| HQ NZ Div (NQ)   | 2 |
| HQ NZA           | 1 |
| 4 Inf Bde        | 1 |
| 5 Inf Bde        | 1 |
| 6 Inf Bde        | 1 |
| CE 1 Anzac Corps | 2 |
| CE BTG           | 2 |

-----  
3. vehicles to mile?

4. Despatch Rider

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RECENT SME ACTIVITIES (1)

by

2 Lt John Flanagan

**NAP/RMFP Training.** The year to date has seen a number of significant events affecting the School of Military Engineering (SME). The most important of these resulted from the recent political situation within Fiji. For many years, we have enjoyed the presence of Royal Fiji Military Forces (RFMF) Sappers to the School undertaking training as part of the Mutual Assistance Programme (NAP).

The stand taken by the New Zealand Government has severed ties with the RFMF and as a result, the 26 strong contingent returned home on 14 June 1987. The Fijians had already completed a number of projects around and outside of Linton Camp and established an excellent rapport with all personnel of the School. All Sappers alike now hope for an improvement in relations and military ties to resume.

**SME Headquarters.** On a brighter note, April 15th saw the completion of the new SME Headquarters building. The project was started on 16 June 1986 by students of the Trade Training Wing, and was officially opened by the Minister of Defence, the Hon F.D. O'Flynn, QC on 8 May 1987. Built at a cost of \$276000, the building is unlike any other in the Army or within Defence establishments. It reflects both a colonial and modern style and its superbly finished interior provides an effective and comfortable working environment for members of the School Headquarters staff. The building boasts a computer room, garden atrium, conference room with a range of audio-visual fittings, long awaited and modern ablution facilities and many other modern and functional amenities. Affectionately known as 'The White House', the building is the envy of all other units in Linton Camp and others.

**Trade Training Wing.** The staff and apprentices of our Trade Training Wing have also been responsible for a number of construction tasks about the Camp. To date, two storehouses, five training shelters, four work site huts and several relocatable building have been completed. In addition, the Wing compound is almost complete including many trade training facilities, and the personnel are currently engaged in extending the Linton Camp Rugby Club (Jock Quinn Centre) social building, assisting in the new officer accommodation and a number of housing projects. With the impending return of the Battalion from Singapore to Linton, the Wing has an extensive programme of construction work ahead of them.

**Civic Action.** The School has also been responsible for

a number of Civic Action projects this year. The first was the erection of a radio antenna for *Radio For The Print Disabled Incorporated (Levin)*, an organisation which now broadcasts news and information to those that are unable to read. The station is the first of its type in New Zealand and the antenna was constructed over a period of two days by NAP students and School staff.

The Demolitions and Minewarfare Section are also involved in a civic action task. This time demolishing an old dam in the Tongariro National Park. The task will be undertaken over a period of successive demolition courses. Members of a recent Assault Pioneer Constructors course have already demolished part of the dam, but at least two more courses are required to complete the whole job. The task provides both challenging and realistic training and is greatly appreciated by the National Park Board.

**Summary.** Overall, the School is enjoying a busy period with a steady number of courses coming through. The staff and instructors are in good heart and working hard to maintain the high standards expected of the School by the Corps and the Army as a whole.

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## MINEWARFARE IN THE NEW ZEALAND ARMY

### AN OUTSIDE VIEW

BY

WO 1 H.E. Chamberlain

*"Mines are very cost-effective weapons: they can disable a soldier, rendering him ineffective as a fighting machine while lowering the morale of his comrades and tying down other personnel to treat his injuries; and they can destroy a tank costing hundreds or thousands of times as much as the mine itself. The confusion caused by mine attacks on armoured forces also renders them more vulnerable to other weapons. Mine programs do, however, habitually suffer from a lack of money - not least because they are unglamorous and cannot be paraded past a saluting base".*

International Defence Review 8/1986

During the 1960s the Corps of RNZE used to maintain a much higher profile of minewarfare instruction than that currently included in the training undertaken at the School of Military Engineering. At the time when I was a junior soldier minewarfare instruction was conducted as a complete unit, not just a module of another course. The Minewarfare Instructors Course was of three to four weeks duration, and had a large portion of the course devoted to night work. Reconnaissance, laying, recording and breaching drills would be practiced often during the course, with "call outs" occurring at all hours.

The content of the course was much wider than that now conducted, and included instruction on mines other than those currently held in New Zealand. The instruction did not rest with the then obsolescent Mk V and Mk VII anti tank mines and two or three anti personnel mines, but covered a wide range of American, French, German and Warsaw Pact country mines. We were fortunate also in that some people had managed to spirit home some of these foreign mines (all rendered safe of course), from the places where they had been, and we were the ones to benefit from the handling of these. Some of these mines had been brought back from Europe during and after the Second World War. (It should be noted here is estimated thirty percent of allied tank losses during the Italian Campaign of World War Two were caused by mines.).

During "Confrontasi" in Malaya and Borneo between 1963 and 1966 American anti-personnel mines, used as booby traps by the Indonesians, were encountered by our soldiers in the jungles. They were, more often than not, laid for nuisance value in patterns of between three and ten mines. These American mines were not the Claymore mines with which we were familiar. They were an older mine which had in some cases been adapted or modified by the Indonesians. Fortunately, perhaps, a type of mine we had seen at the SNE before we left for Malaya. Yet the

discovery of these mines made the patrols much more wary than they had been previously and caused rapid reviews of minewarfare training within the battalion, and the Commonwealth Forces in Borneo and Malaya as a whole.

In Vietnam the problem was considerably different. The Americans acknowledged that 70 per cent of the armoured casualties they sustained in Vietnam resulted from mines. Many of the New Zealand fatalities were caused by mines including the deaths of two sappers. (Sprs J.T. Barrett and R. Brown) and some other friends including Jim Gatenby, Maurie Manton and George Horopapa.

The emphasis on improvised mines and mechanisms, command detonated mines and American ordnance converted by both the regular North Vietnamese Army (NVA) and the Viet Cong created considerable problems for our forces. Perhaps the most outstanding example of "conversion" was the manner in which the Viet Cong decimated an Australian laid minefield (containing US manufactured mines) and converted the mines thus recovered, to weapons for their offensive against the Australians. Notwithstanding the above, there were a number of mines of Soviet and other Warsaw pact country origin encountered as well.

However mine recognition training in New Zealand did not maintain the standards of the early days of the 60s. By 1968-69 training with mines at SNE had deteriorated to a much lower standard. Watties Baked Beans tins painted black, filled with sand, topped off with wooden fuzes gave an approximation of what to expect when M16 anti personnel mines were to be employed or encountered. It was a poor substitute with which to train soldiers proceeding to Vietnam, where they would find the real article perhaps barring their way. But it was several years before a real manufactured practice mine in sufficient numbers for class instruction became available. The instructors at the School were delighted when these inert practice mines reached the School but all were agreed that they took far too long arriving.

A more recent catalogue of lessons could be taken from the British experience during the Falklands War in 1982 only five short years ago. These lessons published below (almost directly lifted) have been extracted from the Royal Engineers report on the Falklands Campaign. The introduction states the following:

*"The opportunities to test engineer skills, procedures and equipment under wartime conditions are mercifully rare. It is essential, therefore, that maximum benefit is derived from the lessons of the Falklands Campaign. Many of the general lessons in the report are not new and most of them are well known to our predecessors. Nevertheless, they remain as valid and important now as in the past."*

## LESSONS FROM THE REPORT

### Mine Warfare

**Mine Detection.** The problems of detecting and neutralising mines of minimal metal content were amply demonstrated by the Falklands Campaign.

### Minefield Reconnaissance.

a. This was one of the most important tasks carried out by Sappers who invariably formed part of all infantry patrols throughout the campaign. The major shortcoming in this and other reconnaissance contexts, was the absence of passive night viewing devices: none are held on the Equipment Tables of the RE field Squadrons. This is clearly a serious omission.

b. **Conclusion.** The need for passive night viewing devices on the Equipment Table of Field Squadrons must be strongly argued, and the provision and scaling action initiated as a matter of urgency.

### Minefield Breaching.

Experience shows that there is, at present, no substitute for the classic hand prodding and breaching drills, especially when minimum metal anti personnel mines are suspected.

### Mine Recognition.

The view has been expressed, at a wide variety of rank levels, that *insufficient attention was paid to foreign mines both during normal training and specific pre-Falklands training.* (Author's italics)

The Technical Intelligence organisation was tasked in early April 1982 to identify the nature and country of origin of mines that might be found in the Falklands. Tech Int were unable to produce any useful information during the following eight week period: the only information obtained was that certain types of Italian mines had been sold to Argentina. Basic "sales brochures" were then made available to Task Force units.

Once various types of mines had been discovered and identified in the Falklands little constructive advice could be given from the UK until mine samples were received from the Falklands."

The conclusions from this report recommended a review of the policy for training in mine mechanisms and render safe procedures. There was also a recommendation for the creation of a "Bank" holding small quantities of as many foreign mines as possible, so that samples are ready for immediate study in detail should the need arise.

## WHERE DOES THIS PLACE NEW ZEALAND TRAINING?

Here in New Zealand we have a similar need for our mine warfare skills to be upgraded. We have few current allied mines with which to train, and **NO FOREIGN** mines whatsoever. Of the Allied mines there are, with the exception of the British Barmine, insufficient numbers available for training and less for exercises. Few actual **INERT** mines even of the types we do teach are available because of attrition over the years since they were first supplied. This lack of physical examples makes the problem of teaching recognition and handling very difficult.

Whilst not advocating a wholesale change to training, it is time to review and upgrade the mine warfare training in the New Zealand Army - particularly within the Corps of RNZE which is supposed to be the font of knowledge on such matters. Current defence oriented glossys (Defence Materiel, Pacific Defence, International Defence Review etc.) show many developments of mine mechanisms, types of mines, materials used, methods of placement, means of delivery, and detection and recovery.



The advance and development of new mine mechanisms cover fields not thought of even ten years ago. Micro switches, acoustic sensors, infra-red devices, seismic sensors, electronic double-influence (seismic and magnetic fuzes) are all recent additions to the types of initiation methods now available. There are even electronic packs which can distinguish between tracked or wheeled - single or multi axle vehicles, thus making anti-mine rollers ineffective. Even amongst the above there are variations, such as the mines which throw out fine wires as part of their mechanisms. Negative earthing, as a result of touching the wire, in this type of mine, causes the mine to detonate. With such systems now being incorporated into mines, training on the Mk V and Mk VII and our new Barmine is **not sufficient for todays Sappers.** We do not even have the upgraded fuzes (double impulse) for the Mk VII anti tank mines, or the enhancements (full width fuze) now available for the barmine. Any concerned unit commander ought to be greatly worried about the safety of his men knowing that there is a deficiency in training which has not kept up with modern developments.



**MUSA**

Multi-fragment mine for combatting semihard and mixed area targets.

**MIFF**

Anti-tank mine with a specific sensor to detect and to destroy a tank passing over.

Placement of mines has outgrown hand laying methods and the mechanical means we know. There is no thought or suggestion of removing hand laying and breaching drills, or the mechanical means at our disposal. Far from it, for they are the basic tenet of our (RNZE) minewarfare instruction. However, most of those concerned with minewarfare training know that mines may be delivered now by fixed wing aircraft (using either dispensers or free-fall bombs) helicopters, missiles, artillery rockets or shells and vehicle mounted dispensers. It is a whole new ball game - but we do not know any of the new rules! We are being left far behind in a critical area of military engineering, almost to the point where we could not give technical advice, when asked, because we have none to give.

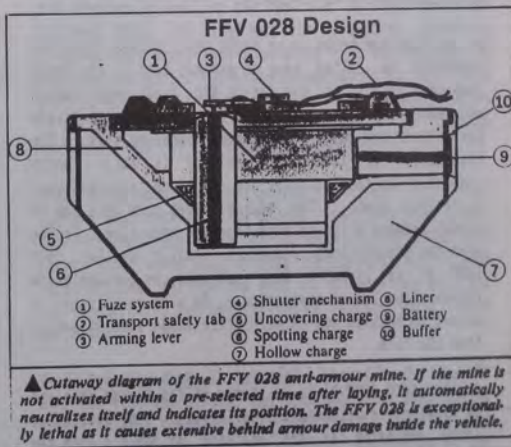
New methods of detection require further training and more highly developed detection equipment. The lesson from the Falklands campaign stated that there was no substitute for prodding and hand searches. However there have been some developments since, with considerable emphasis being placed on detection of non-metallic mines. Now would be the time to start looking at these methods of detection rather than after the need has appeared. At the outbreak of conflict there is only time to pick up recent developments rather than assimilate a whole new concept from scratch. It is too late once a conflict of arms has commenced, to start the required training.

So what are the answers? In the short term, policy may not change greatly, but nothing surer - it will have to change. Right now there is room for the supply of good training aids such as the MILTRA replica mines and fuzes. These are full size and fully detailed and range from whole to sectionalised items. There is a great variety of types available which have no doubt been created as a result of the lack of training materials for the British Army prior to the Falklands War. The replicas would have to be supported with relevant documentation in the shape of new pamphlets. The most recent of the US handbooks is now several years old with no further supply likely being available in the near future.

In keeping with the lessons referred to above we would then at least have some means of seeing and handling new mines. New developments would become clearer and RNZE would be more in touch with current trends. In addition we should be looking at the procurement of passive night viewing equipment (as recommended by the RE report) to enable night reconnaissances to be conducted. These two items coupled together would then enhance the ability of the SME at least to teach modern mines and their mechanisms. There cannot be any problem with money for procurement of these items otherwise Defence would not be handing back several millions of dollars each year because we have underspent our budget. Simply saying there is no money available is a falsehood and a lie.

Many of the articles in the above mentioned glossys point to the simplicity of delivery and placement, and with it, the difficulties of recovery and neutralisation of modern minefields. There is a need for the Corps to look at this problem and review modern placement and detection methods, and the requirement for the New Zealand Army as a whole.

Finally our political masters, whose servants we are, must be forced to acknowledge that we can only operate effectively if we have the right tools for the job. If the politicians are willing to sacrifice *our lives* because of a political dogma, then they had better think again. The current sensitivities over "offensive" weapons, bearing in mind that mines are defensive as well as offensive, must be reversed. If we are to follow the directive to the Chief Of General Staff to make training more realistic, then the embargo on "offensive" weapons, such as mines, must be lifted immediately and the items procured without further delay.



## EXPLOSIVE ACCIDENTS

Are you an officer or NCO who is qualified to supervise the preparation and detonation of live explosives? Are you experienced and sure of the actions which you are required to carry out on any demolitions range or battle simulation practice? Are you sure that your skill and leadership is sufficient to prevent explosives accidents occurring during your practices? The number of explosives accidents which occur within the services each year would indicate *that some of you are not as good as you should be*. See if you can pick the mistakes made by the major players in the following scenario. The scenario is a composite of *real* incidents.

### The Scenario.

A unit is tasked with a demonstration which will involve the detonation of a large number of simulated artillery shellfire charges. The charges consist of 0.5 kg of PE and are to be located in two main demonstration areas. A sub-unit of the unit is tasked with the conduct of the practice and at the end of the demonstration a number of blinds/misfires are present in each area. A troop of the sub-unit is tasked with the clearance of both sites. For various reasons, including complaints about noise from local residents and demonstration troop movements, a decision is made to move the numerous blinds/misfires to a safe area for disposal. This is not a normal practice but is quite permissible provided safety procedures are followed.

At the time the troop is to begin the clearance task its commander is called away on another task. The troop commander duly briefs his Senior NCO, hands over command and leaves the scene. The acting troop commander briefs his subordinate NCOs and the troop commences work. The destruction of the blinds/misfires is still being conducted in two locations and the troop is spread over a sizable area. The acting troop commander has to travel between sites to supervise the operation. In one area the acting troop commander details another SNCO (SGT A) to light a fire and burn the non-explosive refuse from the demonstration. He also established an unused explosives and blind/misfire dumps some 30 metres from the fire.

Another SNCO (SGT B) is in charge of the second area and is blowing his blinds/misfires in-situ. On hearing a large explosion in the vicinity of SGT B's area the acting troop commander and SGT A decide to investigate and leave the fire site in charge of a soldier who is instructed to burn the flammable refuse but not touch the explosive. After ascertaining that the large

explosion was of no consequence the acting troop commander decides to leave the area to return exercise stores. He leaves the two SNCO's in charge of their respective areas. SGT A returns to the fires site and continues work. Some time later senior appointments in the parent unit's HQ decide that because of several complaints about the noise created by the ongoing detonation of blinds and the onset of evening, no more explosions are to take place. As the acting troop commander cannot be found a message to cease fire is given to SGT B. SGT B sends a Cpl to inform SGT A of the order to cease firing. SGT A gets the order to stop firing but isn't told how the destruction of the blinds is to eventually proceed. He therefore decides to burn the explosive he has left and proceeds to demonstrate burning techniques to the soldiers burning the inflammable refuse. They then proceed to burn all the PE left at the site by the acting troop commander. SGT A then decides to burn a quantity of detonating cord. The detonating cord is serviceable but broken from its packaging. Together SGT A and the soldiers cut the cord into 1-2 metre lengths and throw it into the fire.

Five new soldiers arrive at SGT A's site and he decides to dispose of an unused roll of detonating cord in his possession. SGT A leaves this task to the soldiers and busies himself with sorting some detonators and ISFE's which are located in the explosive dump. By this time the only knife is blunt and the workers are getting tired of their task. The soldiers, now unsupervised, decide to lengthen the pieces of detonating cord being burnt. They continue this routine until they reach a stage where the free end of the cord is in the fire before the other end is severed from the roll. Suddenly there is a violent explosion and the detonating cord does just as its name suggests - detonates. Several soldiers are badly injured.

### What Went Wrong

Well what went wrong, what caused the explosion? As you might have guessed there are a number of reasons. Would you have picked some of these:

- a. The explosives dump was established dangerously close to the open fire. This didn't cause the accident but a situation was created where this action alone could have resulted in a nasty incident. Explosives must not be situated within 50 metres of an open fire.
- b. The chain of command in the troop was seriously interrupted with conflicting and perhaps ambiguous orders being issued in an unprofessional manner. Hearsay orders are never acceptable where the use of live explosives is concerned.



## SME NOTES (2)

By

2 Lt DW Baxter, RNZE

c. Supervision at all levels in the organisation appears to be poor. This was especially evident in SGT A. He didn't brief his new workers and then didn't check how they were performing the task. Everyone knows you have to have eyes in the back of your head when you are supervising soldiers using explosives - **DON'T YOU?**

d. In peace, high explosive substances are NOT TO BE BURNT by other than specialist personnel employed in RE Bomb Disposal or RAOC ATO positions. To do so is illegal and looking for trouble.

e. Apart from the illegal burning of partially used explosives, SGT A also added to the risk of an explosion by illegally disposing of perfectly good and serviceable explosives. These should have been returned to the QM.

f. It is lunacy to hold the free end of any inflammable substance, let alone explosive substances, while the other end is exposed to a heat source or open flame. Training at all levels must emphasize this danger.

g. Although not clearly defined in the scenario, it seems likely that the acting troop commander's explosives was a hotch potch of different explosive types "SGT A was sorting out detonators and ISPE's". This is an unsafe practice which increases the chances of 'Murphy's Law' applying. The separation and strict physical control of explosive natures is vital.

It is hoped that this scenario and its serious implications will remind those officers and NCO's who work with explosives, that the rules exist for good reason. To disobey the rules can and often will result in serious injury or death - statistics prove this to be the case. Ignorance of the rules is no excuse. To get into a position where you are allowed to be in charge of live explosive practices you will have passed a rigorous and testing training course but, changes to standard drills are necessary in the light of experience or changes in equipment. You must keep abreast of these changes if you are to do your job properly. You must ensure that your pamphlets and range orders are up to date and fully amended. If you are unsure - CHECK. SME will be more than happy to assist you and will provide advice. Enquiries should be addressed to the Demolitions Section, School of Military Engineering, Linton Camp, or telephone (063) 258819 extension 805. Let's be safe.

**Sapper's Day 1987.** The 1987 Sapper's Day activities began with the exercising of the Charter for the Freedom of the Borough of Levin on the 14th October. Members of SME undertook a range of tasks in their allocated area of Levin for the elderly, disabled and community organisations.

Many truckloads of clippings, rubbish and weeds were transported to the dump. As well, sappers painted, stacked firewood and felled trees. The work done was appreciated by all those who benefited and we have received letters of thanks and appreciation.

On the 15th October after the traditional explosions, and the serving of rum and coffee by the officers and senior NCOs to the ORs, all sappers of all rank joined a hearty breakfast in the 600 man mess. Then it was a quick rehearsal and off to Levin to exercise our right to parade in the streets with swords drawn, bayonets fixed, flags flying and drums beating. At 1200 hours, 207 sappers began the march along the main street to halt outside the RSA for the reading of the Charter and liaison with the members of the Town Council and the RSA members which went on well into the afternoon.

Sappers Day was very successful and we look forward to renewing once again our friendships and associations with the people of Levin.

**Civic Action.** The Demolitions and Minewarfare section are progressing well on the old dam in the Tongariro National Park. Low cloud and the resulting shockwave from the task meant that some quick work was required by glaziers and public relations plummeted to an all time low. It will some time before this task is completed but in the meantime it will continue to provide a valuable training scene for the demolition courses.

**Exercise Arduous Adventure** is the SME annual unit training and will consist of an annual range practice, adventure training, and tasks for the Whanganui National Park board. These tasks will involve the construction of some Burma bridges, restoration work on an old flour mill and the construction and maintenance of various bush walks and tracks.

**Trade Training Wing.** It has been a busy time for the TTW over the last few months, and with Operation KUPE coming up are looking towards a busy time ahead. Some of the projects undertaken recently include, completion of the Rugby Club extensions, constructions of six houses in Palmerston North including three for the Maori Affairs Department, the replacement of a burnt out house at

Ohakes. The apprentices also constructed two training shelters, and a 1/4 scale model three bedroom house for use by the wing in training all trades. Next year we are looking a construction twelve houses in Linton, a new Dental Section and a 20 bed senior NCO accommodation block.

The school is now (November) tying up some loose ends from a hard and busy year and planning ahead for the year to come. The staff are looking forward to the break offered by the unit training and the festive season so to return to start the new year in a fresh and enthusiastic manner.

## THE REE CORPS MEMORIAL

The Corps memorial continues to draw visitors from round New Zealand and from overseas. It is warming to see that some have come to see the museum and library after not having had any contact with the corps for forty years. Nearly all say what a difference the trees in Linton have made to the bleak place that it used to be.

Visitors have come in their ones and twos, and on one occasion recently the complex was inundated with six busloads all at the one time. Three hundred people is

just to much for the Corps Memorial to handle at any one time - but it was good to see them there and to know that the word will get round that we have a valuable collection of our Corps History.

A number of presentations have been made recently to the Corps. Colonel Currie, DSO, OBE (a former Chief Engineer and Colonel Commandant of the Corps) has presented a large number of books to the Library, included amongst which are copies of the Professional Papers of the Royal Engineers from 1845 through to about 1927. It is unfortunate that the two which contain articles on the work of the Royal Engineers in New Zealand during the wars of 1845 - 48 and 1860 - 72 are not amongst them.

Colonel DJ O'Brien, in his retirement from the Army late in 1987, has presented the Corps a silver cup for the regimental collection in the hope of establishing a precedent on the retirement of senior officers. This is a fine gesture and and it is to be hoped that his lead will be followed.

Other gifts continue to find their way to the Corps Memorial from time to time ranging from a single card to a number of photographs. All of these are appreciated as they all help to build to spiritual centre of the Corps.

# Seminar rescued from disaster

CONTRACT '87 was an ideal setting for the Contracting Industry Training Council's first plant operator seminar — yet the course came near to being a disaster.

Due to a failure in communication outside his control, executive training officer Grant Binns was left at the last minute without much of the manpower and machinery he required to run the course.

The manpower crisis was solved by using the talents of Brian Marshall, of the Army School of Military Engineering at Linton, who was on hand to judge the Contract '87 loader operating competition.

Mr Marshall handled the grader side of the seminar, and the graders themselves were supplied and operated by Doug McKay Earthmovers Ltd. The excavator part of the course was looked after by Cable Price Equipment.

Twenty-two operators attended the course, the classroom section of which was held at the Russley Hotel on the eve of Contract '87. On the exhibition's



Doug McKay's Cat 14G grader used on CITC course

opening day, the participants then received field instruction on the main earthworks demonstration site.

A relieved Mr Binns said he was grateful for the last-minute help from Doug McKay and Mr Marshall. He hoped to use Mr Marshall on future courses, if the Army was agreeable.

Mr Binns said the inaugural course had given him insights into improve-

ments that could be made for next year's plant operator seminars. Owner-operators, contracting company employees, and local authorities all had different needs, which would have to be catered for. He also hoped to obtain videos as instructional aids.

Mr Binns said he was disappointed that no owner-operators had attended the Christchurch seminar.



# RNZE CORPS SUPPLIES

## price list wef 20 November 1987

Available from: The School of Military Engineering  
Linton Camp  
NEW ZEALAND

### Miscellaneous

|                                                                                                      |       |                                                                                                  |       |
|------------------------------------------------------------------------------------------------------|-------|--------------------------------------------------------------------------------------------------|-------|
| Lapel Badge (RNZE Grenade)                                                                           | 2.20  | Jackets, Standard                                                                                | 59.00 |
|                                                                                                      |       | (These are ordered as and when requested. Three to ten weeks delivery time.)                     |       |
| Nametag shields (RNZE badge on Corps colour Shield Suitable for attaching to brooch fitted nametags. | 2.00  | Vests, Corps.                                                                                    | 50.00 |
|                                                                                                      |       | As for bomber jackets without sleeves. (Item must be ordered. See note under Jackets, standard.) |       |
| Plaque RNZE, (Corps badge on wooden base).                                                           | 22.00 |                                                                                                  |       |
| Ribbon, Corps Colour 13 mm wide (cost per 25 mm).                                                    | 0.10  | Jersey, Corps.                                                                                   | 53.00 |
|                                                                                                      |       | (Royal blue with red stripe in neckband, red grenade with white RNZE underneath.)                |       |

### Stationary

|                                                                                 |       |                                                                                                  |       |
|---------------------------------------------------------------------------------|-------|--------------------------------------------------------------------------------------------------|-------|
| Christmas cards (complete with insert and envelope).                            | 0.25  | Ties, RE Pattern                                                                                 | 9.00  |
| Folder slimline RNZE, with up to 22 plastic pages A4 size.                      | 11.50 | Leatherware                                                                                      |       |
| Pen ball point, red and white with Corps badge and RNZE Corps Memorial in Blue. | 0.60  | Key keeper, for preventing holes in pockets. Corps badge embossed on outside. Very popular item. | 4.30  |
| Corps Crest, three colours on clear vinyl background. (New this November.)      | 1.00  | Single chequebook holder, Suitable for a BNZ style chequebook.                                   | 13.50 |
|                                                                                 |       | Double Chequebook holder, Suitable for Trustee Bank deposit/chequebooks.                         | 14.50 |

### Clothing items

|                                                                                       |       |
|---------------------------------------------------------------------------------------|-------|
| Beret Badge, bullion wire on dark blue ground (RE pattern). (Officers and WOs 1 only) | 6.40  |
| Badge, cloth, Corps (ER II) full colour. (Blazer pocket).                             | 8.00  |
| Badge, cloth, RNZE crest, full colour. (Blazer pocket).                               | 9.65  |
| Badge, bullion wire, RNZE crest (Blazer pocket.)                                      | 11.00 |
| Jackets, Bomber, (When ordering give size 1½ your normal size.)                       | 59.00 |

### Note

Prices may change without warning as new stock is received.

### NEW LINE

The Corps is investigating the purchase of stoneware steins. These will have a full colour RNZE badge emblazoned thereon. The expected cost is \$10.00 each. A minimum order of 150 is required by the supplier before firm orders can be made. - UNFORTUNATELY cash must be sent with the order for these.

## PEACEKEEPING IN THE MIDDLE EAST

WITH THE UNITED NATIONS TRUCE SUPERVISION ORGANISATION.

By Capt J Lock, RNZEE

Reprinted from UNTSO NEWS

Upon arrival in Israel an observer (UNMO) will begin to meet some of the many members of UNTSO. Most likely the first UNMO encountered will be one of the members of the Training Team who is waiting at the Ben Gurion airport to meet him. "The Team", as I would like to call them, is in charge of the checking-in procedure. "paving the way" to a new member of the Organisation in the Service of Peace. Before 1979, when the Training Team was established, UNMO's were on their own when beginning their tour with UNTSO. In those days, everybody did their best to assist them with the compulsory paper work and orient them to the requirements of the Organisation, but obviously that was not enough.

The two and a half days which an UNMO normally spends with the Training Team, is a short time to give the whole picture of the observer duties. It is, however, enough to familiarise him with the mission area, give him practical briefings and to run a basic training

program which includes a vast amount of filling out forms. Without an experienced UNMO, who takes the newcomer around by the hand and contributes invaluable advice drawn from an operational UNMO, the first duties of the newly arrived would be much more complicated and complex.

An UNMO would probably spend an unnecessary, long and frustrating period of his short tour of duty in the Organisation trying to collect the information that he now receives in "a one package".

Normally the Training Team consists of a Chief and one other member. They are kept busy due to the ever changing nature of the 299-member observer group, which has a 100% turnover of personnel on the average of every year and a half. Change is a permanent phenomenon among the military staff. The members of the Team try their best to assist every UNMO in a personal way by addressing each individual's special requirements and their expectations of the future outstation where one will be posted. The Training Team has a responsibility also to the station receiving new observers. From the day of arrival, the new UNMO is credited to his future



I'm Captain John Lock from New Zealand. On behalf of the Chief of Staff and all the members of UNTSO, welcome to the mission area. During the next twelve months you will be serving in one or more of the following areas of operations. On the Golan Heights maintaining OPs on both sides of the ISRAELI-SYRIAN borders. You will be based on TIBERIAS and DAMASCUS. In South Lebanon based in WAQOURA. Egypt; based in CAIRO working from the outstations in the SINAI, and not forgetting BEIRUT. Welcome. You are now an UNMO in the service of peace.



stations operational strength. Often the short fall in authorised strength at an outstation does not allow very long periods of initiation.

Flexibility and ability to cooperate are the trade marks of the Team, since many of the incoming UNMOs have not had much previous information about the mission area or their future duties. Observers coming from the Nordic countries have an advantage in that most of them have completed a thorough three week course on UNMO duties in Niinisaio, Finland. For them it is a little easier to adjust themselves to the requirements of UNYSO.

"Starting off on the right foot is important because the first impressions of the Organisation stay with the UNMO a long time" says Captain John Lock, the Chief Training Team. "We are here to assist and adapt the incoming UNMO to the duties in UNYSO. During the Check-in procedure I stress the importance of the careful completion of all the forms to enable the many different branches of the Organisation to carry out their responsibilities effectively. Cooperation with the international and local staff here in UNYSO Headquarters has been and must be excellent. The people in all those many offices listed in the Check-in Processing List are very professional. In all cases, an UNMO receives a warm and sincere welcome and best wishes for his future services."

Everyone who has been through the Check-in genuinely appreciates the assistance they get from the Training Team. The team members are always experienced UNMOs with a distinguished service record and carefully elected by the COS UNYSO. Therefore, few questions about observer duties or the mission are cannot be answered or an answer found in a very short time. One who belongs to the Training Team must also have "the right touch", or else he might fail in that complex duty to brief our new colleagues coming from 16 different nations (Australia, Austria, Belgium, Canada, Chile, Denmark, Finland, France, Ireland, Italy, the Netherlands, New Zealand, Norway, Sweden, the USSR and the United States) each with different backgrounds.

Captain Lock himself has had the perfect background for a Team member. First as an operational UNMO in the Training Team in Jerusalem as Captain OGG-T and OGL, and then as an Assistant Chief Military Personnel Officer before becoming Chief of the Training Team in Jerusalem! As Captain Lock himself says: "Only after having the opportunity to work as an A/CNPO could I fully understand the importance of the Training Team to our Organisation. I still remember the good advice that I received from the Team upon my arrival. I feel very fortunate to have been given the opportunity to serve in the Training Team and to help the newcomers. The most rewarding aspect of this work is the feeling that one

can help his fellow UNMO by making the beginning of their service easier. In many cases, that warm and personal handshake and an invitation to visit at a later date from an UNMO who is on his way to his first station shows a genuine need and appreciation for the Team. Many of the UNMOs come back to update me about the changes in the outstations; and "need-to-know-when-arriving" facts. With the feedback, I constantly revise my training methods and update my information to help each UNMO on his first step along the long road in the Service of Peace."

|         |        |          |        |           |          |        |       |        |                |        |         |             |      |      |      |         |         |
|---------|--------|----------|--------|-----------|----------|--------|-------|--------|----------------|--------|---------|-------------|------|------|------|---------|---------|
| SCOUT   | SIoux  | TIGER    | BEAGLE | BUCCANEER | BADGER   | MIRAGE | LYNX  | FRESCO | BISON          | CRUSTY | HIP     | STARFIGHTER | BEAR | COCK | PUMA | GAZELLE | HOPLITE |
| FLOGGER | FITTER | ALOUETTE | FARMER | HARRIER   | HERCULES | JAGUAR | FAGOT | BREWER | FREEDOMFIGHTER | TOMCAT | PHANTOM | DRAKEN      | HIND | HOOK | HOUD | HOODLUM |         |
| F       | A      | R        | X      | W         | E        | L      | E     | R      | M              | A      | B       | A           | R    | Y    | N    | Q       | X       |
| B       | T      | Z        | W      | J         | K        | I      | J     | G      | O              | N      | E       | K           | A    | R    | D    | I       | L       |
| A       | M      | C        | R      | E         | L        | E      | Z     | A      | G              | O      | T       | A           | L    | O    | N    | I       | M       |
| U       | B      | E        | H      | M         | O        | R      | A     | U      | G              | A      | J       | H           | F    | O    | D    | H       | U       |
| P       | H      | E        | D      | F         | U        | T      | I     | E      | L              | D      | N       | U           | O    | K    | O    | E       | A       |
| E       | M      | L        | L      | R         | S        | R      | E     | L      | C              | A      | R       | P           | B    | C    | C    | O       | A       |
| E       | N      | U        | A      | B         | A        | R      | Y     | N      | Q              | X      | F       | P           | M    | I    | G    | E       | Z       |
| W       | E      | G        | S      | I         | O        | S      | Z     | T      | U              | O      | P       | A           | E    | Y    | F    | G       | T       |
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# Engineering — the next 200 years

By General Sir Hugh Beach  
Chief Royal Engineer

MILITARY ENGINEERING is a craft as old as war itself and this year we have been celebrating the 200th anniversary of receiving the Royal Warrant. As in any anniversary, it has been a time to look back at our past history. It is also a time to look forward and assess what the future might hold for sappers. What will they be doing as we enter the 21st Century, and how will they be doing it?

I doubt whether the broad role of the Corps — to help the army to live, to fight and to move — will change. Over the years, the emphasis has shifted towards support of the three services rather than the army alone, as shown by the work of our postal branch, the increasing support provided by our survey branch and indeed the rest of the Corps to the Royal Air Force, but that is a broadening of emphasis not a change of role.

The major tasks carried out by the sappers are rooted in history and are also unlikely to change. The fortifications recently built by the Corps in Northern Ireland only differ in size and material from the prefabricated fort brought across the Channel and erected at Hastings in 1066. Engineers will still be throwing bridges across rivers as they did in Caesar's day. New tasks will arise: some predictable, such as the increasing support to the RAF mentioned above, some less so, such as the recent emphasis on reacting to terrorist threats, or building prisons; but the main areas of engineer support are likely to remain as important in the year 2000 as they are today. What will change is the way in which they are carried out, and that will be a function of tactics and technology.

So far as tactics are concerned, the introduction of Challenger and Warrior into 1st (British) Corps gives the potential for greatly improved mobility, fortuitously at a time when the likely future battlefield is perceived as requiring a higher degree of tactical flexibility and mobility both in the conduct of operations in the forward areas and in the use of reserves.

Without additional mobility support, the battle winning characteristics of these high

investment equipments will be wasted. The mobility support provided by the sappers at present relies on limited numbers of armoured engineer equipments which are held centrally. Some of them are two tank generations out of date. There is some debate within the Corps on whether they could always respond quickly enough to the requirements of the battle.

To meet the requirements of the modern day battlefield, engineer armoured vehicles need to be modernised, increased in numbers and held within brigades to provide intimate mobility support. The introduction of the Chieftain AVRE (Assault Vehicle Royal Engineers), with its ability to carry three pipe fascines, mount a plough or dozer blade and tow Giant Viper, is a positive improvement which is already proving its worth.

If procured in sufficient quantities, it would fill the existing capability gap. The best long-term solution lies in the development of engineer variants of future tanks designed at the same time as the main battle tank.

The pace of the modern day battle and the enemy's increasing ability to gain timely intelligence will mean that engineers will need to carry out their work quicker and more efficiently — and so the trend will be replacing some manpower by machine power.

Technology exists now to make this transformation a reality. Faster methods of bridging and demolition are already on the horizon and improvements in other areas can be achieved within the timescale.

The area likely to show the most cost-effective technology improvements is mine engineering, most evident recently in the Corps' work in the Falklands (Malvinas) and Northern Ireland. The sappers' role as military construction engineers to the three services, and indeed to the Foreign and Commonwealth Office, Overseas Development Administration and other government departments is unlikely to decrease, and this role will continue to have the highest profile in peacetime.

The need for high class professionally qualified engineers, clerks of works and artisan tradesmen undoubtedly remains.

The Territorial Army sappers also appear to warrant a secure future. The need for



warfare. Historically, the mine has directly accounted for at least 20% of all tank casualties. Increases in armoured protection on the sides, top and front of tanks make the underneath relatively more vulnerable.

Substantial improvements in mine design are in view in the areas of fuzing, battery power, active and passive sensors, attack profile and lethality. Self destruct mines are available now and remotely controlled minefields are within the art of the possible.

New anti-tank mine systems, such as vehicle-launched scatterable mines, will complement the existing successful range of the barmine and its fuzes, and will greatly improve tactical flexibility and kill potential.

Area mine systems, which will actively seek and destroy enemy armour, show the greatest potential for increased cost effectiveness as an essential component of the anti-armour battle.

Mine warfare, either when considered in its own right, or as a force multiplier used in conjunction with other obstacles such as tank ditches, suggests that this is potentially one of the most cost-effective areas for development in the future.

Conversely, the clearance of scatterable mines will be a new and morale sapping problem, not only in the forward areas, but more particularly in the rear logistic support areas. The need to improve our countermine capability is highlighted by these mine warfare developments.

Automated data processing (ADP) is another field in which all arms and services can expect technological improvements. Command and information systems which assist intelligence gathering, surveillance, target acquisition and air defence, will form an essential component of the future battlefield. The sapper has a vital role to play in support of these systems by providing geographic and terrain information.

Additionally, sappers will need to be able to manage rapidly changing battlefield engineer information and disseminate it quickly, so that everyone is aware of the

sappers consistently exceeds the numbers available and is likely to do so in the future. TA sappers will continue to provide a cost-effective way of mobilising engineer support.

Finally, what of the officers and soldiers of the Corps in the future? Certainly they will need a sound technical education to manage the advanced equipments likely to be in service, but that is not enough.

The unexpected will inevitably occur; then sappers will need to draw on their engineering wit, knowledge and experience to improvise a solution. Therein lies the major engineering challenge in the year 2000, much as it did 200 years ago.

## Chief Royal Engineer

from p757

position of minefields, demolished routes and bridges, and other obstacles to battlefield mobility.

In the training field, environmental considerations and the rapidly escalating cost of training ammunition will encourage an increasing shift of emphasis towards simulation, which should be greatly enhanced by the ability realistically to simulate indirect fire and minefields.

The other side of the sapper coin to combat engineering is construction



## PART TIME SOLDIER

This article has been reproduced from the Ministry of Works and Development in house journal called WORKS NEWS Volume 17 Number 5.

### Roy Dale, Engineer and part time Soldier.

Roy Dale, who comes from Essex, joined Works in Twizel when he arrived in New Zealand in 1973. Two years later he came to his present job as a surveillance surveyor and engineering officer in the power directorate in Head Office where he has been ever since.

After leaving school Roy worked for the Ordnance Survey of Great Britain for six years. At that time it was controlled by the Royal Engineers and all the executive were also army officers in the Royal Engineers. Originally, in the First World War, it had been a totally military organisation so it was through his work that Roy joined the army. He was with 135 Field Survey Squadron of the Royal Engineers two years before coming out to New Zealand.

During that time he served on exercises with the army of the Rhine, spending two annual camps in Germany and one in the Channel Islands where the squadron surveyed the island of Guernsey. As the army equipment was of an extremely high standard Roy knew he would learn something from this military experience. Although they had less square-bashing than the infantry they were expected to be smart soldiers and to be able to shoot. In Britain, as in New Zealand, Territorial soldiers do range shooting at least once a year.

The first thing that struck Roy about the New Zealand army when he joined was that here the non-commissioned ranks can speak more easily to officers. Being a smaller army makes for a less formal exchange between ranks, although the NZ Territorials are still very disciplined. Roy is a Corporal in the Royal New Zealand Engineers and trains at Petone. He joined the Three Field Squadron near Christchurch when he was working at Twizel and was with them for two years. During this time he went to Fiji for an exercise. He transferred to the Sixth Field Squadron when he came up to head office in Wellington.

As Roy travels away from home a good deal in his job, and is now married, he restricts his soldiering to annual camp and to about 12 days scattered through the year.

Roy Dale received his second stripe in October 1985 and the Efficiency Medal after 12 years service, both here and in the UK.



Roy Dale

A civilian award from the Society of Surveying Technicians has also gone to Roy for an examination entry he submitted to this society and to the Royal Institute of Chartered Surveyors.

Early in June Roy heard that he will be going to England to do a course for the third and final year of a Royal Institute of Chartered Surveyors' course. Beginning in late September, the course runs for six to seven months with exams at the end of it. A successful result will make Roy an Associate of the Royal Institute of Chartered Surveyors or ARICS, as a member of a fairly small group of professionals.

While he is on the course, Roy and his wife Sue will be staying in the London area.

### It's No Dad's Army

The Territorial Force is no "Dad's Army" in spite of the fact that those who serve in it are volunteers and part-time soldiers at that. They are an essential element of the New Zealand Army and the Royal New Zealand Engineers have a significant number of MWD engineers among their ranks. Hardly surprising when one remembers that the profession of engineering had its beginnings in the military. Moreover, during the 2nd World War many RNZE units were raised directly from MWD (then the Public Works Department). Others were raised from NZ Railways and the Post Office. Many older MWD staff served at Territorials in the 1950's but fewer in the below 40 age group have served in the Defence Forces in general, or RNZE in particular.

Now, through Malcolm Faulls, operations engineer, Defence Works, closer links are once more being forged between MWD engineers and tradesmen and the army. He and Bob Sneddon, senior operations engineer, will liaise with the Chief Engineer and four people have been nominated to liaise with the four units. They are D.J.

Low, manager, Otahuhu: J.M. Ellis, principal engineering officer, Palmerston North: A.J. Erskine, construction superintendent, Wellington district office, and J.O. Ballantyne, manager, Christchurch. All of them have had some previous service experience.

According to an earlier Works News story (Vol 13 No. 3 June 1982), Grant Hardie (Inspecting Engineer, staff) was commanding the 1st Field Engineer Regiment RNZE during its annual camp at Linton in the summer of 1982. Photographed with him on this occasion were WO1 Allan Oliver, Corporal Ruth Fletcher and Lieutenant Warwick Potts - all NWD personnel.



Grant Hardie who retired last year after 30 years' service with the Territorial Army.

Grant Hardie was currently the longest serving officer in the Territorial Army when he retired last April after 30 years service. Asked if he missed it, "not as much as I expected to," he replied. "There never were enough hours in the day."

Allan Oliver of Porirua residency is now SSM (Squadron Sergeant Major) of 6 Independent Field Squadron RNZE and received his "gong" (Efficiency Medal) in May this year. In 1979 Allan was up in the Chatham Islands doing a bridging job with Warwick Potts, for which he was awarded the BEM in the Queen's Birthday Honours the following year. That was the year that the "Close to Home" team were filming there. They complicated Allan's work by dressing the cast in army uniform and writing them into the bridging exercise. "They all had a nice holiday in the Chathams, but as usual, in the Territorials, we were in an awful rush," Allan remembers.



Allan Oliver of Porirua residency was awarded the B.E.M. for his services to the Territorials.

"A lot of people gave up a lot of time to the Territorials. Allan Oliver would be one of those, a very competent bloke," said Stuart Clark, 2nd Lieutenant with the Six Field Squadron and an engineer in the public health section of NWD head office. Stuart joined the Territorials in 1984 mainly for philosophic reasons. "After talking to someone I met on a post-graduate course overseas. He was from Cyprus and he lost everything when the island was left undefended from the Turkish invasion. I concluded that we need some sort of civilian trained force."

Warwick Potts is an engineering officer at NWD's Masterton sub-office, and a Captain in the Territorial Army. He is 2IC of the 25 Engineer Support Squadron at Linton and spends an average of six weeks on training courses each year. Warwick said he enjoys the Territorials and benefits from the experience in management that he gets there. The military experience complements the NWD training. NWD provides the theory which he puts into practice in the army.

David Servante-Freeman is another part-time soldier who finds this combination very good. An engineering officer at Trentham residency, David has been in 6 Field Squadron for about seven years and is a Lieutenant. David is a qualified demolitions officer and usually goes to annual camp at Waiouru. He has served overseas as well. In 1983 he went to Fiji on an infantry exercise call Tropic Coral.

David spends about 60 days a year training with the Territorials and he finds the two jobs complimentary, enabling him to broaden his experience in both the civil and the military branches of engineering.

Robin Fry



# The MILITARY WAY

Whilst the civilian construction plant industry has still to get its act together on the training of managers, operators and mechanics, the military have long shown what can be done.

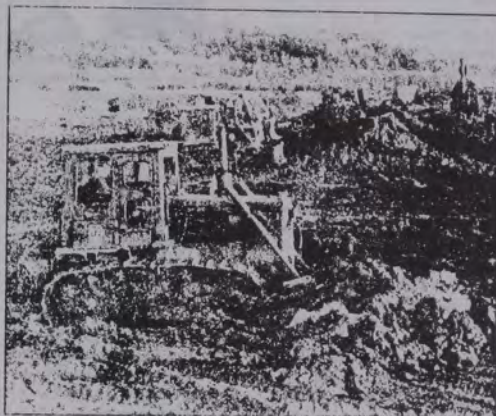
**D**O you suffer from a shortage of skilled plant managers, mechanics or operators? And how can you ensure good quality personnel when not enough plant mechanics are being trained? Certificates of training achievement for operators is still a thing of the future and courses for plant managers are a very rare occurrence. What you need is a POM or better still an MPF.

Confused? Well you are obviously not aware of the extensive range of specialist plant courses run by the Military for its own personnel. And, in case you think that what the army does is irrelevant, remember that many military people 'retire early' and seek employment in civvy street

## Specialist

The plant training routes in the British Army are through the Royal School of Military Engineering (whose Plant, Roads and Airfields Wing caters for around 1300 adult soldiers a year — mainly Royal Engineers.) This establishment runs a wide variety of specialist courses ranging from those for POMs (Plant Operator Mechanics) right up to those for the more senior MPF's (Military Plant Foremen).

The name Military Plant Foreman really does not do justice to the course which turns out people who, in civilian life, would be much more



Cat dozers (foreground) and the special CET working together.

managers than foremen (In military circles it seems that only officers are called managers.) At the Wainscott, Kent base of the PRA Wing of the Royal School of Military Engineering there is a superbly equipped training centre to cater for the comprehensive courses which build up to the military qualification of MPF. The total route involves a number of intermediate courses and periods of practical experience.

The road to becoming a MPF in the Royal Engineers starts with a Basic Training course which covers combat engineer training and tuition to get a driving licence. After a short tour of duty with a field unit there comes the POM2 course at Wainscott which lasts 22 weeks. The 12 courses a year each train 16

people.

The POM2 course includes such topics as engines, transmissions and plant management. A major portion of the course — 15 weeks — provides practical operating and servicing experience on crawler tractors, wheel loaders and hydraulic excavators. After completing POM2 the theory is put into practice with a 2-4 year tour of duty as a plant operator.

The interesting aspect of the POM2 course and the subsequent 9 week POM1 course is that they cover both operating and mechanics skills. This combination of driving and fitting is seen as producing a much better all-round practical plant man. At Wainscott the plant workshops are well stocked with a wide variety of machines on which fitting

skills can be learnt.

There are two classes of machine in the workshops. Those painted yellow are deemed to have finished useful service and can be stripped right down whilst those still 'hiding' in army green are modern units which can only be dismantled to the extent that they can be rendered roadworthy again within 24 hours should they suddenly be required operationally.

## Project work

POM1 includes another week on plant management theory and then four weeks each on motorised scrapers and graders. Project work in this course includes actual construction projects and recently students have dug a 33 acre lake at Bassingbourn in Cambridgeshire to improve the local environment.

Seven POM1 courses are held every year, each with 16 members. Successful completion of POM1 is followed by a 2.5 year tour as a plant operator (during which time Corporal status would be acquired) before a 6 week Engineer Construction Plant course and a Plant Section Commanders Course of equal duration.

Up to 5 years work as plant section commander and promotion to sergeant followed by Senior NCO and Plant Sergeants Courses (5 weeks) leads to at least 2 years duty as a Plant SNCO. Finally for those that get so far there is the MPF Course itself.



A 56 week marathon, the MPF course covers amongst other things, construction technology, vehicle design theory, service report writing, cascade planning, materials testing, workshop processes and methods of instruction. It includes periods of secondment with civilian contractors (for piling, quarrying and blacktop laying experience) as well as specialised military topics such as the air transportability of plant, mechanised airfield damage repair and battlefield engineering.

After completing the MPF course the military specialist has to complete a further 4 years in the Royal Engineers to put all his training into practice. After that he is free to leave the army and offer his skills to industry if he should so wish.

Apart from the fitter element in the POM courses there are also separate training routes purely for plant mechanics. The trainee fitter RE's come to Wainscott to get specialist tuition on construction equipment with particular emphasis on transmissions.

### High standard

Despite the obvious high standard of training (and the fact that many of the courses are approved by such bodies as the Construction Industry Training Board), it could be argued that the trained plant men who eventually leave the service are of restricted use in civvy street because of very specialised nature of the plant operated by the Royal Engineers. To an extent this viewpoint is valid but machine basics do not vary and the

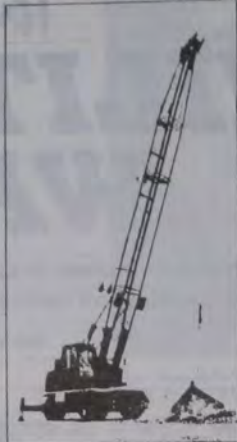
military are slowly getting their plant fleet more in tune with general practice.

At present the Royal Engineers runs nearly £200 million worth of earthmoving and associated plant. Annual purchases amount to between £8-10 million and it is part of the PRA Wing's function to evaluate the type of plant which can be used for military applications.

Machines in military service are designated according to operating weight in three categories. Plant under 10 tonnes is classified as Light and it is air portable or even air droppable. Medium machines weigh in between 10 and 20 tonnes whilst those over 20 tonnes are in the Heavy class. Further divisions in the terminology centre around wheels and tracks and the specific machine type.

One military maid of all work is the Light Wheeled Tractor which in reality is a Muir-Hill A5000 wheel loader with an MF backhoe attachment. Medium Wheel Tractors are the Terex 72-51 and the newer Volvo 4400 whilst on tracks an International Harvester 100B crawler loader is known as a Light Crawler Tractor rather than a Drott and a Caterpillar D6D dozer is a Medium Crawler Tractor. Many of these machines sport winches to cater for what seems to be an Army obsession for this attachment.

Hydraulic excavators feature in the Royal Engineers fleet with wheeled machines from Atlas and International Harvester and crawler mounts from Hymac. To dig anti-tank ditches (3.5m wide and 1.5m deep) Hymac 201 machines



*The Coles Dynamic Compactor is an interesting military hybrid.*

are specially equipped with shortened front end equipment, large 2m<sup>3</sup> backhoe buckets and an electronic dig depth indicator to allow night time digging without lights. Other Hymac 580 and 590 units have been purchased either as fully armoured machines or with remote control to facilitate mine clearance and bomb disposal work.

### Compaction

Another machine with a difference is the Coles 335M Dynamic Compactor which utilises a Priestman Lion crane superstructure on a Coles rubber tyred 4x2 chassis. The unit is designed for the consolidation of subsoil on bomb damaged runways and aircraft working surfaces.

Compaction is achieved by dropping a special 5 tonne weight with a 4m<sup>2</sup> surface from a height of approximately 10m.

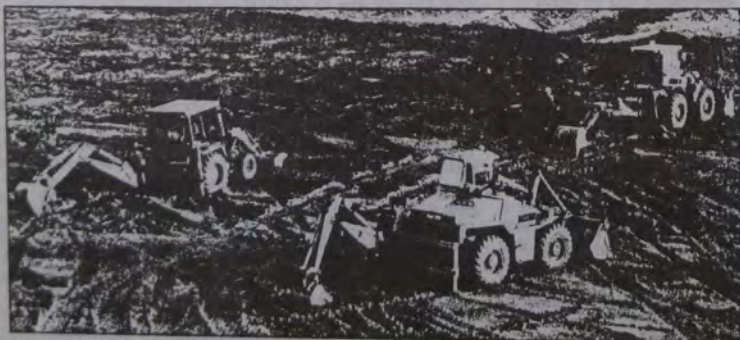
An example of a totally specialist item of plant is the CET which stands for Combat Engineer Tractor. This crawler mounted armoured vehicle is equipped with a 1.75m<sup>3</sup> front loader bucket which is made out of aluminium (to aid the units ability to 'swim' across water).

Whilst 'ordinary' plant is not expected to swim it often requires considerable modification before it meets the military spec. For example wheeled machines may be required to travel at 40kph (25mph) convoy speed, fit inside specific aircraft, operate at temperatures down to -40°C and be controlled by men wearing nuclear, biological and chemical kit. In this latter respect controls may have to be moved further apart to allow for operation with heavily gloved hands and windscreens angles may have to be changed to reduce parallax error with the operator's gas mask.

### Trends

In evaluating machine types the plant men at Wainscott are taking more notice of equipment trends in the civilian sector. Large vibrating rollers (Hamn tandem and self propelled units) now feature prominently in the fleet and articulated dumptrucks and matched excavators are being evaluated as replacements for the traditional Heavy Motorised Scraper. And there is even a school of thought that a large (10-11 tonne) 4wd backhoe loader (such as the Volvo BM 6300) could replace the Light Wheeled Tractor, the Medium Wheeled Tractor, the Light Crawler Tractor and the Medium Wheeled Excavator.

Already conventional backhoe loaders such as the MF 50H and the JCB 3CX now figure in the Royal Engineers fleet and their inclusion should help the well trained POM and MPF feel much more at home if they seek to put their extensive experience to good use in the civilian plant industry.



*Backhoe diversity — conventional MF50H, unique Muir-Hill A5000/ MF and trial Volvo BM 6300.*











# ENGINEER LIAISON LETTER



HER MAJESTY QUEEN ELIZABETH II  
Inspecting the Royal Guard mounted by  
The Corps of Royal New Zealand Engineers  
at Linton Camp in February 1990





# RNZE CORPS LIAISON LETTER

Colonel in Chief  
Her Majesty Queen Elizabeth  
The Second

Colonel Commandant  
Col George Butcher, MC, ED, RNZE

Chief Engineer  
Lt Col Alan Beaver, RNZE

QUO FAS ET GLORIA DUCUNT



# RNZE CORPS LIAISON LETTER

Colonel in Chief  
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## FOREWORD

by

*Colonel G.W. BUTCHER, MC, ED, RNZE*

*Colonel Commandant*

I welcome the opportunity to provide a Foreword to this the 34th Edition of the RNZE Corps Liaison Letter.

Readers may recall the aim of the Engineer Liaison Letter which is to disseminate, on a regular basis, Corps related news, history, current activities and movements. Items of a technical nature may be included from time to time but it is not intended to be a Corps technical bulletin. The Liaison Letter parallels but does not duplicate the valuable quarterly newsletter produced so efficiently by the Sappers Association.

It is with concern that I record the gap of almost three years which has occurred since the last Liaison Letter was published. As a consequence some of the material in this edition is dated, while a number of very important events and Corps activities have not been reported. For this apparent lack of interest and effort, all of us within the Corps must accept responsibility. Our problem is stated succinctly by Peter Nolan on page 9 of this edition where he is reported as saying **"We as a Corps do not keep in touch very well and tend to meet only at funerals"**. Peter goes on to say that as a result, he regards the Liaison Letter as **"good value"**. With the recent changes in the Corps and the Dispersion of of sappers throughout the Army, it seems to me that the Liaison Letter assumes an even greater importance in providing contemporary news of the Corps and its activities. I commend to you the editorial in this edition which sets out the problems the Editor faces and the ways in which all sappers can assist.

As part of an effort to improve **"keeping in touch"**, the Corps Committee at its last meeting, decided on a fixed publishing date each year for the Letter. The next publishing date is 30 September 1991 and I ask you **all** to provide the necessary support by preparing items and articles **now** and sending these to:

The Editor  
Engineer Liaison Letter  
School of Military Engineering  
LINTON CAMP

Finally, on behalf of all sappers, I would like to record my my appreciation of the retiring Editor WO 1 Clas Chamberlain who has produced the past five editions of the Liaison Letter, often under difficult and trying circumstances.

G.W. Butcher.

## FOREWORD

by

DR. C. W. BUCHER, M.A., F.R.S.E.

General Secretary

I welcome the opportunity to provide a Foreword to this 15th Edition of the *History of the Cape Colony*.

Readers may recall the aim of the *History of the Cape Colony* which is to document, on a regular basis, Cape's social, economic, cultural activities and movements. Issues of a national nature may be included from time to time but it is not intended to be a Cape's national history. The *History of the Cape Colony* has been published by the *South African Historical Society* and is published biennially by the *South African Historical Society*.

It is with pleasure that I record the gap of almost three years which has occurred since the last *History of the Cape Colony* was published. As a consequence some of the material in this edition is dated, while a number of very important events and Cape activities have not been reported. For this significant lack of material and other all too obvious the *History of the Cape Colony* is responsible. The problem is stated succinctly by Lord Hume on page 9 of this edition where he is reported as saying "We as a Society do not keep in touch with what is going on in the world and tend to treat only as 'news'". Lord Hume on to say that as a result, he regards the *History of the Cape Colony* as "good value". With the recent changes in the Cape and the Division of the Cape, throughout the Army, it seems to me that the *History of the Cape Colony* is even greater important in providing contemporary news of the Cape and its activities. I intended to put the material in this edition which sets out the position the *History of the Cape Colony* in which all reports are dated.

As part of an effort to improve "keeping in touch", the *History of the Cape Colony* at its last meeting decided on a fixed publishing date each year for the future. The next publishing date is 30 September 1967 and I ask you all to provide the necessary support by preparing news and making new and existing items as

The Editor

Dr. C. W. Bucher, M.A., F.R.S.E.  
School of History, University of Cape Town  
LITTON CAMP

Finally, on behalf of all reports I would like to record my appreciation of the editing skills of Mr. C. W. Bucher who has produced the new five editions of the *History of the Cape Colony* under difficult and trying circumstances.

C. W. Bucher



## EDITORIAL

### GRIZZLE TIME

This is fifth and last RNZE Liaison Letter the current Editor is compiling. The bulk of the material in this edition will appear somewhat dated which is a great shame, however, it is the material which has been sent from those people who think enough of the Corps to realise that there is a need for a magazine such as this.

Most Sappers like to see their name in print - particularly when it relates to overseas trips, promotions or awards and the Editor has pleasure in compiling such information. It is also a great pleasure to be involved with recording today's contemporary news as this becomes the history of the Corps tomorrow.

Unfortunately the Editor has had to try and raise articles from units and personnel and this proves very disappointing. The production of this Liaison Letter is made difficult when information is sent to other magazines rather than the Corps' own newsletter. This has a direct bearing on the currency of the information between these covers. Furthermore the lack of articles means that it takes longer for a magazine to be compiled and produced and so what does finally appear is rather dated.

It does not take long to see that a **CHICKEN and EGG SITUATION** rapidly occurs when this circular series of events takes place.

Examples of what the Editor has seen passing by the Corps Liaison Letter but appearing in **FIX BAYONETS** are:

RNZE Teams in Pakistan

An article of a recent deployment in the Pacific by a RNZE WO

Unfortunately nothing has been published about Namibia for Corps Personnel to read.

These are important facets of our current history and we should have this information held in **our own Corps records**. Unfortunately the lack of these and similar articles means that our Liaison Letter is not current with few "up-to-the minute" articles.

Where does the answer lie? Quite simply with **YOU** - Officers, NCOS and junior ranks. The Editor, no matter who or where he/she is, cannot "crystal ball" all the articles for a production of this nature. Without your input there can be no magazine.

**No Articles + lack of other input = no Liaison Letter**

The answer is in your hands.

Best Wishes to the future Editor and for the maintenance of our Corps Liaison Letter.

WO 1 H.E. CHAMBERLAIN (Editor)

BOOKS

This is the first and last book by the author. The book is the result of the author's own research. The book is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

Most people like to see their own work. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

Unfortunately, the book has not been very successful. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

It does not seem to me that a book by a person who is not a member of the party is a very good one. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

Examples of what the book has been doing for the party are given. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

THE PARTY

An article of a person who is not a member of the party is a very good one. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

Unfortunately, nothing has been published about the party. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

There are important facts of our country's history and we should have this information told to our own people. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

When does the party end? It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party. It is a very good one. It is the only one of its kind which has been written by a person who is not a member of the party.

No Article - lack of other report - no book by the author.

The book is in your hands.

Ben White to the House of Representatives and the Department of the Interior.

WYATT CHAMBERLAIN (1911)



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**\* NOTES FOR THE GUIDANCE OF THOSE  
SUBMITTING ARTICLES FOR THE LIAISON  
LETTER**

\*

The Liaison Letter is designed as a vehicle for the dissemination of Corps related news, history, current activities, and movements. It is not designed to be the "PROFESSIONAL" Corps Technical Bulletin, though there may be times when items of a more technical nature are included.

\*

*The articles presented for inclusion in the Liaison Letter should be written in an easy reading style, suitable for all rank levels to gain some value therefrom. One should avoid long words where a shorter word would do, - the resulting impact is greater. Also writers should adopt a conversational tone as much as possible.*

\* \*

Where possible articles should not include long lists of personnel. Credit where credit is due - but don't bore your readers - writers.

\*

\*

*Finally do send your articles in for the magazine-preferably on a diskette using Wordstar 2000. This would greatly assist the Editor. It is the intention to publish as much as we can from as wide a base as we can.*

\*\*\*\*\*

Those articles published in the RNZE Liaison Letter are not necessarily the doctrine or policy of the Corps, or the opinion of the Editor.

\*\*\*\*\*

*Researched, edited, typed and set, by  
WO1 H.E. Chamberlain and F.P. Chamberlain at  
19 Dominica Cres, Grenada Village, Wellington.*

# NOTES FOR THE GUIDANCE OF THOSE SUBMITTING ARTICLES FOR THE LIAISON LETTER

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The articles presented for inclusion in the Liaison Letter should be written in an easy reading style suitable for all ranks levels to gain some value therefrom. One should avoid using words which a soldier would not understand. The writing should be presented in a clear, concise, and to the point manner as much as possible.

When possible, articles should not include long lists of personnel. Check where such is due - but don't list your brother's name.

Please do send your articles in for the magazine. It is the intention to publish as many as we can from as wide a base as we can.

These articles published in the Liaison Letter are for informational purposes only and do not represent the opinion of the Editor.

Submitted articles must be sent to:  
WFO, 1000 Lincoln Ave., Ft. Belvoir, Colorado 80040



**RNZE CORPS SUPPLIES**  
 price list as at 1 October 1990  
 current to this issue.

**Available from: The School of Military Engineering  
 Linton Camp  
 NEW ZEALAND**

**MISCELLANEOUS**

|                                                                                                               |       |
|---------------------------------------------------------------------------------------------------------------|-------|
| Lapel Badge (RNZE Grenade)                                                                                    | 2.20  |
| Nametag shields (RNZE badge on<br>Corps colour Shield<br>Suitable for attaching to<br>broach fitted nametags. | 2.00  |
| Plaque RNZE, (Corps badge on<br>wooden base).                                                                 | 17.00 |
| Ribbon, Corps Colour 13 mm<br>wide (cost per 25 mm).                                                          | 1.00  |

**STATIONERY**

|                                                                                       |       |
|---------------------------------------------------------------------------------------|-------|
| Pad (approx 35 leaves A4 size)                                                        | 2.00  |
| Christmas cards (complete with<br>insert and envelope).                               | 0.25  |
| Folder slimline RNZE, with up to<br>22 plastic pages A4 size.                         | 11.50 |
| Pen ball point, red and white<br>with Corps badge and RNZE<br>Corps Memorial in Blue. | 0.60  |
| Corps Crest, three colours on clear<br>vinyl background.                              | 1.00  |

**CLOTHING ITEMS**

|                                                                                             |       |
|---------------------------------------------------------------------------------------------|-------|
| Beret Badge, bullion wire on dark<br>blue ground (RE pattern).<br>(Officers and WOs 1 only) | 6.40  |
| Badge, cloth, Corps (ER II) full<br>colour. (Blazer pocket).                                | 8.00  |
| Badge, cloth, RNZE crest, full<br>colour. (Blazer pocket).                                  | 9.65  |
| Badge, bullion wire, RNZE crest<br>(Blazer pocket.)                                         | 11.00 |
| Jackets, Bomber,                                                                            | 67.00 |

(When ordering give 1 size larger  
than your normal size.)

|                                                                                                                            |       |
|----------------------------------------------------------------------------------------------------------------------------|-------|
| Jackets, Standard<br>(These are ordered as and<br>when requested. Three to ten<br>weeks delivery time.)                    | 59.00 |
| Vests, Corps.<br>As for bomber jackets without<br>sleeves. (Item must be ordered.<br>See note under Jackets,<br>standard.) | 45.00 |
| Jersey, Corps.<br>(Royal blue with red stripe<br>in neckband, red grenade with<br>white RNZE underneath.)                  | 58.00 |
| Ties, RE Pattern                                                                                                           | 13.00 |

**LEATHERWARE**

|                                                                                |       |
|--------------------------------------------------------------------------------|-------|
| Key keeper,<br>Corps badge embossed<br>on outside. Very popular.               | 5.00  |
| Single chequebook holder,<br>Suitable for a BNZ style<br>chequebook.           | 13.50 |
| Double Chequebook holder,<br>Suitable for Trustee Bank<br>deposit/chequebooks. | 14.50 |
| Card Holder with perspex window                                                | 11.00 |

**OTHER ITEMS**

|                                          |       |
|------------------------------------------|-------|
| Sappers Association Book "Your Heritage" | 15.00 |
| Stein 300ml                              | 8.00  |
| Stein 500ml                              | 11.00 |
| Zippo Lighter                            | 20.00 |

**NOTE** Prices may change without warning.

## HONOURS AND AWARDS

Since Liaison Letter No 33 was issued over two and a half years ago the following honours and awards have been made to members and ex - members of the Corps.

### ORDER OF THE BRITISH EMPIRE

**Medal of the Order of the British Empire (BEM), New Years Honours 1988.**

U 46892 SSgt M.P. SHELFORD, 3 Field Squadron, whom we all know as Pete. Unfortunately we have no citation which we can publish.

**Officer of the Order of the British Empire - (OBE), Queen's Birthday Honours 1989.**

Col Stuart JAMESON, in Canada at the time of the award.

**Member of the Order of the British Empire - (MBE) Queen's Birthday Honours 1989**

WO 2 Dave FITZWATER, for his work in the Army Museum, Waiouru over the last eleven years.

**Medal of the Order of the British Empire (BEM), Queen's Birthday Honours 1990.**

F46948 SSgt Garry Rossmore NICOL, att NZCMFO El Gorah Camp, Sinai.

### MERITORIOUS SERVICE MEDAL

WO 1 D.P.(Dan) Cunningham was awarded the New Zealand Meritorious Service Medal on 26 July 1989. It was announced in the Army GS Sitrep of 14 August 1989. It is very pleasing for both Dan and the Corps for such and honour as these awards a few and far between. Since 1895 when the Medal was instituted there have only been 453 awards and of those only 14 have been awarded to members of the RNZE.

### ARMED FORCES AWARD

**Major Wyatt George W. WILLIAMS.** This award was presented by Brigadier Birch, OBE, the Commander of Support Command, at an informal function at SME during March 1988, just a few days prior to WGW and his family departing for Brisbane. The medals that Major Williams now wears are an unusual combination and the only set as such in the Corps of RNZE. They consist of the Vietnam Medal,

the Armed Forces Award, the Long Service and Good Conduct Medal (Military), and the Republic of Vietnam Star.

### THE NEW ZEALAND ARMY LONG SERVICE AND GOOD CONDUCT MEDAL

The list below covers a long period during which there was no Liaison Letter. Therefore some people whose awards may have been missed in the past are now included. There are some who would say that the Long Service and Good Conduct medal "comes with the rations" but the Editor notes these awards are hard to get and easy to lose. The minimum age that this award can be received is 32 and a half years, as service before 17 and a half is NOT counted.

|         |      |    |           |           |
|---------|------|----|-----------|-----------|
| J44559  | WO 2 | WD | Toia      | 18 Mar 87 |
| M850160 | Sgt  | AB | Martin    | 19 Mar 87 |
| X45971  | Sgt  | RK | Webster   | 26 Mar 87 |
| J575054 | Cpl  | TM | Uriarau   | 30 Mar 87 |
| H37083  | WO2  | EL | Watson    | 13 Apr 87 |
| W45353  | WO2  | LW | Ward      | 13 Apr 87 |
| N44379  | WO1  | WN | Stirrat   | 14 Sep 87 |
| R45325  | SSgt | RI | Maber     | 19 Oct 87 |
| S682403 | WO 2 | BE | Meade     | 7 Jul 88  |
| M46356  | SSgt | RI | Sinclair  | 28 Jul 88 |
| C46048  | WO 2 | KC | Jones     | 27 Sep 88 |
| T759063 | Sgt  | DM | Stott     | 26 Oct 88 |
| K454342 | WO 2 | BN | Akari     | 21 Nov 88 |
| W44962  | WO 2 | WE | Smyth     | 15 Dec 88 |
| G46029  | Sgt  | BC | Powell    | 19 Dec 88 |
| L654797 | WO 2 | DJ | Fitzwater | 13 Jan 89 |
| P44564  | WO1  | WT | Wharewera | 31 Mar 89 |
| R46636  | SSgt | GT | Abernethy | 6 Jun 89  |
| F46948  | Sgt  | GR | Nicol     | 6 Jun 89  |
| H46099  | WO2  | CJ | Wilson    | 13 Jun 89 |

### THE EFFICIENCY DECORATION

**Major/Squadron Leader Walter Ralph DYER.**

This award was presented by Brigadier Birch, OBE, at SME on 20 April 1988 about a fortnight after the award to Major Williams. This is a most unusual award as it was issued some *forty-seven years late*. Squadron Leader Dyer first joined NZE as a Sapper during 1925 and was commissioned in 1927. He became eligible for the ED in 1941 but he was remustered to RNZAF on account of his civilian trade being a meteorologist and was posted to Fiji. It was during this time that the award should have been made but the change over from The New Zealand Army to the Royal New Zealand Air Force clouded the issue of the decoration. Squadron Leader Dyer continued to serve throughout the war and afterwards, and finally retired from the Territorial Air Force during the early 1960s. His Efficiency Decoration is correct for the time when he became eligible, for it has the cypher of



George VI rather than Elizabeth II. We are pleased to say that a member of the Corps was able to assist in the research required for the eventual award of this decoration.

**V728567 Capt G.A. REID 12 Aug 88**

Gordon Reid has served with 6th Independent Field Squadron, CRE Works, and FMG. He has been waiting for his award for some years now, but not as long as Squadron Leader Dyer. He finally received his decoration about mid 1990 (POOR). In fact it will not be long before he qualifies for the clasp to the award if he remains in the TF.

**K390135 Maj G.G. WILSON 17 Nov 88**

Currently OC of 6 Engineer Services Squadron. Unfortunately the editor does not have much information on Major Wilson's service.

#### CLASP TO THE EFFICIENCY MEDAL FOR EIGHTEEN YEARS SERVICE

**M846871 WO2B McTurk 26 May 87**

#### THE EFFICIENCY MEDAL

**W755731 Sgt D.A. BEARDSMORE 4 May 88**  
**Q760486 Sgt P.M. CUMMINGS 17 Aug 88**  
**L83109 Cpl S. LIM 18 Oct 88**  
**P760531 Spr K.H.K. MORGAN 28 Oct 88**

#### CHIEF OF THE GENERAL STAFF'S COMMENDATION

**K858967 WO 2 BN MARSHALL 27 Jun 88**  
For His efforts during Cyclone Bola.

#### AWARD OF AN ARMY POCKET

Lt J. Flanagan of SME was awarded an Army Pocket for Rugby on a FMG Parade in Linton Camp during July 1988.

#### RECENT - AND NOT SO RECENT PROMOTIONS

Maintaining the pattern previously set in the last Liaison Letters, only Officer and Senior NCO promotions are shown. It is pleasing to see some of those "GOOD" corporals now wearing three stripes. It is not hard to imagine that a lot has happened in the thirty months since the last edition.

**TLt Col SG Heaton Lt Col 11 Dec 88**  
**Maj JS Hollander T/Lt Col 18 Sep 89**  
**Capt PW Howard T/Maj 9 Dec 88**

|        |              |           |              |           |
|--------|--------------|-----------|--------------|-----------|
| Capt   | MA           | Oliver    | A/Maj and QM |           |
|        | (for NZCMFO) |           |              | 30 Mar 88 |
| T/Capt | PJ           | Amyes     | Capt         | 14 Jun 87 |
| T/Capt | PN           | King      | Capt         | 20 Dec 87 |
| Lt QM  | AJ           | Brown     | T/Capt       | 20 Dec 87 |
| T/Capt | PJ           | Curry     | Capt         | 11 Jun 89 |
| T/Capt | GE           | Pullen    | Capt         | 21 Jun 89 |
| T/Capt | JA           | Hill      | Capt         | 1 Jul 89  |
| T/Capt | JR           | Armstrong | Capt         | 20 Dec 89 |
| Lt     | RA           | Lloyd     | T/Capt       | 20 Dec 88 |
| Lt     | SH           | Reynolds  | T/Capt       | 9 Feb 88  |
| Lt     | NF           | McGregor  | T/Capt       | 13 Jun 89 |
| Lt     | WJ           | Vince     | T/Capt       | 16 Oct 89 |
| Lt     | CD           | Birch     | T/Capt       | 2 Nov 89  |
| Lt     | DJ           | Pirie     | T/Capt       | 20 Dec 89 |
| Lt     | GP           | Shirley   | T/Capt       | 20 Dec 89 |
| WO2    | BN           | Marshall  | T/WO1        |           |
| WO2    | PG           | Packer    | T/WO1        | 1 Jul 88  |
| T/WO1  | PG           | Packer    | T/Capt       | 19 Mar 90 |
| WO2    | KC           | Jones     | T/WO1        | 9 Jan 89  |
| WO2    | BN           | Akari     | T/WO1        | 17 Mar 89 |
| WO2    | WE           | Smyth     | T/WO1        | 21 Jun 89 |
| T/WO2  | BJ           | Clark     | WO2          | 20 Jan 88 |
| SSgt   | MP           | Shelford  | WO2          | 11 Apr 86 |
| T/WO2  | BN           | Marshall  | WO2          | 9 May 88  |
| SSgt   | BS           | Fanning   | T/WO2        | 22 Mar 88 |

(It should be noted that WO2 Fanning is also Troop Commander of the Fire Troop in 6 Engineer Services Squadron, Petone, as well as Firemaster, Linton Camp.)

|        |     |                |        |           |
|--------|-----|----------------|--------|-----------|
| SSgt   | NJ  | Orr            | T/WO2  | 11 Apr 88 |
| SSgt   | RJ  | White          | T/WO2  | 2 May 88  |
| SSgt   | IJ  | Lowe           | T/WO2  | 26 May 88 |
| SSgt   | DJ  | Blomfield      | T/WO2  | 16 Aug 88 |
| SSgt   | RJ  | Fels           | T/WO2  | 10 Jan 89 |
| SSgt   | CJ  | Wilson         | T/WO2  | 8 May 89  |
| SSgt   | GT  | Abernethy      | T/WO2  | 26 Jun 89 |
| SSgt   | BA  | Cosford        | T/WO2  | 27 Jul 89 |
| T/SSgt | CJ  | Henry          | SSgt   | 9 May 88  |
| T/SSgt | CC  | McKenzie       | SSgt   | 9 May 88  |
| Sgt    | HM  | Shields        | T/SSgt | 26 Nov 87 |
| Sgt    | JP  | De Breuk       | T/SSgt | 2 Dec 87  |
| Sgt    | PF  | LePou          | T/SSgt | 24 Jan 88 |
| Sgt    | BW  | Jackson        | T/SSgt | 8 Feb 88  |
| Sgt    | RJ  | Kirtan         | T/SSgt | 9 Mar 88  |
| Sgt    | CJ  | McKenzie       | T/SSgt | 21 Mar 88 |
| Sgt    | MJR | Walters        | T/SSgt | 1 Apr 88  |
| Sgt    | TK  | Chadwick       | T/SSgt | 18 May 88 |
| Sgt    | RK  | Webster        | T/SSgt | 27 Jun 88 |
| Sgt    | MK  | Anderson       | T/SSgt | 22 Sep 88 |
| Sgt    | PG  | Haines         | T/SSgt | 27 Sep 88 |
| Sgt    | MJ  | Cavanagh       | T/SSgt | 5 Dec 88  |
| Sgt    | RJ  | Alexander      | T/SSgt | 5 Dec 88  |
| Sgt    | RB  | Scott          | T/SSgt | 3 Mar 89  |
| Sgt    | PG  | Hutson         | T/SSgt | 3 Apr 89  |
| Sgt    | RH  | Cockburn       | T/SSgt | 8 May 89  |
| Sgt    | CMT | Kauika-Stevens | T/SSgt | 8 May 89  |
| T/Sgt  | AP  | Williscroft    | Sgt    | 22 Jan 88 |

|         |                 |       |           |
|---------|-----------------|-------|-----------|
| Cpl HDV | Priest          | Sgt   | 22 Apr 88 |
| Cpl AP  | McKay           | T/Sgt | 9 Nov 87  |
|         |                 | Sgt   | 22 Jan 88 |
| Cpl B   | Church          | T/Sgt | 18 Mar 88 |
|         |                 | Sgt   | 19 Nov 88 |
| Cpl LD  | Dahm            | T/Sgt | 21 Mar 88 |
| Cpl JG  | Fischer         | T/Sgt | 11 Apr 88 |
|         |                 | Sgt   | 22 Mar 88 |
| Cpl BH  | Clinch          | T/Sgt | 19 May 88 |
|         |                 | Sgt   | 19 May 88 |
| Cpl GD  | Robinson        | T/Sgt | 6 Jun 88  |
| Cpl P   | Lightbourne     | T/Sgt | 15 Jun 88 |
|         | (protected Sny) | Sgt   | 3 Aug 87  |
| Cpl HK  | Lawrence        | T/Sgt | 1 Jul 88  |
| Cpl DG  | Thomas          | T/Sgt | 4 Nov 88  |
| Cpl MC  | Beddis          | T/Sgt | 16 Dec 88 |
| Cpl PPS | Albert          | T/Sgt | 19 May 89 |
| Cpl RM  | Palmer          | T/Sgt | 24 Aug 89 |
| Cpl TM  | Uriarau         | T/Sgt | 23 Apr 89 |
| Cpl TP  | Haami           | T/Sgt | 23 Sep 89 |
| Cpl WS  | Nathan          | T/Sgt | 2 Oct 89  |

\*\*\*\*\*  
 \*\*  
 \*\* **RECENT ARRIVALS** \*\*  
 \*\*  
 \*\*\*\*\*

The following young men obviously saw the light during their training and have become members of **The Corps Of Royal New Zealand Engineers**. A BELATED welcome is extended to these new officers of the Corps.

**Lt Gregory Wilson**, ex Australian Defence Forces Academy

|      |                    |                |
|------|--------------------|----------------|
| 2 Lt | Hemi Morete        | ex OCS Waiouru |
| 2 Lt | Geoffrey Chao      | ex OCS Waiouru |
| 2 Lt | David Karam        | ex OCS Waiouru |
| 2 Lt | Richard Buttenshaw | ex OCS Waiouru |
| 2 Lt | G (Broz) Brosnan   | ex OCS Waiouru |
| 2 Lt | Martin Donoghue    | ex OCS Waiouru |
| 2 Lt | Tony West          | ex OCS Waiouru |
| 2 Lt | Malcolm Harrison   | ex OCS Waiouru |
| 2 Lt | Darrel Hubbard     | ex OCS Waiouru |

## POSTINGS

Many changes have occurred since this list was first compiled. It is now out of date but it is felt that these movements should be recorded.

**Maj W.B. COBB**, returning to the Corps after sixteen years of soldiering with the Royal Engineers in Northern Ireland, Belize, and BAOR Germany. Maj Cobb was posted to the School of Military Engineering as the Chief Instructor wef 4 Jul 88. The comment was

made that a new sign should go up outside saying "Under new management - COBB and CO. Ltd" Maj Cobb has now returned to the United Kingdom.

**Maj J.S. HOLLANDER**, posted from the School of Military Engineering to Acting SO 1 Pers/Log at Headquarters Support Command, Palmerston North wef 4 Jul 88.

**Maj & QM M.A. OLIVER**, from SME, on six month TOD to the Sinai from 30 March 1988, returned to SME, now at LRSU.

**Capt N.K. GATTSCHKE**, posted from Defence Headquarters Works Branch to HQ FMG, Linton as SO3 Works wef 5 Jan 88, then to 1 Fd Sqn, Nov 89.

**Capt P.N. KING**, from Chief Engineer's Office to Engineer Platoon Commander, Vanuatu Mobile Forces, 15 May 89.

**Capt R.P. CASSIDY**, from Engineer Platoon Commander, Vanuatu Mobile Forces to Chief Engineer's Office, 15 May 89.

**Lt G.P. SHIRLEY**, posted from 25 Constr Sqn to SME trade Training Troop Commander, 26 Apr 88. Also has had a short trip to Namibia.

**2 Lt S.R. MAINDONALD** posted to 6 Engineer Services Squadron BD Troop Commander, 5 Feb 88.

**Lt W.J. VINCE** to 1 Ranger Company, 1 Sep 88.

**Lt N.F. MCGREGOR**, from 25 Const Sqn to Support Command, 17 May 89.

**WO1 H.E. CHAMBERLAIN**, from Projects Officer, the School of Military Engineering, to Army General Staff Systems (Micro Computers hopefully) loaned to EDP Porirua for work with the NAMES team wef 15 August 1988.

**WO1 D.P. CUNNINGHAM**, from NZWSU in Singapore to RSM the School of Military Engineering wef 27 June 1988. The handover was carried out in parade at SME on Monday 27 June 88. Now retired.

**WO1 K.S. MCKEWEN**, from the Chief Engineer's Office to WO Personnel, HQ FMG, Linton Camp, 5 May 1988. Now retired.

**WO2 N.J. ORR**, from 3 Fd Sqn to SME, Bridging Instructor, 11 Apr 88.

**WO2 W.E. SMYTH**, from The School of Military Engineering, Linton to WO Pers, Chief Engineer's Office, Army General Staff, Wellington.



**WO2 B.N. MARSHALL**, from SME to 1 Base Supply Battalion, 26 October 88 where he is employed as the RNZE Advisor.

**A/SSgt A.P. McKAY**, from SME to Troop Staff Sergeant, Vanautu Mobile Forces, 9 Mar 88.

**SSgt R.J. ALEXANDER**, posted from 25 Const Sqn, Linton Camp to 4 Engr Res Tp, Waiouru, 5 Dec 88.

**SSgt R. FELS**, posted from 1 Fd Sqn to SME as Chief Clerk, 2 May 88. Posted to QA Sqn Waiouru Sep 90.

**SSgt R.J. WHITE**, posted from SME to Recruiting WO, Base Area Wellington 2 May 88.

**SSgt C. WHAKATOPE**, from SME to 1 Fd Sqn, Papakura Camp, 11 Apr 88.

**SSgt P. TE NANA**, from SME to 3 Fd Sqn, Burnham, 11 Apr 88.

**SSgt C.J. WILSON**, from SME to SQMS 1 Fd Sqn, Papakura, 8 May 89.

**SSgt B.A. COSFORD**, from NZ BSU, Singapore, to the Chief Engineer's Office, Welington, 6 May 89.

**SSgt M.J. DEW**, from Trade Training Wing, SME to 3 Field Squadron, 8 May 89.

**SSgt CMT KAUIKA-STEVENSON**, posted from SME to 1 Fd Sqn, Papakura Camp, 8 May 89. Now left the Army.

**Sgt M.P. HENDERSON**, posted from SME to 3 Fd Sqn Burnham Camp, 2 Nov 87, reporting early 1988 after his tour to the United States of America.

**Sgt R.B. SCOTT**, posted from 25 Const Sqn to SME, 13 May 88.

**Sgt G.G. WALL**, posted from SME to 25 Const Sqn, 23 May 88, remaining on TOD to SME until 30 Jun 88.

**Sgt A.W. COOK**, posted from 1 Fd Sqn to SME, 15 Aug 88.

**Sgt L.D. DAHM**, posted from 1 Fd Sqn to 6 Engineer Services Squadron, Petone, 23 Nov 87.

**Sgt M.K. ANDERSON**, from NZ WSU to Support Command, mid June 1988.

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## LAST POST

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Ex LCpl **Wally KNOWLES**, RNZASC and RNZE Fireman at Linton Camp, died at Palmerston North on 23 February 1988. In his later years Wally, who worked in Linton Camp with the Ministry of Works as a gardener, was known for his snowy white beard.

Former SSgt **Keith HENSON**, ex Carpenter and Instructor RNZE, Died at Papakura on 3 February 1988.

**WO 2 R.D. "Spike" MILLIGAN**, well known in the Papakura area, died suddenly on Friday 8 April 1988. Spike was a carpenter by trade and had trained many Army apprentices.

Former President of the Sappers Association and long serving Committee member, **Terry "Snow" CHESTER** died on 3 May 1988 after a short illness. He carried out the duties of Welfare Officer for the Association, and was a willing and able worker in all his endeavours. We owe a lot to his sense of duty and efforts over the years.

**Colonel Gordon LINDELL** died on 3 May 1988 at the Auckland Hospital after a long period of indifferent health. The service was held at St Oswald's Church (Anglican) One Tree Hill, and was conducted by the Rev Cecil Wright - an ex-sapper from 7 Field Company during WW2. For further background on Col Lindell please read the obituary notice.

**Joe HENARE**, known to many sappers in Palmerston North area, died at the Palmerston North Hospital on Sunday 12 June 1988. Joe had previously served in the infantry (both NZ Regt and RNZIR prior to joining RNZE as a plant operator.

Ex plumber and SSgt **Buster ROSS** (Military Medal, WWII, 19 Armd Regt) Died suddenly on Tuesday 5 Jul 87. He had suffered a heart attack about three months beforehand, but was recovering well. After leaving the Army he worked for Ministry of Works at Linton for 11 years, and retired for a second time seven and a half years ago. It is hard to believe just how time flies. His sense of humour had not diminished one bit when the editor was talking to him the day before he died. He was enjoying the life of an armchair soldier.

Former RQMS at SME, **Jack SHIRLEY** died at the Public Hospital in Palmerston North after a long illness. Just prior to his death he was allowed out of the

hospital for a short time to receive an honour from the Masonic Lodge. Jack was known for his interest in trout fishing in his earlier days.

Also a plumber when he was serving was **Dave MURRAY**, who died as the result of an accident while working on a private residence in Palmerston North on 5 Dec 88. Dave was a fine tradesman who also taught a number of Army Plumbers.

**Bruce JARVIS** died at Palmerston North on 26 April 1989. Prior to joining the Army Bruce worked for the NZ Railways at Taumaranui. Bruce joined the RNZE after serving with RNZIR in Malaya, Borneo and Vietnam. Some years ago he was involved in a vehicle accident at Waiouru and it is thought that the ongoing results of that lead to his early death.

**466507 Walter (Wally) George PHILLIPS** served in the NZE during World War 2 and has continued to serve the Corps ever since that time until his death in Palmerston North Public Hospital on 14 July 1989 aged 82. Wally was the secretary (and one of the principal organisers) of the **Levin Sappers Reunion Committee** and as such was involved almost to his dying day.

**Major George BUNCE**, QSM died at Devonport, Auckland on 29 August 1989. He was a Graduate of the Royal Military College Duntroon and served as a NZE Company Commander in 3 NZ Division in the Pacific. He also served in the 2 NZEF in Italy and was posted as the OC of 5 Field Company in Japan after the war. He later retired about 1952 and established his own firm of Forgan Jones Engineering which specialised in light engineering. He was awarded the Queen's Service Medal for his Community Service principally in law reform to do with the Matrimonial Act. George Bunce was the Patron of the New Zealand Sappers Association and was that organisation's representative on both the RNZE Corps Committee, and the Engineer Corps Memorial Association. He visited the Solomon Islands during 1988 with the 3 NZ Division tour and the Governor General Sir Paul Reeves to establish and dedicate a Memorial Plaque to those members of 3 NZ Div who died in that theatre of operations during the Second World War. George was very proud of the Corps in which he served and always maintained a deep interest in all its activities.

**Keith Malloch**, former SSM at the School of Military Engineering died at Opoiki on 23 Aug 1990. Keith was in the second class of RF Cadets and served in Korea. He was posted to the United Kingdom for two years for plant training and came back to New Zealand as a Plant Instructor. He was the first SSM of 5 Support Squadron well before it became 25 Spt Sqn. His last

posting in the Army was in Singapore. He had suffered ill health almost ever since he returned to New Zealand.

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## RETIREMENTS

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**SSgt S.C. (Stan) HANSEN**, released at own request on 10 Feb 88, after thirteen years service.

**Sgt T.C. (Trevor, Top Cat) SHAW** released at own request on 11 March 1988 after thirteen years service.

**Lt C.R. (Craig) DALTON** released at own request on 12 April 1988 after 6 years service.

**Maj G.R. (George) JASON-SMITH** retired on 20 April 1988 after 20 years service.

**Sgt S. (Simon) KOKO**, released at own request on 11 December 1988 after 12 years service.

**Maj D.J. (Dave) BEGLEY** retired from the Army April - May 89 after many years good service. We wish Dave Trish and the children good fortune in their new lives in Australia.

**Sgt A.B. (Marty) MARTIN**, retired on 2 Jun 89 after 20 years service.

**Sgt W.G. (Wayne) STOWERS**, retired after fifteen years service, on 9 Jul 89.

**Capt A.J. (Alan) BROWN, BEM**, lately the Works Officer at Trentham Camp, retired on 13 Jun 89 after 25 years service.

**WO 1 R.D. (Ron) EVERSON**, retired from the Army on 23 July 1989, after 21 years service.

**SSgt C. J. (Chris) HENDERSON**, retired from the Army after seventeen years service on 2 Aug 89.

**Cpl G.E.R. (George) TAIATINI**, retired from the service on 18 Aug 89 after 20 years service.

**WO 1 D.G. (Pinky) STAINES**, retired from the Army on 25 Aug 89 after 26 years service.

**WO2 C.D. (Splash) BRICKELL**, retired from the Army on 10 Sep 89 after almost 21 years service.

**T/Maj E.W. (Eddie) BRUCE, MBE**, retired from the Works Directorate, Defence Headquarters, 5 Sep 89.



Others who have signified their intention to leave the service before the issue of the next Liaison Letter include:-

SSgt M.J.R. (Mike) WALTERS, 15 Oct 89 (Sappers Day).

WO1 G.J. (Geoff) BLACKBURN, MBE, 20 Oct 89.

T/Maj B.J. KNOWLES, MBE, 14 Nov 89.

WO1 W.N. (Bill) STIRRAT, 7 Dec 89

WO1 A.A (Tony) GLADSTONE, 30 Mar 90

Sgt J (Joe) TE WHATA, 14 May 90.

And others unknown to the Ed.

## OLD COMRADES NOTES

Ex WO 1 Ralph FLAVELL called at SME mid 89. Since leaving the Army he has been involved with a number of activities including :- Prisoners Parole Board, Massey University Visiting Lecturer, Community worker and lecturer Access Council (Manawatu), (Ministerial Appointment), and carpet cleaning when he has time. He has also developed an strong interest in wood carving.

Former Captain and Quartermaster Peter FOSTER, now with New Zealand Forest Products, Papakura, visited SME on 24 February for the first time since 1979. A second visit on 27 June 88 coincided with a visit to see his son (who is an officer cadet) in hospital in Palmerston North. Another RNZE Officer in the offing perhaps?

Ian CLARKE, formerly the Chief Clerk at SME and 1 Field Squadron (now living in in Papakura) has not been too well in the last few years. He has been suffering from a heart attack and cancer of the Larynx. Ian may be interested to know that his old two-tone Holden car is still in Linton Camp area and still mobile after all these years.

Jim HENDRICKS, formerly RSM of the School of Military Engineering is now working with Opunake County Council. He states his home is "two minutes from the beach, three minutes from the golf course and five minutes from the pub." Well set up what!

Capt (T/Major) Robin FRANCIS, civil engineer and former TF officer, (1 Constr Sqn) visited SME on 15 - 16 June 88, during which time he gave a lecture on bridging in BHUTAN (under the shade of the High

Himalayas - North East India). He has been working for some time under the auspices of the United Nations Industrial Development Organisation, and has worked in a number of fascinating places such as Madegascar, Kenya, Ethiopia, Sri Lanka, Honduras in Central America, and Dominica in the Caribbean. One of the wooden bridges on which he was advising in Bhutan, was at an altitude of more than 4200 metres (i.e. if Mt Cook had been next door he would have been looking down on it.) Interesting to see pictures of this sapper sitting in his tented site office wearing his old sapper LEMON SQUEEZER.

Former WO 1 and RSM of the School of Military Engineering Peter NOLAN was not too well last winter. He had a heavy bout of flu as well as the ongoing problem of diabetes. Peter has been living in Palmerston North since his retirement from the Army, and has retired for the second time from his job as a building inspector with the Palmerston North City Council. He recommends the life. Peter has also noted that we as a Corps do not keep in touch very well and tend to meet only at funerals and feels the value of a Letter such as this to be of good value.

Noel WOODLEY a former plant operator, and Gordon BYRON (formerly RSM SME) have been with NZ Forest Products in Tokoroa for a number of years. They are about to, or have recently moved to Takanini where NZFP are setting up a training establishment. Guess what - Doug ROBERTS (twice RSM of SME) has been doing some of the work involved in the relocation and refurb of the training buildings. What happened to the four day week Doug? Apparently the thought was that they would get Don ROLLES a former WO1 electrician (now the executive officer at Rose Hill College, Papakura) to do their electrical work for them. Keeping things in the "family" we hear that Trevor CAMPTON who has his own business in Papakura may be involved in doing the plumbing work at the same location.

Ex WO1 Jack BLYTHE, who left the army eleven years ago, has been in Christchurch virtually since retirement. He was for five years the Registrar of the Air New Zealand Training School and for six years has been the technical instructor, teaching Air New Zealand apprentices basic engineer skills. Jack is only two minutes walk from the domestic terminal at Christchurch so if you are passing ask someone to point the right direction and go and visit him between flights.

Colonel Russ CURRIE still goes into Wellington each Tuesday from Lower Hutt to the Officers Club, and sometimes visits the Chief Engineer's Office. His sense of humour is still the same, (He says, people seem to forget that I am seventy-eight). He keeps reasonable health though he does need to use a walking

stick now. Col Currie is one of the stalwarts of the Corps of RNZE and is a mine of information about the Corps.

**Ken WOODS**, who retired as a major with an MBE is now living at Rothsay Bay, North Shore. He is currently working with Fletcher Panel Industries (Doors Division) in Onehunga, Auckland. This lucky fellow had an overseas trip during August - September 1989

Former Captain **Russ LUSCOMBE** retired to Tauranga in June 77. He is still in Tauranga although we did have a minor problem tracking him down when he shifted from his old address. He is working with Turners Tauranga Ltd., and was involved with Kiwi Fruit exporting. Russ is now the captain of a truck and trailer unit, and enjoying life without too much of a paper war.

Noel **HERCOCK** formerly of 2 Field Sqn, became the manager of the AGI at Linton then Ohakea after his retirement from the Army. He has been suffering from multiple sclerosis for some time now. Just to compound things his wife Norma recently suffered a stroke.

**Colin CORNEY**, an ex instructor, fireman and electrician left the army six years ago. He was the second posted SSM of 5 Support Sqn and is currently teaching Sunbeam Corporation servicemen how to repair home appliances and electric blankets at their Palmerston North establishment.

Ex Sergeant **M.R. (Shorty) TAYLOR** was admitted to the Coronary Care Unit in the Palmerston North Public Hospital on 7 Jul 88. He was critically ill when the Editor phoned the unit the following day, but he is now up and about. Palmerston North people may be able to give the editor and update on his condition.

"**Stalky GILBERT**" was seen in Papakura WOs and Sgts Mess earlier this year. He is looking well and is obviously enjoying life as a civilian. Working for an oil company on the Auckland waterfront must have its benefits.

**Wattie HOBAN**, a spry 80+ was not able to make the trip from Alexandra to the AGM of the Corps Memorial Association, but he still keeps a close interest in the activities of the corps. Wattie served with the 21 Mechanical Equipment Company during World War 2.

A phone call to **Bruce MALLOCH** in Palmerston North informed the Editor that he was well and still busy with his Pest Control business. Unfortunately his brother **Keith** is still very ill. Keith has recently been

shifted from hospital to hospital (Opoitiki, Whakatane, Rotorua and Waikato) for treatment for his heart condition and asthma. Keith has not been well enough for the operation he requires. See Last Post notice.

Colonel **Dick PEMBERTON**, one of our former Colonel's Commandant has recently moved from Piha (near Auckland) to the Takaka area (Nelson) to be nearer his family members. Are there any good walking tracks in your new home area Dick?

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## OBITUARY

**Colonel Gordon Anderson LINDELL, DSO, OBE, ED**

"They received, each for his own memory, praise that will never die. And with it, the grandest of all sepulchres, not that in which their mortal remains are laid, but a home in the minds of men."

**Pericles funeral oration to the Athenians.**

The following eulogy was given by Colonel R.C. 'Dick' Pemberton, MC and Bar at the funeral of his friend **Colonel Gordon LINDELL**.

"We are together today to remember with respect, affection and gratitude, the life of Gordon Anderson Lindell.

Gordon was born in Taihape in 1906; his family moved to Mt Maunganui in 1913, and his schooling was at Mt Maunganui and Tauranga High Schools. He inherited the engineering skills of a Swedish father who 'could do anything with iron', and who managed the Public Works Department Workshops which built the components of the Mohaka Viaduct. Gordon was very proud of that viaduct, and painted a water-colour of it not long ago. His studies in draughting and engineering were mainly done *the hard way* - by correspondence. As a youth he particularly liked yachting and rowing, sailed one of the first P-class boats, and later was joint winner in the NZ pairs Rowing Championship. He could still skull beautifully in 1945 when, on holiday after the European war finished, he borrowed the oars from an Italian boatman on Lake Maggiore.

Gordon married in 1933. In those days he worked at the Public Works Department offices at the Mount, Tauranga, at Stratford and then Wellington. In the thirties he was in the Territorials in the Infantry. On the outbreak of war in 1939 he enlisted. A few days later he was called to the telephone by a senior Roads



Board Engineer. "Hanson, here. Lindell, I've just been appointed to command 7th Field Engineers Company. I want you as one of my officers."

While the 1st Echelon baked on the sands of Egypt, 7 Field Coy, with the 2nd Echelon, sailed to England, trained and stood by to defend Britain. They joined the New Zealand Division before Greece, fought in Crete where Gordon was wounded, and later took part in the Crusader campaign in North Africa. By then Gordon was Adjutant to Lt. Col Hanson, CRE. One day Divisional Headquarters was attacked near Tobruk by twenty eight dive bombers. Gordon was severely wounded. He returned to New Zealand to recuperate and supervise the training of engineer reinforcements.

During his stay in New Zealand he was the Chief Instructor of the Engineer Wing at the Army Schools of Instruction at Trentham - the fore runner of the present day School of Military Engineering. He was also a Staff Officer NZE at Army Headquarters until 5 January 1944 when he re-embarked for the Middle East.

He rejoined the Division in Italy, after Cassino, and commanded 7 Field Company from 30 March 1944 through the rest of the war.

It was on the approach to the Lamone River that Gordon earned the DSO for his energy and inspiring leadership. Part of the citation read "Throughout the operations which resulted in the fall of Faenza, Major Lindell, as a Field Company Commander, displayed outstanding organising ability and gallant leadership in clearing lanes through the mined areas, building roads, and erecting several important bridges in the face of the enemy". Subsequently a bridge built by his company at Faenza was named Lindell Bridge. A photo of this bridge inspired one of Gordon's recent paintings.

In the post war period Gordon kept up his Territorial soldiering; became CRE of the Engineer Regiment and in 1955 was awarded the OBE. Between 1964 and 1970 he held the Honorary appointment of Colonel Commandant of the Corps of Royal New Zealand Engineers.

After the war he returned to the Ministry of Works, was County Engineer at Eketahuna, before being appointed Designing Engineer to the Wellington Harbour Board. He was responsible for the design of the Cook Strait Ferry link span and all its details - so when you next travel on that ferry give a thought to Gordon Lindell. He remained in Wellington till his retirement, and shortly afterwards he and Estelle moved to Auckland to be near his daughter Judith, and his grandchildren Helen and David.



Colonel Gordon Lindell

"Once a Sapper, always a Sapper" they say. Gordon served on the Committee of the Sappers' Association, particularly doing welfare work; for some years he was Newsletter Editor, and he was President. He has earned the Sappers' Association merit badge "For Service".

When Estelle's health began to fail Gordon took on unaccustomed tasks of house keeping, and cared for his wife with loving patience until her death. He accepted a solitary life with courage, filled his days with interests, kept his home and garden immaculate, and when his own health deteriorated bore the difficulties and trials of frequent blood transfusions and failing energy with fortitude and cheerfulness. He travelled to Sweden to visit cousins and learned the language so that he could write to them in their native language. He had a great affection for the country of his forebears. As his life became more restricted he never complained, but kept himself busy and entered into the life of his retirement village.

Colonel Gordon Lindell, DSO, OBE, ED, C Eng, MI Struct E, FNZIPE, was someone rather special - a loyal devoted husband, a loving and generous Dad, and a loved grandfather; a skilled draughtsman and meticulous designing engineer; an outstanding soldier

both firm and just, a careful planner, organiser and leader, a kindly thoughtful gentleman; a 'gentleman' in every sense of the word.

His passing leaves a great gap among his family and friends. He had a good life, and measuring worth by service, and affection in the hearts of men, he was one of the salt of the earth."

Only one Military Cross has been won by a member of the Corps since the End of the Second World War. Our Colonel Commandant, Col George Butcher is the recipient of that award.

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Quote - MORE WEAPONS WITHOUT MORE TRAINING ONLY MEANS MORE MARTYRS.

Afghan Guerilla Leader 1986.

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## DID YOU KNOW THAT:

Leonardo da Vinci, the artist and sculptor was once a military engineer in the service of Caesar Borgia, one of Italy's most powerful families.

Major George Goldsworthy retired from the New Zealand Army on Friday 24 April 1987, flew to Nuie crossing the International Date Line, and started work the next day as Deputy Director of Works - on Friday the 24 April 1987

At least two former members of the Corps have been members of previous New Zealand Olympic Teams. Ex WO2 Earl WELLS (1 Fd Sqn and 4 Fd Pk Sqn) represented New Zealand in the Flying Dutchman class yachting at Tokyo in 1964, whilst ex Spr A.A. PAGE was a rowing cox at the same games.

All the Victoria Crosses awarded to members of the New Zealand Army have been awarded to infantrymen with the exception of Cpl C.R.G. BASSETT, who won his Victoria Cross at Gallipoli, and Sergt Samuel FORSYTH who won his Cross (posthumously) in France during the Great War. Both men were members of NZE at the time their awards were won.

The grenades now worn on the collar (collar dogs) were formerly worn on the tails of the coat when that form of dress was introduced and worn by the Royal Engineers in 1825.

Major C.G. HUNT, RNZE was one of the few New Zealanders who served with the United Nations Forces in the Congo between 1960 and 1964.

The first vessels owned by New Zealand for maritime defence were operated not by the Navy but by the Army. They were operated by the Torpedo Corps which was a fore runner of the RNZE.



Cyclone Bola, which struck the East Cape Region during 5 - 8 March 1988, caused a great deal of damage, and with it created a requirement for RNZE support to the civil authorities which was possibly the largest and longest commitment within New Zealand for many years. The following are a number of reports from a variety of sources, each with its own flavour. It is appreciated that the time lag is somewhat lengthy but it is better to record now, than to forget until some nebulous time in the future.

## REDRESSING THE BIAS

(With Tongue in Cheek)

Capt P.G. Curran

I would like to start by offering a sincere vote of thanks to 25 Const Sqn and SME for assisting 1 Fd Sqn to open the Waingake Road, Gisborne. Certainly we would never have been able to complete the task without your limited but invaluable assistance. I understand that the locals were considering offering us the Freedom of the Borough! Most certainly the unit is considering nominating the OC 1 Fd Sqn for the OBE for the priceless assistance given by his unit to the Gisborne area. (Well done that man.)

The Wairoa task also provided invaluable LTR operational training for up and coming young sappers. The locals frequently commented on the the upright, polite and sober dispositions of the 1 Fd Sqn LTR Team. In fact one well known and liked local stalwart remarked that he could now sleep at nights knowing that a sober crew would be delivering the thousands of locals in a safe and timely manner to the far bank.

Despite rumours to the contrary, Mrs Whakatope (Senior) was not the 1 Fd Sqn Team Leader. In fact she was there to ensure that her son, SSgt Chris Whakatope, was maintaining the high standards she had set him as a child and to offer advice on the training and practical aspects of OBM operations. The benefits of her vast experience and her invaluable training 'titbits' served only to enhance the great, all round, performance of her son and his team.

Gisborne and Wairoa did not allow much time for sport and recreation and serious consideration will now be given to selecting and training a team for the Corps Rugby Tournament. 1 Fd Sqn certainly looks forward to meeting 3 Fd Sqn's

very talented team in the final but cannot decide whether SME or 25 Const Sqn will win the plate. I guess that time will tell.

Cpl Noel Komene is currently up in Vanuatu on a goodwill visit to show the locals how to break dance. In between times he is responsible for the construction of a number of school buildings, a job which we understand he is carrying out with great credit. Noel advises that his 'ghetto blaster' provides a great incentive for the locals to work hard.

Sgt Hopkirk is busy trying to win his maroon beret on the Danger Coy course. The Audible clacking of his knees and the quivering of his fundamental, as it prepares to issue evidence of fear, bears testament to his state of mind as he approaches the parachute phase of the course. The only advice we have for you 'Hoppy' is "don't wear your own underpants on your first jump".

Capt J. A. Hill and his very capable dive team worked hard in difficult conditions, to recover two Styers lost in the Rotoira Channel. The Navy Operational Dive Team was unable to locate the weapons as the water was too cold; a visual search, by them, from the bank failed to reveal anything. Thanks to those sappers who assisted in the task - and those who would have liked to assist. Simon and Manu from ATG your wet suits are in the mail, complete with built in backbones to support the flacid upper bodies!

The Unit is particularly busy at the moment constructing the new SAS headquarters - about which we can tell you no more. (Need to know basis chaps - you understand). The 1 Fd Sqn Plant Accommodation is progressing well. So well in fact that the OC 1 Fd Wksp is chewing his beret in jealousy!

North Head, of which you have no doubt heard, continues to be the running canchre in the genitals of the Armed Forces. However, thanks to the timely and diplomatic intervention of the OC 1 Fd Sqn, the task progresses on a more friendly basis - OBE is looking good! The task is most interesting but time consuming. IF we are to believe what we hear on TV our team is expecting to be mustard gassed any day now.

The unit recently hosted the McAlley family, the Minister of Defence and the Commander 1 TF for the presentation of the Queen's Commendation for Brave Conduct, which was awarded posthumously to Lcpl Allan McAlley. The ceremony was simple, moving and well deserved, albeit long overdue. Lcpl McAlley will be sadly missed by all who knew him.

A number of postings, in and out, have given the unit a face lift. We look forward to the posting in of Lt John "Tanalised Strainer Post" Flanagan and Lt Jim "Smoothie" Vince. One and Support Troops personnel are eager to return the mirrors and cardboard cut-outs to the Q store in exchange for real troop Commanders.

Thank you to the Corps for your continued support of our unit. We remain your devoted, tongue in cheek servants.

# **1 FIELD SQUADRON - CIVIL AID - WAIROA**

20 April - 5 May

SSgt C Whakatope

During the period March - April 1988 after Cyclone Bola, sapper elements were involved in civil aid activities in the East Coast Region. Most of the work was round the Gisborne area, but in Wairoa an aspect of field engineering was required which is not often used, other than during the teaching phases of the Basic Combat course. This was the operation of the Light Tactical Raft (LTR) over an extended period.

Due to the mid section of their only bridge being washed away, an alternative mode of transport was required for the local population to be able to get to and from work. This was where the LTR came into its own and provided a link between the two parts of the town.

1 Fd Sqn was asked to supply a team to man the fourth TOD from 20 April until 5 May. The team comprised of the following personnel:

|                   |                 |
|-------------------|-----------------|
| SSgt C. Whakatope | LCpl BD Grigg   |
| LCpl DR Esaiah    | Spr SM Edwards  |
| Spr RA Langman    | Spr BR Looker   |
| Spr FR Harrison   | Spr BA Scholes  |
| Spr NM Hutchings  | Spr AW Bucknell |
| Spr AJ Walker     |                 |

Some of the above had had experience from the earlier TODs. SSgt Whakatope, back for another stint, was in charge of the initial build during the first deployment and had the added advantage of local knowledge having been born in Wairoa.

So it was after a long journey, eased by somewhat broken sleep, that we arrived in the thriving metropolis of Wairoa, to find only two sappers manning and operating the ferry. Even though they hit the mark each time it was obvious that safety would be the first priority to sort out.

We crossed over to the south side to find our home for the next two weeks - the Clyde Hotel - where we left our kit and returned to the "Love Boat" (as it had been nicknamed) for some refresher training by the 25 Const Sqn guys.

After a few heavier than normal landings we took control for the rest of the day. It was quite obvious to us that the public were well used to the change over of the crews, judging by the jokes and laughter received on these occasions.

We broke our team into two crews of five - a commander, two outboard operators and two bowmen. The latter four were changed periodically during the shift so that every one had a "bash" at landing. While one crew manned the raft the other completed tasks or were stood down.

Whilst we were there, we had the pleasure of attending the Dawn Parade to commemorate ANZAC Day at the Mahia Beach Cenotaph along with many local dignitaries and guests. The Chief of the General Staff, Maj Gen D McIver, along with his entourage, was also present. On the way back to Wairoa we visited to Tai Hoa Marae for a short memorial service, then it was back to work. Later in the day the CGS and his party crossed on the barge for a Memorial Service in Wairoa. Our days were long, with a few social hours in the hotel, due to the nature of our work.





The "LOVE BOAT" with a full load of passengers, before the superstructure was added. The safety boat fussing round, with Wairoa in the background.

Aside from the many missed landings a few other events highlighted the TOD, like driving the LTR straight up the ramp. A moment of lost concentration (Dean) was saved by mad panic efforts from the motormen who avoided a serious beaching.

Then there were the two civilian guys who tried to cross the river by swinging along under the suspended water pipe. The cops got one, the other fell into the river and the crew before us fished him out of the drink. The judge gave them both eight hours community service which were served on a Sunday as ferrymen, which allowed us to stand two of the normal crew down for the day.

On other occasions there were the ZigZag races where the motormen tried to outdo each other, to the delight of the children and the curses of the commander.

The many bags of fruit, fresh cakes, and hot piklets went down a treat. So it would seem that our antics were taken in a light hearted manner by the local population. This was particularly noticed as the end of the TOD approached and the crew started to think of home and Stand down.

Alas the final day of the TOD arrived with no respite until the next team from 25 Const Sqn arrived about noon to take over once again. There was some retraining before handing over, then back to the hotel for our farewell before departing at 0600 hrs on 5 May. Mogs are great places to catch up on much needed sleep on a journey.

In finishing, we of 1 Fd Sqn would like to acknowledge the hospitality of our hosts, the staff of the Clyde, the County Council, close acquaintances, and especially the civil populace of Wairoa and Mahia. Thanks.

#### UBIQUE

#### THE SCHOOL OF MILITARY ENGINEERING INVOLVEMENT WITH CYCLONE "BOLA".

Although many units within the Force Maintenance Group (FMG) and Army Training Group (ATG) were involved the School of Military Engineering played a particularly important part in respect to Engineer input.

WO2 B.N. Marshall, a member of the SME staff was involved in the Command element (Maj Begley of 25 Const Sqn, OC of team) inserted by RNZAF Andover on 9 March 1988. This group was followed by Lt J.C. Flanagan, Lt G.P. Shirley

and WO2 K.C. Jones whose task was to carry out a general and route reconnaissance of SH35 from Opotiki to Te Puia Springs.

Due to the damage sustained by the Gisborne City Waterworks, water purification teams with four Stellar 10A5 trailer mounted units were utilised. The team leaders from SME were Cpl's Albert, Sturgess, Hudson and LCpl Trodd.

As the Wairoa Bridge was destroyed by flood waters on the night of 7 March 1988, a wet gap recon was conducted by WO2 B.N. Marshall. The recommendation of the Light Tactical Raft (LTR) outfitted as a passenger ferry was supported by the Army.

A construction/operational team under the control of SSgt C. Whakatope arrived in Wairoa on 14 March and after two days of construction/rehearsing, provided an excellent ferry service for 4500 - 5000 civilians per day, seven days a week. This ferrying task lasted until the end of May.



Waingake Rd. Damage both above and below road.

As the emergency was scaled down, submissions for assistance to local authorities were invited by the Government. Surprisingly there were only two local authorities who took advantage of this offer.

Cook County Council requested assistance in the form of reinstatement of approximately 21 Km of the Waingake road. An initial recon conducted by WO2 B.N. Marshall assisted by Sgt W.C Stowers and LCpl Trodd identified some 23 individual tasks. A composite engineer plant team of approximately 49 persons including support personnel and some thirty items of plant were recommended. The team was principally under the command of Lt J.R. Armstrong.

Waipu County Council requested that an Army Engineer assist the County Engineer with a field recon of damage and initial investigation of claims. WO2 Marshall spent two days covering the back roads of the county and assessed eight claims for assistance and inspected and reported on bridge and road damage.

An analysis after the emergency showed that SME personnel spent some 3372 man hours being involved in the emergency. It provided an excellent opportunity for many SME personnel to put into practice their skills in reconnaissance and management. A close bond was made between Civil Defence, Red Cross and other local organisations, and lessons learned include those of making use of local knowledge and resources.

Content removed due to copyright





**Above.** Waingake Rd showing some of the damage. Notice the large cracks in the foreground and the dropout in the middle of the picture.

**Below.** The same area after the composite engineer group had been working for some weeks. The road has been cut back into the papa rock and batters improved. Damage is still noticeable in the background



## CONGRATULATIONS

The light hearted article following, appears to have been purloined from a WRAC Association magazine or newsletter.

The ex-members of the WRAC Corps would like to congratulate Signals in their colour choice for their "New" beret. To all the other Corps Directors we believe that your Corps prestige could be enhanced by adopting the following berets:

Nursing - cream, with a red cross on top;

Education - cream, with outline of parts of the brain on top;

Intelligence - cream, with a question mark on top;

Psychologists - cream, with a trick cyclist on top;

Spt Comd Headquarters staff - blank with a spiral on top (denoting ever decreasing circles);

Infantry - DPM beret tied to epaulette with DPM chord;

Ordnance - ten berets, one on top of the other, neatly bundled;

Chaplains - gold beret, hovering two inches above the head;

Transport - blue with yellow wheel on top;

Electrical and Mechanical Engineers - light blue with oil stains;

Artillery - sandy colour complete with ear muffs;

Air Defence - as for artillery minus sandy coloured beret;

Defence Headquarters - purple with yellow spiral (see Spt Comd Headquarters above);

Army Air Corps - Beano Fan Club propeller hat;

1 Scots - black beret with two leg holes, (to be worn under the kilt on cold days);

Engineers - Real men don't wear hats.

Please note: Your submissions for any other Corps (or Regimental) Distinctions are sought for publication in the next issue.

e.g. BN HQ 3 Auckland North - Blinkers

2 Cant NMWC - red and black eye patch

School of Admin - Mortar board hats, black gown and cane.

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## 6 ENGINEER SERVICES SQUADRON

You may notice the new title, however we are still the same guys based in Pattie Street in Petone. Back in 1986 the Squadron underwent a change in its role from a Field (Combat Engineer type) squadron to one which provides a number of specialist Engineer functions. It took rather longer to change the name though and it was not until February this year when 6 Independent Field Squadron gave way to 6 Engineer Services Squadron.

The Squadron has four troops in its peace time establishment; Bridging, Bomb Disposal, Chemical Defence and Port Repair and Construction. In the event of war the establishment is expanded by a Fire Troop and a Quarry Troop. At present we do not have the Chemical Defence Troop raised as the current Territorial Force strength is 90.

At the annual "Musical Chairs" time in late 1987 we saw a significant change to the Regular Force Staff of which we have eight. Some of the changes to the senior appointment holders are shown mostly on page four of this journal. SSgt D.J. Blomfield and SSgt H.M. Shields changed places in February - March this year.

### Annual Camp 1988

This year's Annual Camp found the squadron deployed to the Chatham Islands in late February early March during the same period that 1 Bde and FMG held their Annual Camps. In all there was a total strength of 77 people on the Chathams with a number of people attached, including eight fellow sappers from 25 Constr Sqn, cooks, signallers and the like.

We departed from New Zealand two days behind Schedule as our stores were still on the high seas. The January sailing had been cancelled and the





Rebuilding the Tukutuku Bridge in the Chatham Islands Feb- Mar 88

February sailing was delayed a week. We had been on the Island for ten days before the ship was finally unloaded and we obtained all the stores that we had shipped for the deployment. The lesson must be "transport early - and even then be prepared to improvise."

The three troop structure was maintained with one troop on Pitt Island (a relatively small island with a population of 70) to the south of the main island. The works undertaken there consisted mainly of upgrading the reliability of their transportation systems, a major alteration to the breakwater to prevent silting, repairs to the wharf area at Flower Pot Harbour, upgrading of the drainage at one of the two airfields, production of approximately two years supply of road metal and some work at the school.

A number of tasks were carried out on Chatham Island itself including the complete rebuilding of a bridge. Most of the roads are on the coast and the maintenance problems with steel beams is large. The rebuilt bridge now has timber beams of the "GLU-LAM" type. It is believed that the life of these beams will be similar to that of steel but the maintenance problem will be substantially reduced. Further work was done on the Nairn Bridge (built by 6 Fd Sqn on a previous visit) and those at Upper Nairn and Shelly Beach. An old fish factory was demolished at Owenga and the wharf there had protection works carried out. An underwater survey was done on the main wharf at Waitangi, and perhaps one of the bigger jobs was to lay a netball court at Owenga School. This task arose while we were on the island and was

completed in five days. The biggest task was pouring the concrete - 32 cubic metres of it all mixed by hand and laid in thirty six hours.

Despite the frustrations associated with the deployment, the end result was extremely worth while from both the squadron's and the Islanders point of view. The significant number of small to medium works tasks being completed in a short period, which, had they been undertaken in the normal course of a works programme by the two Ministry of Works men or the four members of the Council's work staff, would be at best, still be part of a future programme or just at the planning stage.

As a finale, by a score line of 10 - 4, Defence regained the Rugby Challenge Trophy, which the Islanders won when they defeated the Navy. The Ladies Softball which went into an extra innings finished with a 21 all draw.

#### More 6 Sqn Notes Capt John Armstrong

Picking up the unit activities for a period of over eighteen months is not easy and some activities tend to slip through the cracks. Since we came back from the Chathams the emphasis for training has been on developing the Troops individual specialist capabilities. With the exception of Golden Fleece and one or two minor activities, Troop weekends have formed the basis of training.

The following are worth committing to paper as a squadron record.-



Just a little 'wary' at annual Camp 1989

The Construction of a non-equipment bridge at Pikerere in June 1988;

The demolition of a large structure on Mana Island in August 1988;

The Squadron Charter Parade in Petone in November 1988;

COIN exercise in March 1989;

An underwater demolition task in June 1989 and a host of other smaller activities.

At first reading it would appear as though the Squadron has not been doing very much over the period. Those in the know will realise the hardships with which our TF soldiers have been burdened, the negative results of man-day cuts and the unsympathetic attitude that has developed amongst civilian employers. Things look a little more encouraging now and the unit is anticipating a return to the high standards in training that have been set in the past.

On a more positive note the Bomb Disposal Troop is now up and running. Seven Regular Force personnel are included in the Troop with the balance being Territorial servicemen. Those in the larger RNZE units will be aware that the troop undertook training at the RSME, Chatham, England over May/June this year (1989). Personnel from other RNZE units also joined us for this period. The training the contingent received was first rate and the off-duty activities were quite tolerable too!

Nobody can tell us definitively what the future holds for the Pattie Street Camp - whether we stay or move. This year marks the end of the

Borough of Petone and therefore the Squadron's long association with it. A parade and other activities will be held to return the Charter. Details of these events will be forthcoming - it would be nice to see some of the old 6 Field Squadron faces there to farewell the old era.

It is not out of place to record the current key appointment holders within the squadron at this time.

|             |                                                 |
|-------------|-------------------------------------------------|
| OC Maj      | Graham Wilson                                   |
| 2IC Capt    | John Armstrong (wef 20 Sep 88)                  |
| SSM         | WO1 Alan Oliver, BEM                            |
| R & LO      | Lt Dave Freeman                                 |
| Trg WO      | WO2 Pete Shelford, BEM (8 Sep 88)               |
| SQMS        | SSgt Hugh Shields (when he is not in the Sinai) |
| CClk        | Sgt Les Dahm                                    |
| Clerk       | Spr Robin Minchin (2 Sep 88)                    |
| Regt NCO    | Sgt 'Mouse' Darroch                             |
| Tpt NCO     | LCpl Fij Bowden                                 |
| Sm          | Cpl Rudy Paul                                   |
| Brg Tp Comd | Lt Stu Clark                                    |
| PRC Tp Comd | Lt Peter Box                                    |
| BD Tp Comd  | Lt Colin Birch (1 Aug 88)                       |
| BD Sec Comd | Cpl Bruiser Grigg (7 Nov 88)                    |
| BD Ops      | LCpl Colin Davidson (7 Nov 88)                  |
|             | LCpl Carl Mannion (7 Nov 88)                    |
|             | Spr Pera Hauraki (7 Nov 88)                     |
|             | Spr Tira Kaa (7 Nov 88)                         |



## THE RNZE CORPS MEMORIAL

The Committee of the RNZE Corps Memorial Association spent a considerable amount of time during 1988 gathering ideas for the extension of the RNZE Corps Memorial Centre. Designs were viewed, reviewed and re-hacked and finally a set of preliminary drawings and costings were set in train. The Colonel Commandant, Col G.W. Butcher, MC, ED, was able to use his "knowhow", and together with the sappers in the Defence Draughting Section produced a design which was accepted by the Committee. The design is a modular concept based on a seven square metre unit which can be linked to others of the same. The module, should more be required, is designed to be easily added to the existing building - and further modules if they are required in the future. The style of the modules is in keeping with the design of the present structure.

It was the desire of the Committee that construction should start late 1988 or early 1989, bearing in mind the work commitment of SME and 25 Const Sqn. The programme for construction has unfortunately slipped by nearly a year, however the fruits of these efforts is now being seen.

### THE RNZE CORPS LIBRARY

#### STOREHOUSE OF INFORMATION

It seems incredible to the Curator of the Corps Memorial Centre that there are so few who really make use of the Library as a resource for projects such as the Junior and Senior NCO courses or apprentice studies. There are a large number of biographies which cover the lives of many commanders of both the First and Second World Wars; Campaign Histories, New Zealand Official War Histories, maps and documents. There are also a number of reports from overseas tasks, and in a vertical file there are the beginnings of a source of items specifically aimed at the Junior NCO type courses.

In addition there is a very fine *Encyclopedia Britannica* which has a large amount of military history within its covers - again a resource for many different projects. For the family man this one set of books may well have the information that his children are seeking for a school project.

The encyclopedias are not to be removed from the Library but may be taken across to HQ SME to copy the odd page when required.

Those personnel who are following RNZE trades should also be aware that there are considerable numbers of *trade handbooks* which may be drawn from the library for the minimal cost of a signature. One senior trade instructor went to the trouble to order these through the military system for apprentice use - and few apprentices bother to use them. It suggests one of the following alternatives:

apprentices don't know they are available because the instructors haven't informed them,

apprentices are too lazy to draw the books, or

the NCO concerned did not do a careful study of user requirements to ascertain how often they may be used and therefore wasted a money resource.

This last alternative worries the Corps Curator as book shelf space is limited and some books may have been purchased needlessly at considerable expense to the taxpayer. Since they have been placed in the library, few of these books have been drawn for use - and it is NOT because the library is closed most of the time. The Corps Library is a CORPS facility for Corps use - so make use of it. For example 25 Const Sqn, being in Linton Camp could make much more use out of the facility rather than "going it alone" in a number of cases.

LIBRARIES  
care  
for  
LIFE

Be aware that if there is a need for a book we will attempt to get it, primarily through the military system, or through the Engineer Corps Memorial Association. But remember DONT shoot

yourself in the foot by requesting ten copies of a publication when two will do! Trade and Technical books are very expensive and need to be looked after by the users. For instance there are a number of books in the above category which are well in excess of one hundred dollars per copy and not a few which cost well above that.

It has been pleasing to note over the last few months that there have been a small number of ex soldiers using some of the resource materials available for historical and genealogical research. Searching out family members who served overseas during the Boer War and First and Second World Wars has become quite important to a number of people and we have the resource available. The Library is working towards completing a full set of Nominal Rolls which cover embarkations in these three wars. Information given in the rolls includes Next of Kin and addresses and other family information.

#### THE RNZE CORPS CHAPEL



Recently a number of small plaques were placed in the Corps Chapel at Linton to commemorate the lives of sappers, most of whom have died whilst in service over the last twenty or so years. The plaques have been placed on the ends of the pews so that they can be easily seen by visitors and worshipers alike. A sad reflection is the number who have died as a result of motor accidents, where alcohol was a major contributory factor.

Personnel commemorated in the Corps Chapel, in no particular order are:

Spr E.M. ACE, 2 NZEF, died 22 Jan 1979.

Spr Jerry T BARRETT, killed in a mine incident in Vietnam 24 Nov 1969.

Spr Raff A BROWN, also killed in a mine incident in Vietnam 12 Aug 1969.

Sgt Wally MORGAN, killed in the Solomon Islands on 1 Aug 1980.

Sgt Joe CAMPBELL, killed in a rock fall in Papua New Guinea 9 Aug 1977.

Spr Wai TONI, drowned on exercise in Kuantan in Malaya 6 Jan 1966.

Lcpl J.B."Duck" McDONALD, killed in a bridging accident at Linton Jan 1987.

Lcpl Alan McALLEY, (Queen's Commendation) died as a result of a motor cycle accident near Linton 2 Jun 1987.

Cpl Tom POMARE, died in a motor accident near Linton 29 June 1975.

Spr W.W. TOIA, died in a motor accident near Burnham 16 Feb 1983.

Spr M.E.ROBERTS, died in a motor accident near Ohakune 14 Jun 1980.

Spr G.B MOULDEY, died in a motor accident near Ohakune 14 Jun 1980.

Cpl (W) Leslie DUFF, died suddenly and tragically on 1 Dec 1980 at Christchurch Hospital approximately one month before her wedding date.

Maj Jack D BROADBENT, died whilst on holiday with his family in Rarotonga on 12 Sep 1981. He had had an heart attack some months previously.

SSgt Jack B HADFIELD BEM, died suddenly on 14 Jul 1987 at Christchurch.

Sgt R.W. FERGUSSON, died at Christchurch 24 August 1977.

Others for whom plaques are being manufactured include WO2 Dave Murray, Col Gordon Lindell, Cpl Bruce Jarvis and George Bunce. These small memorials truly give the Memorial Centre a depth of feeling, and hallow its walls.

#### LEST WE FORGET

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## ENGINEER CORPS MEMORIAL ASSOCIATION

With the likelihood of further building starting in late 1987 early 1988 the treasurer busied himself (some two to three years ago) investing money and attempting to raise further interest in the Corps Memorial by recruiting more members to the Corps fortnightly donation scheme. It was quite a sad reflection on the "*Esprit de Corps*" when he discovered the following facts on 13 July 1988, (Black Wednesday?)

Perhaps it is time we had a good look at ourselves and how much the Corps Memorial means to us as a whole and individually.

*Of a Corps strength of 573 only 72 (12.5%) were regular donors to the scheme.*

Only 21 of 49 officers supported the scheme and only one donated less than a dollar per pay. The 21 officers were contributing 30% of the fortnightly receipt. There were a small number who became Life Members of the Association through a one time donation but that is where their support has stayed.

*Only eighteen senior NCOs of ONE HUNDRED AND SEVEN in the Corps made fortnightly contributions.*

Four of these have been long time supporters but their contributions were less than one dollar per pay. It is not to say that their support is below par. Indeed it is the opposite for some of these have been donating since 1972 when 20 cents was worth about \$2.00 in today's terms. These eighteen gave 22.5% of the 14 day financial support to the scheme.

*Corporals, lance corporals and sappers make up a group of thirty three donors out of over four hundred in that rank bracket.*

This amounts to 8% of juniors - but their contribution is sound. 44.5% of the donations each pay period come from their support and it looks likely to increase substantially.

So where does this place most of us? Officers and seniors must show the way - **leading by example** it is called. The Treasurer does not advocate people fronting up to the SSM with an arm forced up behind their back but he does suggest that all

sappers take a look at themselves and their personal commitment. This was attempted in the past and had a lasting bad effect.

Since 13 July 1988 a year passed and the figures changed to look like those shown below.

**Officers** 19 of 52 in the Corps - donating 17.8%

**Senior NCOs** 21 of 113 in the Corps - donating 19.2%

**Juniors** 59 of 314 in the Corps - donating 63%

In other words a total of 99 of a Corps of 591 involved directly with the Corps Memorial Donation scheme. This amounts to 16.75% of our Corps. I am sure it is quality that counts here. the figures for August 1990 are 75 personnel in the Corps.

Remember that the Corps Memorial is both a Memorial and a functional facility for the Corps. Without support we will not have a Corps Memorial of which we can continue to remain proud.

*It is recognised that times are extremely tight at the moment but I am sure that careful consideration of a \$2.00 or even \$1.00 per pay could make a difference to the fundraising effort, and we all know the nausea of trying to run raffles and Golf Tournaments and the like.*

Most Orderly Room staff know how to fill out a change or make a new allotment. Ask them to process a form for you. The example of the form is shown below. The only information required is as shown on the sample PLUS your signature of course.

### INTERESTING ITEMS and MORALE BOOSTER

There are many items of interest in the Corps Memorial not the least of which is a small piece of paper from a field service note book. This item came to the Corps Memorial by way of the estate of Col W.G. Morisson who died a few short years ago.

The piece of paper is a most valuable acquisition as it is a hand written pass which contained only one sentence, the signature and date. Later Maj Morrison (at that time) was to add a few more details which show the importance of that piece of paper.

The New Zealand Division had withdrawn from Greece in April - May 1941 after having been forced out of position after position. Some personnel were taken directly to Egypt whilst others were taken to Crete which was a much shorter run for the Royal Navy which was having to contend with Axis aircraft and the fear of intervention by elements of the Italian and German Navies.

After days of heavy fighting in Crete the Allied forces were forced from their positions and started the withdrawal through the mountains to the Southern coast port of Sphakia where the Royal Navy was again going to attempt to take off as many as possible. The march was long, hot and frustrating as any movement drew attention from the skies and Stuka dive bombers quickly appeared to bomb and strafe the columns.

When the tired and somewhat dispirited troops eventually arrived at the embarkation points they still had to fight off German attacks before being taken aboard the ships which only appeared at night. This piece of paper meant the difference to almost the whole of 5 NZE Field Park Company for it provided a means of escape to fight another day. One hundred sappers were taken off Crete at 2200 hours on 31 May 1941, by the destroyer HMS Kimberly, the last night of the evacuation.

The Beach Master at Sphakia Lt Col A.J. Healy wrote the pass which states very simply:

#### "PASS

#### PASS MAJ MORRISON AND 100 NZ TONIGHT 31ST."

Major Morrison's comment was equally brief. He wrote "It means we do not have to go into Gerry's "Bag," - in other words become Prisoners of War.

Although Hitler tossed treatys away with a terse comment as "just being a scrap of paper", this particular scrap of paper saved many men from capture or perhaps an untimely death at the hands of the Axis forces.

Coupled with this piece of paper is a silver flute which has an inscription thanking Major Morrison for ensuring their free passage from Greece and Crete. This flute was to replace that which he had lost during the withdrawal - when he, together with one of his corporals, played marching tune duets on flute and mouth organ.

This simple act helped keep up morale thus greatly assisting his men to keep going when things were very much against them.

=====

#### BRASS MONKEYS

OR

#### CONFESSIONS OF AN OLD SAPPER

=====

BY

C.A.D. (JOHNO) JOHNSON

Mr C.A.D. Johnson, known as "Johnno" to many sappers past and present, used to live next door to the 6 Field Squadron, now 6 Engineer Services Squadron in Pattie Street Petone. He shifted recently to Westfield Station Rd, Wanganui, but still maintains his very deep interest in the activities of the Corps. Although never (as far as we can say) a member of 6 Fd or 6 ESS his interest has earned him, many times over, the accolade of Honorary Sapper in that unit. If you are passing that way he would be delighted if you dropped in for a chat.

In the days when I was a bit younger than now, and starting off my apprenticeship, I took my turn with the older boys and furnace labourers on the Foundry scrap heap. There were no outside mobile cranes in those days. Cast iron scrap was broken up in to furnace size pieces (25 kgs) or so and thrown up on stages six feet (1.8m) at a time until you got to the top platform, level with the maw of the furnace.

The smashing up of scrap iron in large quantities was always done in winter, the best time being the first hour of a cold frosty morning. Most metals, but not all, expand and contract with variations of temperature and a good frosty morning would cause any castings to be under stress (contraction). A good solid thump under these conditions would in most cases shatter the casting. You worked hard in winter to make sure that you had enough cast iron scrap to see you through the heat of summer.

Sometimes the old moulders - 65 to 70 years of age would join us, "to straighten out a few aches", so they would say. They would also show us how to take the sledge hammer blows on our



legs instead of our backs, and in which direction to place the blow for maximum effect. You well know that each tool a sapper uses requires the mastering of a skill for its best use.

These old boys had a saying which used to puzzle me no end. It was, "Boy its cold enough to freeze the balls of a brass monkey." with the usual rejoinder being "And they would shatter what they dropped." I always used to scratch my head about that one, but I knew better than to say to my elders, "Yes but brass doesn't shatter like cast iron on a cold frosty morning". Such a display of ignorance or whatever would have earned me a traditional cuff on the lug in zero seconds flat.

It was a long time and many military associated hours later before I cottoned on to what was meant, and from whence the monkeys etc originally came.

You see the "ready to use" cast iron balls the Gunners had near to the business end of their muzzle loading cannon were contained in a brass ring, or a triangular brass frame something like a billiard or snooker frame for holding the balls in position on the table. This frame was called a "monkey".

When the snows fell and the chilly winds of winter whipped up her skirts, and, in spite of the braziers kept going near the muzzles (where the sentry used to keep the rear part of his anatomy warm), the cannon balls did indeed freeze to the "brass monkey". And what's more, they were, like my cast iron scrap on a frosty morning, likely to shatter if they were dropped.

The old gunners saying over the years has been bastardised from "Its cold enough to freeze the balls TO the brass monkey", to the present day "Its cold enough to freeze the balls OF a brass monkey", which is quite a different thing. It just goes to show how easily communications can so easily get fouled up. It is just like the officer who sent back the message "Send reinforcements, we are going to advance." By the time the message had been passed 200 times by word of mouth it had been corrupted and came out at Headquarters, "Send three and fourpence, we are going to a dance."

Give me that new fangled invention the heliograph any day.

@ @ @ @ @ @ @ @ @ @ @ @ @ @ @

## SAPPERS IN THE SINAI

OCTOBER 1988 - APRIL 1989

On the 1st October 1988 four sappers deployed to the Sinai as part of the New Zealand Contingent to the Multinational Force and Observers Peacekeeping Force. Major John Lock and WO2 Chris Henry were appointed to the Engineering and Facilities team and Sgts Bruce McLean and Paul Willisroft to the Training Advisory Team as Instructors. SSgt Hugh Shields arrived in February 1989 and joined the Contingent Quartermasters team.

The sappers have been to the fore in every activity - from work right through to Remembrance Day Parades at the El Alamein and Ramile War Cemeteries, and the touristy "things" like sight seeing in Cairo, Jerusalem, Tiberias, Bethlehem and Massada.

The true worth of the sappers was evident when the Contingent successfully defended "The Ashes" in cricket against HNSI civilian team from the South Camp. The saying of sappers being 'first in and last out' was exemplified and the sapper motto 'UBIQUE' was truly upheld.



Sgt McLean, Maj Lock, WO2 Henry  
and Sgt Willisroft

**Deputy Chief, Engineering and Facilities  
Major John Lock**

I followed on from a long line of RNZE officers who have served in the Sinai, with the Multinational Force and Observers (MFO) as the

Deputy Chief Engineering and Facilities (DCEF). From memory my predecessors are listed nearly as shown below:

|                    |                                |
|--------------------|--------------------------------|
| Capt Colin Haig    | 5 Spt Sqn                      |
| Lt Col Alan Beaver | CE                             |
| Maj Steve Ransley  | 1 Fd Sqn                       |
| Maj John Tymkin    | Works Services Singapore       |
| Maj Paul Howard    | 3 Fd Sqn                       |
| Maj Mike Oliver    | School of Military Engineering |
| Maj John Lock      | 25 Const Sqn to be followed by |
| Maj Knowles, MBE   | 1 Task Force.                  |

In the early days, around 1982, the length of the tour was twelve months but fortunately for Mike Oliver and myself we had a shorter tour of six months.

The location was great. We lived and worked in in the northern Sinai with Israel only 45 km away.

The Chief of our team is a US Corps of Engineers Lieutenant Colonel. I assisted in planning and organising the expenditure of some 3 million US dollars which was used on new works, and the maintenance of all facilities in North Camp - El Gorah, South Camp - Sharm El Sheikh and some 35 remote observation posts. I was even known to have shown interest in the North Camp's water supply but that is another story for another day.

#### **Facilities Warrant Officer - Remote Sites WO2 Chris Henry**

I know that it sounds like a real 'wary' name but it isn't really. After a long line of Americans had filled this appointment the Kiwis were asked to take up this task. WO2 Graeme Abernethy was the first and I followed. The basic mission is to be responsible for the maintenance that is required on some thirty five observation posts, command posts and SSC's.

Each site basically consists of two 10m x 4m containers, one being a combined kitchen and site operations room, the other set aside for living quarters. An ISO container is used as a changing room and a ration store. Each site has solar heated ablutions, toilets, observation tower and gun pits all of which are enclosed in a wire entanglement. The sites are situated along the Egyptian/Israeli border covering some 500 km of rugged country.

It was really a great experience working with people from twelve nations. The Fijians (some of whom may have received their training in NZ) were by far the best

to work with apart from the Brits. All in all it was a tremendous tour and I left with experiences that I could possibly never have gained elsewhere.

I was replaced by WO2 Barry Clark whom I am sure is carrying on the good name of the Corps.

#### **Operations Instructor, NZTAT Sgt B.D. McLean**

As an Instructor Operations NZTAT, my primary employment was was instructing on the site commanders course, nine of which had been conducted during my tour. This was a five day course designed to familiarise potential site commanders with various aspects of commanding a field site in the MFO. I conducted the following lessons during these courses:

- Field Site Development
- Vehicle drills
- Observation techniques
- Desert survival

The students came from the USA, Fiji and Colombia, the lessons for the Colombians being conducted through a spanish/english interpreter. Additionally I spent about a month on improvements and new obstacles for the Force Skills Obstacle Course - designing, planning and commencement of the practical phase. Very soon this simple six day task was transformed into and extremely slow and frustrating job. This was due to a number of factors which would not be prudent for me to mention here.

Operational checks of some thirty field sites were conducted, along with external validations and a little QRF training for the Fijians.

In general, when travel and social opportunities are considered along with the experience of working in a small team with many nationalities, the Sinai tour was a valuable work and educational experience.

#### **Driving Instructor, NZTAT Sgt P. Williscroft**

My duties in the Sinai were both varied and interesting. As a sapper in a predominantly RNZCT environment, I was aware that I was under the microscope, so to speak, and was sure that any borax could easily come my way. Within a short period the Driving Instructor Wing became very close knit with the RNZCT personnel striving to maintain the very high standard set by the sappers.

The task involved the following:



Practical testing of all MFO personnel, from some eleven nations, who required a driving license for the MFO vehicles,

Running advanced drivers courses, and

Testing all plant operators.

The job was somewhat frustrating due to language barriers. With such a hectic timetable we found little time to take in the sites such as Cyprus, Cairo, Tel Aviv, Haifa, Massada and the Golan Heights.

My replacement was SSgt Bruce "Jacko" Jackson whom I am sure carried on the same high standards as was set in my time in the Driver Training Wing.

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### **EX TROPIC MEDIC '89** **Cpl Moran, 3 Fd Sqn**

On 22 June 1989 I departed for Rarotonga with Major Gilbert, RNZAMC, and Sgt Walker of the RNZAMC School as part of the advance party of Exercise Tropic Medic 89.

The first couple of days were spent visiting members of the NZ Government Representative's office, the Public Works Department (PWD) and the Education Department. The time was spent ascertaining supply and confirmation of materials and stores. One problem encountered was that the PWD could not confirm that there was any oxyacetylene on the island of Mitiaro, the scene of the exercise.

On 24 June, Major Gilbert and I departed for Mitiaro. On arrival we met with the Island Council, the Ariki (Chief) and the Island Administration Officer (AO). After the meetings the AO showed me the tasks which were planned for us to complete.

The first task was an extension to the school which meant starting from the prefabrication of the framing, erection of framing and right on through to finishing work. This task caused major problems for as much as 90% of the materials were missing. When Sergeant Lawrence completed the initial reconnaissance all the materials were on site, however when I arrived there were only about fifteen lengths of 150x50, the roofing material and internal lining.

On the following Monday I flew back to Rarotonga to have urgent meetings with the NZ Reps office, PWD and Education Department. After discussions it was decided to try and get an extra flight by the C130 to

make a return trip on Wednesday. This flight was confirmed on Tuesday morning and in the afternoon I joined the main body and flew back to Mitiaro Island.

The first day on the island was concerned with setting up the camp and waiting for the materials to arrive. Once the equipment arrived the job got underway. However we did encounter some problems caused by the foundations which the locals had made. These were neither square to the existing building nor level and caused difficulties when it came to matching the two roofs together. Another problem was the lack of window and door joinery, so we had to make do with 100x50s. The task took twelve days which was the total available.

While the school was being added to I went down to the boatshed to replace rusted out posts. For this task we had brought all the materials from New Zealand, but the concrete slab, at only 12mm thick on a packed coral base was insufficient for dynabolting the brackets in place. We were only able to make a temporary repair by leaving the old posts in place and placing the new ones next to them. To have fixed this building properly would have required solid concrete pads on which the brackets could be firmly fixed. The top plates also needed refixing to the posts and rafters.

In conclusion the lessons learned were:

Job I/C needs to be in the advance party to overcome problems like lack of materials,

Stores are generally hard to procure in the islands and of a lower standard, so the more brought from New Zealand the better,

Financial Authorities for preparatory work in New Zealand need to be issued earlier as this caused problems in the manufacture of the brackets, and  
**the need to be FLEXIBLE and PREPARED for problems.**

## A DIVERSION - The Editors Own Puzzle

Neither The Corps of Royal New Zealand Engineers nor The Corps of Royal Engineers carry colours. However there are other Regiments and Squadrons in the New Zealand Army who carry COLOURS or GUIDONS or STANDARDS on which are emblazoned their battle honours - the pride of the unit concerned.

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | D | O | O | W | N | O | G | Y | L | O | P | P | A | L | E | S | S |
| Q | Q | W | E | R | T | Y | C | P | S | P | K | E | S | O | M | M | E |
| L | A | S | W | A | R | R | A | R | E | A | N | G | C | L | A | S | U |
| O | Z | O | A | N | E | W | Z | E | A | L | A | N | D | T | K | S | E |
| M | E | W | N | Y | T | O | N | S | K | L | A | S | A | R | U | O | D |
| O | N | I | S | S | A | C | A | K | L | H | O | W | I | L | R | U | N |
| N | T | S | E | X | I | S | B | I | U | Y | N | T | D | A | B | T | I |
| S | S | P | L | S | E | D | P | O | L | Y | H | A | A | R | O | H | E |
| E | I | L | O | E | M | O | W | P | D | I | E | R | R | E | T | A | S |
| N | D | I | O | N | L | U | A | R | A | U | T | D | V | V | R | F | K |
| C | I | T | Y | I | A | Q | U | E | I | G | A | N | G | O | S | R | O |
| A | R | R | A | S | X | I | S | C | H | I | A | R | E | S | H | I | O |
| I | E | Y | G | S | A | N | G | R | O | I | B | G | M | E | C | C | R |
| R | Z | E | L | E | A | D | N | E | H | C | S | S | A | P | U | A | B |
| E | E | Q | I | M | A | J | E | T | I | S | C | R | O | B | L | Q | E |
| M | G | B | A | P | A | U | M | E | N | C | E | R | F | T | E | S | L |
| A | H | M | E | D | Q | W | E | L | A | N | Z | A | Y | L | A | T | I |
| M | I | N | Q | A | R | Q | A | I | M | T | V | S | A | K | B | R | T |

The puzzle above contains twenty-three battle honours which have been won by New Zealand "units", and strangely nearly all are found variously amongst British Units. The battle honours may be found by reading Horizontally, Vertically, or diagonally, backwards or as normal. Two word names are not separated but run together e.g. ELALAMEIN, which by the way is not in the puzzle. The answers are on p.44.

### THE CREATION OF CORPORATE POLICY

In the beginning was the PLAN and then came the ASSUMPTIONS and the assumptions were without form, and the plan was completely without substance and the darkness was upon the faces of the workers and they spake unto the Supervisors, saying:-

"It is a crock of shit and it stinketh!"

And the Supervisors went unto the Co-ordinators, and sayeth:-

"It is a pail of dung and none may abide the odours thereof."

And the Co-ordinators went unto the Managers and sayeth:-

"It is a container of excrement, and it is very strong, such that none may abide by it."

And the Managers went unto their Controller, and sayeth unto him:-

"It is a vessel of fertiliser, and none may abide its strength."

And the Controller went unto the Director, and sayeth unto him:-

"It contains that which aids plant growth, and it is very strong."

And the Director went unto the Managing Director and sayeth:-

"It promoteth growth and it is very powerful."

And the Managing Director went unto the Chairman and sayeth:

"This powerful new plan will actively promote the growth and efficiency of the Organisation and Engineering in particular."

And the Chairman looked upon the plan, and saw that it was good, and the plan became policy.



## SHAKE RATTLE AND ROLL

A small paragraph appeared in most national papers in September regarding a helicopter which broke up on landing near Feilding. Three sapper officers escaped injury when the Hughes 300, piloted by Capt. Peter Amyes, literally shook itself to pieces when landing, in a phenomenon known as "ground resonance". The other sapper officers were Capt R LLOYD and Lt G Wilson. The three officers had been doing an aerial reconnaissance as part of a course at the School of Military Engineering, Linton Camp.

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## SAPPER ASSISTANCE TO THE DEPARTMENT OF CONSERVATION

An RNZE diving Team recently carried out diver continuation training while assisting members of the Department of Conservation. The tasks completed included recovering a large anchor and mooring chain, using hand tools and a hydraulic crane, a seabed search and a survey of the area for evidence of trawling or illegal fishing. The team also positioned an anchor in a new location near Little Barrier Island.

Personnel for the diving team, lead by Capt Hill, were selected primarily for their engineering skills, and were drawn from 1TF, ATG, SME, 1 Field Squadron and 3 Field Squadron.

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## WORKS DIRECTORATE SUPPORT COMMAND

by  
SSgt PF LePou

As you have probably gathered by the heading, good old Works Directorate, Defence Headquarters has been devolved to Support Command. We are still not sure exactly how that affects our future operations, but rest assured the quality will still be exempl..  
exempl...exemplrar....not bad!

Our current manning as at 26 October is:

|                  |                          |
|------------------|--------------------------|
| Major K Lang     | ADW4 (soon to be posted) |
| Capt B Kenning   | SOW4A                    |
| SSgt P Le Pou    | SOW4B ( " " " )          |
| Sgt T Masi       | W6 (Chief Draughtsman)   |
| Cpl I Tukua      | W6A                      |
| LCpl M Coulter   | W6B                      |
| Spr C Newman (w) | W6C                      |
| Spr S Nelson     | D                        |
| Spr C Allen      | E                        |
| Spr T McHannigan | F                        |

Since the last input to the Corps Liaison Letter, there have been many changes to our establishment, namely the retirements and postings of:

|                         |                                             |
|-------------------------|---------------------------------------------|
| Col RK Rutherford       | Retired                                     |
| Maj EW Bruce MBE        | Retired                                     |
| Capt NK Gattsche posted | SO3 Wks Linton Camp                         |
| Capt C Faulls           | posted AO 3 Fd Sqn                          |
| WO1 Phil Packer         | posted SO3 Wks<br>Trentham Camp             |
| Lcpl Ben Green          | undergoing officer cadet<br>training at OCS |
| Lcpl M Darrall          | posted 25 Const                             |
| Spr G Lelieveld         | posted SAS                                  |
| Spr L Nordell           | posted 1 Fd Sqn                             |

Every year the directorate undertakes to go out on some sort of field trip with the aim of creating an environment where our private and senior ranks work together as equals or as near equals as possible, I mean to say, how could you compare a Squadron Leader with a Samoan SSgt? These excursions are titled "Skilsaw" (Skills At War) we are now up to Skilsaw VI. This year's "skilsaw" was a visit to a Marae in Otaki where we undertook some building tasks. We constructed a timber retaining wall, a flight of timber stairs, and did some concreting. We also developed plans for a toilet block to be constructed by members of the Marae at a later stage and surveyed the land owned by the marae. The evenings were devoted to open forum type discussions on the topics of our choice. It would be fair to say that those who attended, thoroughly enjoyed the experience and hopefully have become more aware of Maoritanga (customs).

## KUPE

The Kupe Development of Linton Camp is substantially complete with only six of the original twenty-six capital projects yet to start construction. These should all be underway by July 1990, they include:

Swimming Pool, Community Center,  
Alterations to AGI canteen,  
Rifle Range, (300m)  
Shopping Complex and Hospital Facility

The thirteen civil engineering development projects are now complete. Some of these projects were:

Roading, (incl kerbing and street lighting)  
Oxidation Pond,  
Electrical, Gas and Water Reticulation,  
Telecom Reticulation,  
Water Supply (incl 2500m<sup>3</sup> reservoir, pumping station,  
water treatment station and two new wells)

Final completion of all projects is expected by June 1991. Total cost is assessed at \$66,000,000

## DRAUGHTING

Since the last liaison letter, the draughting office has gone from one extreme to another, from flat out to dead slow, they are at present going through all those tasks that had been given a low priority initially, but because of projects like SAS HQ, SME Stage II, 2/1 Q store etc, had to be shelved, tasks like updating camp layouts, micro filming existing plans, and a proposed new Range Wardens Hut at Waiouru became the order of the day. Now that Lcpl Murray Darrall is back in town (if only for a short while) he assures me that they are hard at it once again with plans for the new Trentham Camp Golf Club Building. Unfortunately with exams at this time of the year, the squeeze is definitely on (sappers work better under pressure).

## SPORT

Works Directorate have a number of talented sports people who apart from their busy schedule have managed to squeeze in some type of sporting activity, most notable were:

Capt BD Kenning, Badminton Code Chairman  
Chief organiser of the Inter-Regionals  
Central Region Badminton Team

Ssgt LePou - Army Women's Basketball Coach  
Army Men's Basketball Team  
Spr McHannigan - Central Region League Team  
Spr Allen - Central Region Colts Rugby Team

## What next?

Many of you will be wondering, where to from here? The plot for us is to be relocated at the Big MAC (Messines Army Centre) Trentham late February early March 1990.

*"Quo Fas et Gloria Ducunt"*  
(Where Honour and Glory Leads)

## 1 FIELD SQUADRON NOTES

It is unusual for the editor to publish the appointment holders in this Liaison Letter. However seeing that it has been such a long time since the last issue it is appropriate to show some current information.

As at 1 November 1989, 1 Field Squadron reflected the following appointments:-

|              |      |          |                                          |
|--------------|------|----------|------------------------------------------|
| OC           | Maj  | SG       | Ransley (soon to be posted to Singapore) |
| 2IC/AO       | Capt | PG       | Curran                                   |
| SSM          | WO1  | KJ       | Jones                                    |
| SQMS         | WO2  | CJ       | Wilson                                   |
| CCLk         | SSgt | CMT      | Kauika-Stevens                           |
| 1 Tp Comd Lt | JC   | Flanagan |                                          |
| SSgt         | SSgt | C        | Whakatope                                |
| Sgt          | Sgt  | NT       | Komene                                   |
| Spt Tp Comd  | Lt   | WJ       | Vince                                    |
| SSgt         | SSgt | TTR      | Morehu                                   |

Although they were not meant to have been missed out on the list of promotions to senior NCO status the information was not received soon enough to include the following promotions earlier in the Liaison Letter.

Cpl NT Komene T/Sgt 19 May 89  
Cpl WS Nathan T/Sgt 18 Oct 89

## Bombs Away by Cpl WS Nathan

Courses play a major role in the career development of soldiers in the RNZE and indeed the Army. I have recently been fortunate enough to attend a course at SME Casula, in Australia and would like to share some of the aspects of the course with the readers of the Liaison Letter.

The course title was "Explosive Ordnance Disposal Technician" (EOD Tech). In Australia and England the need for such a qualification has been apparent for a considerable number of years but only in recent times has there been a need here at home.

The course covers a broad spectrum of explosives, bombs, IED and guided missiles to name a few. The aim of the course is to qualify officers, Warrant Officers and Senior NCOs in Explosive Ordnance Disposal. Many hours of the three month course were spent on practical tasks, and three and a half weeks were spent in the field on live disposal operations.

I found that the disposal of chemical weapons was a most interesting segment of the course which was made up of two weeks of theory and culminated in a four day live disposal operation.

The course allowed full development of individual skills involving leadership, demolitions, and indeed confidence in one's own ability to work under extreme pressure.



In closing I must say that the course was well presented and more than achieved the aim. I am confident that should any reader be interested enough to inquire about, and perhaps attend the course, he will find it most enjoyable and beneficial.

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### **SAS UNIT ADMINISTRATION BUILDING**

by Cpl ST Reilly

Construction for this building commenced on 15 March 1988 with the site being set up and the security fencing being put in place. From the outset delays occurred in the constructing because of changes being made to the plans and areas therein lacking clear details.

Once the boxing had been put in place and the reinforcing steel laid we called in the civilian concrete placers to lay the floor, from which we gained a very finish. The next stage was to stand the laminated timber portals and the steel columns and beams in place and connect them to the precast concrete pillars which would eventually support the first floor and roof structure.

Once the timber frame had been erected bad weather slowed production down considerably. Unfortunately over the Christmas break 88/89 the weather had caused twisting in the posted frame, which meant that the first few days of this year were spent in straightening and replacing studs.

As the roof was of three different products it was thought that a roofing contractor would be best to control that aspect of the building. This proved to be very successful.

Once the internal frame and the exterior linings were finished the next stage was to was the air conditioning. Some problems were discovered and put right at unit level. (Its the putting right that counts.)

Working on this task has given the apprentices and tradesmen alike an insight on new products and fixing systems not generally employed in standard military construction tasks.

At times the working day has been extended with meals being taken on site. This has allowed the task to flow with minimal distractions.

The task is to continue until its completion in early April 1990 at which time we hope to hand the building over.

### **4th ENGINEER TROOP, WAIOURU**

Unfortunately the information from 4th Engineer Troop in Waiouru is a little dated but that is the problem when a Liaison Letter is produced only once in two years. However the following is good for openers and does cover some of the activities of the unit.

#### **1988 Activities**

This unit, like all all other units had a busy construction season in 1988. As most people already know, the works season in Waiouru is governed by the weather. However most earthworks tasks undertaken by the unit were completed.

#### **Museum Forecourt**

In January the unit was given the task of bringing the Army Museum forecourt up to sealing standard. The task, under to control of LCpl Peterson included the removal of the old seal left on the forecourt, excavation, and new fill brought in and compacted. The area was ready for sealing at the end of January 88.

#### **School Hall**

We were tasked by the Commander ATG to excavate the site for the new school hall. The work was started on site in the beginning of February and completed on the 20th. About 800m<sup>3</sup> of Dabba grit was carted in to the site and compacted.

#### **Ammunition Traverses**

Construction of Ammunition traverses was started in mid February 88 under the control of Cpl Mike Beddis. Bunds were required round a number of ammunition buildings and some 20,000m<sup>3</sup> were brought in by dump trucks and scrapers. the task was progressing well until bad weather struck. Furthermore all personnel were required were required for the crusher operation which had arrived from Linton. The bunds were eventually completed at the end of May.

#### **Crusher Operation**

The Army hired a civilian crusher for one month at the cost of \$1100 per day. Virtually the whole unit was required to keep this going. Approximately 1500m<sup>3</sup> was crushed for both the Imjin (it gained its name from the Korean War) and Carbuncle tracks. The Imjin road realignment was commenced and about one Km was completed with base course before bad weather again put a stop to the task.

This year we have worked in conjunction with 25 Construction Squadron on the re-alignment of the Imjin Road. The Imjin has been for many years one of the worst roads in the Waiouru training area and was in great need of some reconstruction work.

4 Engineer Resources Troop won roading materials from the Number One Road quarry

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## CONGRATULATIONS

Congratulations from the Corps go to **Spr Paul Krisiansen**, 3 Task for Region for gaining the highest marks within New Zealand for Advanced Trade Certificate Signwriting. This is an extremely fine achievement in a very competitive field. Well Done.

And Congratulations too to the **Vanuatuan** trainees who did the blockwork on the extensions to the Corps Memorial at Linton. The Contractors who came to measure the window spaces have stated that it is the most accurate block-laying they have had to work with. From the top of the openings to the bottom there is **NO** deviation as the blocks are all perfectly in line. Congratulations to the site boss LCpl "Snails" Snam and his team who oversaw the work completed.

Congratulations are also extended to **Spr A Slade** of 25 Construction Squadron who competed in the Horowhenua District Shooting Championships over the weekend of 2 - 3 December 1989. The two day meeting was held at Levin and the practices were shot over 300, 500, 600, 800 and 900 yards. Spr Slade gained 11th place in the "C" out over one hundred firsers with a score of 219 out of a possible of 250.50.

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## Pakistan Team

The first RNZE Detachment to serve in Pakistan returned home a few short weeks ago. This team was led by Captain Peacock and

The second detachment to serve in Pakistan to assist and instruct the local population and Afghan refugees on mine clearance departed recently. The team personnel are Capt Faulls, WO2 Bryce Meade, SSgt Fred Estall, Sgt Wall and and Sgt Scott.

## SAPPERS' DAY MEMORIAL CHURCH SERVICE

The Sappers' Day Memorial Church service was held at St David's Presbyterian Church, Khyber Pass Road, Auckland actually on the 15th October 1989. Normally the service has been held on the Sunday nearest to Sappers' Day but this time the two coincided. The writer is unsure how long these services have been an annual event but two dates have been suggested. They are either 1927 or 1928.

The service was attended by some 40 retired sappers (mostly from World War Two) several of whom came quite a distance. A growing number of more recent retirees were visible this year which was really tremendous, and an estimated 60 sappers in uniform from 1 Field Squadron lead by Major Steve Ransley gave the scene a great boost. They were welcomed by the new Minister the Reverend Doctor Graeme Ferguson who delivered the sermon which was on "Life in Christ" which unfortunately may have been lost on the younger sappers. During the service a double baptism was conducted by the associate minister Rev David Brown. It may be a day to remember for the parents of those children to have so much happening on their baptismal day!

The Sappers' Association Vice Patron Bob Gilmour read the lesson and WO 1 Chamberlain contributed to the service with the aria "Arm, Arm Ye Brave" from the oratorio "Judas Maccabeus" by Handel. Perhaps that was quite appropriate for a church half filled with soldiers. Denis McCombe the church organist accompanied the soloist in this aria. As is now customary the youngest sapper present, Sapper Rolls, assisted the President of the Sappers Association, Les Harwood, lay the memorial wreath against the Roll of Honour which lists members of the Corps who died in both the First and Second World Wars.

Luncheon at the Onehunga RSA was attended by about 100 personnel. All were welcomed by the Sappers Association President Les Harwood. At this luncheon presentations were made to Mary Wilson and Ebba Tier. Both these sapper wives have spent many years supporting their sapper husbands in the Association. Mary has assisted in the production of the Sappers' Association Newsletter and Ebba became as the secretary at a critical time. It was with great pleasure that both these ladies were presented with the Sappers' Association Honorary Membership badges by the President.



## A SOLDIER'S PRAYER

*This moving prayer-poem is anonymous, for the scrap of paper on which it was written fluttered into the hands of a British soldier sheltering in a slit trench in North Africa during the Second World War. Where it came from, or who wrote it, no-one knows. But its sentiment and truth will be readily recognised by servicemen who have faced untold fears during the times when they have been involved in conflict. (This poem has been extracted from a magazine called THIS ENGLAND, Autumn 1988 issue.)*

*Stay with me, God, the night is dark,  
The night is cold: my little spark  
Of courage dies. The night is long;  
Be with me, God, and make me strong.*

*I love a game, I love a fight,  
I hate the dark; I love the light.  
I love my child; I love my wife.  
I am no coward, I love life.*

*Life with its changes of mood and shade.  
I want to live. I'm not afraid,  
But me and mine are hard to part;  
Oh, unknown God, lift up my heart.*

*You stilled the waters at Dunkirk  
And saved your servants. All you work  
Is wonderful, Dear God. You strode  
Before us down that dreadful road.*

*We were alone, and hope had fled;  
We loved our country and our dead,  
And could not shame them; so we stayed  
The course, and were not much afraid.*

*Dear God, that nightmare road! And then  
The sea! We got there... we were men.  
My eyes were blind, my feet were torn,  
My soul sang like a bird at dawn.*

*I knew that death is but a door.  
I knew what we were fighting for:  
Peace for the kids, our brother freed,  
A kinder world, a cleaner breed.*

*I'm but the son my mother bore,  
A simple man and nothing more.  
But - God of strength and gentleness,  
Be pleased to make me nothing less.*

*Help me, O God, when death is near  
To mock the haggard face of fear,  
That when I fall - if fall I must -  
My soul may triumph in the Dust.*

## 25 CONSTRUCTION SQUADRON

The Construction Troop has now been running for just over 3 years and has achieved a great deal in that time. From beginning in 1986 with no equipment, no workshops and 10 pers, (5 of whom were carpenters), we have grown to the present manning of 1:36. We have most of the equipment required to carry out our role and workshops to house our allied trades, although these are somewhat substandard.

Major construction tasks undertaken over the past two years include:

- The completion of the Ngarimu Officers Quarters
- The construction of the new Headquarters for the recently returned 1 Battalion RNZIR.
- The partial construction of the new 25 Const Sqn Wksp
- The construction of the new Linton Camp Dental Section, (a Lockwood Design)

Along with these the Troop has completed a number of smaller maintenance tasks around the unit and the FMG.

The manning for the Troop, although impressive at first glance, does not allow a great deal of flexibility when it comes to the amount of work we can take on. The current breakdown of manning is as follows:

Troop strength 1:36

|                  |                  |
|------------------|------------------|
| Troop HQ         | 1 Off + 2 x SNCO |
| Carp             | Cpl x 3          |
|                  | LCpl x 3         |
|                  | Spr x 10         |
| Plumb            | Cpl x 1          |
|                  | Spr x 2          |
| Joiner           | LCpl x 1         |
|                  | Spr x 6          |
| Joiner Machinist | LCpl x 1         |
|                  | Spr x 1          |
| Electrician      | LCpl x 1         |
|                  | Spr x 2          |
| Painters         | Spr x 3          |

Although initially a problem, equipment provision has now been well dealt with and most of the troop is using relatively new kit. The carpenters have a good range of both concreting and woodworking kit, and have recently procured 2 sets of the new 'Alipro' scaffolding.

The joiners workshop has a few recent additions which have enhanced their capabilities 100%, although some of their kit is still 'Arch Age' vintage. Problems with

the Truckies backing into the hopper are making things in that area slightly touchy, but as the hopper has been condemned for 2-3 years already I'm sure it will last for a few years more. Its a shame the same can't be said for the Joinery Trade itself.

The Painters continue to provide the Troop and SME with good support to all Construction tasks and have also been on the receiving end of essential kit purchases from the 'KUPE' project. Their manpower has however risen and fallen like the proverbial loose woman's pants, and at present looks to be dwindling to an all time low. Perhaps the impending demise of the trade within the RNZE, is not going to prove such a problem for the Corps as initially thought.

The Troop Plumbers are like the Painters a variable resource, at one time only 2 in strength, soon thought to be a Cpl and 5 Sprs. This will add a welcome new dimension in that they will now be able to take on a variety of roofing tasks, which would have otherwise been sent to civil agencies. This will also allow them to broaden their already extensive capabilities to such fields as heating and ventilation and perhaps allow an opportunity to deal more deeply with the Gas Fitting side of the trade. With this sort of background we will end up with a very versatile and capable resource, although grossly underpaid by civilian standards.

The Electricians do not fare as well though when it comes to the manpower stakes. At present with one man overseas and a second trained in a Supplementary field (not however worth a skill factor yet), things are reasonably pushed. This is generally overcome by the exceptionally good reciprocal assistance working relationship the Troop has with the TTW of SME. This comes to the fore especially at Annual camp time.

In general the Troop will gain from the proposed new structure, as the construction capability will nearly double. What is required now is a firm commitment from all controlling agencies to ensure the Troop can settle down and get on with what we are here for.

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#### RAOUL ISLAND RECONNAISSANCE

##### History

Raoul Island is located approximately 1000 km northeast of Auckland. It is the largest island in the Kermadec group with an area of about 3000 hectares. The island is volcanic, rugged and densely forested.

The island with the exception of the 111 hectare Meteorological station administered by the NZ Ministry of Transport (MOT), is now controlled by the

Department of Conservation (DOC). Currently, the station is manned by four people, including a mechanic/maintenance man, who 'endure' a 12 month TOD. Replacement and provisioning is usually by sea.

Landing by boat is difficult and access is by a landing point two km east of the station or a short mowed airstrip used by a private NZ pilot.



*The Pegasus II*

##### General

Early in 1989 MOT decided to automate the met station and withdraw the staff as a money saving measure. Government directed that because RAOUL is our northern most island it is to be manned for security and strategic reasons. DOC and MOT agreed to provide a staff of two DOC and one MOT (met) person. Air is the cheapest way to replace and supply teams with shorter TODs saving in allowances and flying in a maintenance man as required saving wages. Aircraft also provide a quicker response in emergency.

However the existing strip was deemed unsuitable and a Works Corp feasibility study recommended a site investigation. On 28 July 89 after 10 days notice a reconnaissance team sailed from Auckland on the MV Pegasus II. The team was:

Capt P.J. Curry,  
WO2 L.W. Ward,  
Cpl E. Tamou,  
LCpl C.J. Rasmussen,  
Spr G.D. Strange,  
Spr N. Mason, and  
Mr C. Harrison, Works Consultancy  
Services.





*The team. LCpl Cliff Rasmussen, Capt Paul Curry, Cpl Eddie Tamou, Spr Geof Strange, Spr Noel Mason, WO2 Lindsay Ward. Absent Mr Clive Harrison*

The three and a half day voyage was memorable for five metre swells, catching gannets but no fish, videos, sleep, meals lost overboard and not much else.

After transferring to inflatables and being lifted ashore by permanent a derrick at the landing point, we flying foxed our kit to the top of the cliff. We then traveled by tractor and truck to the accommodation. We were warmly welcomed by the station staff and next day started the reconnaissance.



*The landing point called "Fish Rock" with the crane and winch shed*

## The Reconnaissance

The reconnaissance itself lasted for five and a half days and concentrated on gathering survey and soils data for the alignments given to us.

The team worked all available daylight hours with Ras and Geoff concentrating on surveying and Eddie, Noel and his close friend Clive Harrison working on soils samples. Capt Paul Curry and WO2 Lindsay Ward checked out beach access for barges, resources on the island, photographed the alignments and assisted the soils and survey teams.



*Soils testing using a hand borer and Cone penetrometer. Mr Harrison, Spr Mason, Cpl Tamou*

The weather station staff put all their resources at our disposal and were of great assistance. Just as well we took a few cans of our sponsors product with to repay them.

## Home Again

The trip home was a repeat of the trip except we were heading into the swell.

Where is the project now? Good question. After a frantic round of debriefs our preliminary report was submitted. However the question; 'Who pays?', and several others which should have been answered before we left mean, the information to finish a final report is not available. It is now in the hands of our political leaders.

## Lessons

An interesting reconnaissance to a beautiful island but there are a few lessons;

- a. Ensure the customer knows his requirements before you leave to carry out the task.
- b. As a customer, give those on the task time and flexibility to give you a range of options if your requirements have a hint of impracticability.

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*Editor's note:* Was WO2 LW the person who traveled with his head out the porthole because of seasickness - and had his face and his cabin washed by the five metre swells?

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### **PLANT TROOP TRAINING 89**

by Sgt J Te Whata

The plant troop of 25 Const Sqn held three weeks of Infantry/Soldier skills training during Jul-Aug 89.

The training consisted of, Weapon Handling, Foot Drill and a series of lectures on field craft, map reading, first aid, the MFO, UN Peace keeping and infantry section minor tactics. This was followed by a troop infantry exercise on the property of Mr Graham Sexton at Himintangi.

The exercise was conducted in four phases:

**Pre-deployment.** This consisted of issuing stores, rations, blank ammunition and checking vehicles.

**Deploying to the first night harbour.** This consisted of moving by vehicle to the exercise area then patrolling by Troop to the night harbour and an enemy initiated troop ambush.

**Section Activities.** This activity covered section patrolling and section minor tactics, carrying out recesses of water points, troop harbour areas, an airfield and an access point to the coast for the withdrawal phase and an enemy attack on the troop harbour.

**The withdrawal phase.** This consisted of a two and a half to three hour night march, which started at 0330 hours, from the exercise area to meet up with Resources troop and the assault boats at Foxton Marina by 0700 hours. Boating up the Manawatu river to Shannon, then via the Tokomaru river which is really a tidal stream to RV with Sqn Tpt and the road back to Linton.

The general feeling among the personnel was that the exercise should have been longer.

### **Points Learnt on The Exercise**

1. Take sufficient Outboard motor fuel to last the whole trip.
2. Boat trips on tidal streams are better done when the tide is in, more boating less walking.
3. We don't do enough of this training.

---

### **IMJIM ROAD RECONSTRUCTION/RE-ALIGNMENT 88/89 SEASON**

by Sgt Beddis

The 88/89 work season was due to start with the construction of the Northern Access, starting from Burma Road to Butts, however due to cut backs in finance the Northern Access was shelved. An alternative task was found which was the reconstruction and realignment of the Imjim Road.

Tasks undertaken in the reconstruction and realignment were as follows:

- a. Three through cuts were surveyed along the road effectively cutting out all the sharp corners, including the tight hair pin.
- b. Several side hill cuts have been completed or started, one of which is a cut of 17m leading into the 15m through cut.
- c. Drainage along the road played a major part of the works with old culverts being flushed out and new culverts put in place. In particular a 1.375m culvert was constructed to replace an ineffective pipe in order to widen the road, (Scorpion Corner).
- d. All batters have been recut and side drains recut or cleaned out.
- e. Blast rock for the road came from Number One Road quarry won by 4 Engineer Resources Troop, Waiouru.

The remaining tasks on the Imjim Road are:

- a. Base course top section of road.
- b. Complete side hill cut and lay blown rock/base course.
- c. Complete through cut lay blown rock and base course.
- d. Finish sand bagging culverts and construct fluming.

All remaining tasks shown above are to be completed during the 90 work season.





*Excavating a trench for a culvert on the Imjin Road.*

### **KIA ORA FROM THE 25 ORDERLY ROOM**

1989 started off with a hiss and a roar with Exercise **Tattered Sheepskin**, held in Napier from 12 January to February 22, which tried the patience of every man, soldier, officer and his dog.

The clerks along with the rest of the troops of the squadron, survived the exercise with no severe injuries, a few, mind you, now have the letters UD plastered across their foreheads. Those who were ex - infantry haven't as yet managed to wash it off. The orderly room staff at the squadron is happy to announce that they never caught the "UD" fever.

After a long and dusty six weeks exercise we all knew it was time to pack up T.V.s and tents and head home when the boys were starting to eye up the sheep in the surrounding paddocks.

3 April saw a new addition to the Orderly Room. LCpl Lou Chamberlain RNZEME swapped units with LCpl Letty Ranger RNZ Sigs. Letty is still currently on TOD to the Workshops.

The year was full of ups and downs. The up of the year was getting a new Chief Clerk. The down of the year was that it was Buster Cooper!... (Sorry boss)

The orderly room staff as it now stands is

|             |                                                                                         |
|-------------|-----------------------------------------------------------------------------------------|
| Chief Clerk | Sgt Buster Cooper                                                                       |
| Peons       | LCpl Fay Beets<br>LCpl Lou Chamberlain<br>Spr Linda Sorensen, and<br>LCpl Letty Ranger. |

not forgetting

We haven't had any marriages or births "as yet". We are all still practicing freedom, even with the battalion arriving back within arms reach. I think it is quite safe to say that majority of the staff are quite happy just enjoying the view.

The RNZE vs RNZEME rugby game was one of the main attractions of the year with LCpl Chamberlain reminding us constantly who the winners were that day.

Sapper's Day went rather well as it usually does, with the celebrations starting two days in advance, warming up to the big event. This year our squadron was the

host inviting the "Whitehouse" (SME) and their merry men down for a few quiet sarsaparillas. The EME victory certainly wasn't forgotten that day!

The year has come to a close and the orderly room has only one thing left to say:

*WE'VE BEEN BEATEN, KICKED, LIED TO,  
CUSSSED AT, SWINDLED, TAKEN ADVANTAGE OF  
AND LAUGHED AT - BUT,  
THE ONLY REASON WE HANG ROUND HERE IS  
TO SEE WHAT HAPPENS NEXT!!!*

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## GALLIPOLI, CRETE, GREECE and ITALY 1990

*WO 1 H.E. Chamberlain*

On 25 April 1915 soldiers from Australia and New Zealand Army Corps (ANZAC) stormed ashore on the coast of the Gallipoli Peninsula. On 25 April 1990 ceremonies were conducted at several places on the peninsula to commemorate the landings and the great sacrifice made by servicemen from England and France, Australia and New Zealand and not the least Turkey.

Few people today recognise that New Zealand grew to nationhood from this conflict and the memories of the surviving men evoke a feeling of national pride in our people. Unfortunately few New Zealanders really know what happened there apart from that fact that our soldiers served and many were wounded and died. 78% of the New Zealanders who landed on Gallipoli became casualties. Many of those who were not killed were unable to take any further part in the war.

New Zealand sent an Official Party to the 1990 services consisting of a Half Guard drawn from all Corps in the Army (as there was no RNZN or RNZAF participation in the battle) and there were a number of groups who made their own way to Turkey. My wife and I were members of a party organised by Support Command which included several World War 2 veterans, Regular Force personnel and one Territorial Force person. This tour party was also going to visit Crete, Greece and Italy.

Our party left New Zealand on 15 April, was split at Singapore but was rejoined in Istanbul, on the morning of 18 April when we all arrived at our hotel. Virtually the first thing we noticed was that after traveling all night we could still not get into a hotel room until mid-day. Most of us were drooping by that time and our veterans certainly felt the need for a rest. We also noticed that a man with a trained bear appeared like

magic outside the hotel as he hoped that we tourists would pay to photograph him and his bear. At 15,000 Turkish Lira per person per photograph there were not many takers. There were some 1,200 Turkish Lira to a NZ Dollar so that will give you an idea of what he was attempting to make.

The rest of the first day was spent changing money and getting a feel for our part of town. A short distance from our hotel were several main shopping areas but it took a little while to recognise the shops for what they were. Many of the streets were narrow (shades of Wellington) and the footpaths in many cases were suitable for only two people to walk side by side.

For the next four days we enjoyed tours of Istanbul and visited the Dolmabahce Palace, Topkapi Palace (the emeralds were magnificent), the Blue Mosque, St Sophia church museum (which has a huge dome), the Roman Cistern and the Grand Bazaar. We also did a day trip up the Bosphorus to Sariyer near the Black Sea. This was most interesting as we saw several Turkish forts dating from the time of wars between the Byzantines and the Turks 500 years ago, and the modern ships of the Turkish Navy. A postcard which one could purchase from many of the shops at the entrance of the Black Sea were completely black - representing the pollution in the water.

One point we all noticed was the standard of building construction. We wondered that not more people lost their lives when one of their major disasters struck as scaffolding was rudimentary, weather boards (when used) appeared to be as thin as three ply, and mortar between bricks appeared to be little more than a spot.

After this our party traveled to Behramkale stopping to visit parts of Gallipoli on the way. We noted that the Turkish gardeners were busy tending the gardens and all the cemeteries were beautifully kept. From ANZAC Cove to Lone Pine, Chunuk Bair and Quinn's Post we could see that there was respect for those interred. As we looked round the cemetery we noted the youth of those who had died. Only rarely was the age seen on the headstones above the early twenties. Also new plaques had been set in place recording in four languages the actions at each of ten locations.

Our hotel was located some 80 kms south of Canakkale which is the the largest city close to Gallipoli (or Gelibolu in Turkish). It was unfortunate that our party could not get hotel accommodation in Canakkale as the trip back from Behramkale to be in time for the Dawn Service had to commence at 2230 hrs to meet the 0130 ferry across the Dardanelles. As my wife stated it was the first time she had attended a dawn service at half past ten the previous night. The



[illegible]

39

The New Zealand Half Guard (which included four sappers - Sgt B.D. Lanauze, LCpl S.B. Karena, LCpl T.W. Howe and Spr J.R. Tamon) was drawn up to the side of the Chunuk Bair Memorial and provided a fitting presence at the ceremony. The Governor General Sir Paul Reeves, and Lady Reeves and Mr Fred Rogers, our only survivor of Gallipoli who was able to make the long journey back, were present at both the Dawn Service at ANZAC Cove and the 1145 service at Chunuk Bair. No doubt Mr Rogers felt deeply about returning to the land where so many of his comrades lay.



*A Gallipoli veteran flanked by two young New Zealand soldiers approach the venue for the Dawn Service*

Kemal Ataturk made the following statement in 1934:

"You, the mothers, who sent your sons from far away countries, wipe away your tears; your sons are now lying in our bosom and are in peace, after having lost their lives on this land, they have become our sons as well."

Most of the people in our party were surprised at the numbers of Turkish people who attended both the Dawn Service and the Service at Chunuk Bair. However it did not take much thought to realise that the Turkish people had also suffered greatly and it was their own country for which they were fighting. Also most of those in our party said that the Turkish people to whom they spoke were very keen that New Zealand and Turkey should be good friends. A number of us were given personal invitations to come and stay with their families on our next visit to Turkey.

After ANZAC, our tour party re-crossed the Dardanelles, briefly visited the ruins of ancient Troy and returned to our hotel at Behramkale. From there we traveled to Kusadasi and visited the ruins of Ephesus (by far the most interesting to see) and then made our way by sea to the Island of Rhodes and by air across to Crete.



*The Governor General Sir Paul Reeves arriving for the Dawn Service at ANZAC Cove.*

We arrived in Crete at about 2300 hrs and were whisked away by bus to our hotel in Iraklion which is the largest city on the island. After a good night's sleep and breakfast of cheese and buns next morning we were taken by bus to look at a number of local sights which included the ancient palace of Knossos. This was a fascinating structure dating back some 2000 BC years. The engineers who had built this palace had created a magnificent building of about five or six levels each completed with concealed drainage from bath and wash rooms and light wells which gave light to every room. They knew their business. Only a matter of a few hundred yards from Knossos is the Villa Ariadne from which the German Commander of Crete was kidnapped by British Commandos during the war.

Crete is a most interesting island in that it was once heavily forested but has suffered from the close cropping by goats and fires caused by electrical storms. Those who have read anything of Crete will know that the soldiers who tried to evade the Germans during World War II found that the island was almost



waterless, almost devoid of topsoils. Now the general state of the land is stony, rough and broken with very hardy trees and shrubs.

We were taken on our second day from Iraklion to Hania to the northwest. On our way we paused at the Suda Bay Commonwealth Cemetery where our World War II veterans saw the headstones of some of their coppers. I also recognised some names of personnel I had read about in my military history researches. One headstone showed the place where the remains of the father of two of our former Warrant Officers were laid. It was in this area that the New Zealand forces were mainly situated during World War 2. From Hania it was only a short distance to Maleme airfield which was fought over bitterly by the New Zealand infantry and the German airborne troops. Also in this area was Galatos Village which was captured, held and lost three times. Sgt Clive Hulme won the Victoria Cross in the fighting at Galatos Village.



*Suda Bay Commonwealth War Cemetery*

On our final day in Crete our party went over the hills to Sfakia from where some 10,000 to 12,000 Commonwealth servicemen were taken by the Royal Navy. The road is much changed and one of our veterans found it difficult to recall the route. The last time he had traveled over this track it was not sealed, he and his companions were constantly harassed by Stukas, and some parts he walked over in the dark. It is hard to realise that such a deep gorge and difficult mountain road could easily be forgotten, but add to the above, absolute weariness and being wounded it becomes more real. We could see the many cave in which the soldier took shelter during the day while

they waited for the night and the R and take them back to Egypt. Sfa tiny town linked to the outside by s The town is located on the only ground in the vicinity but the hous to the hillsides and the restaurant o tables and chairs so that trucks ca pick up the catch from the local fish pp.24 and 25 Interesting Items and



*The tiny harbour at Sfakia*

From Crete our party traveled by Piraeus, the port of Athens. From some of the normal sights such as Pathenon and Odeon and the T Unknown Warrior. The Guard o Unknown Warrior's Tomb with th with pompoms on their boots at t splendid to watch with excellent between each pace as they balance an arm swing which was well above

From Athens we visited the Temple making our way through millions o reputed to be several hundred years Pass, known for its viaduct which v some New Zealand Engineer O partisans. From there we traveled t northwards through the Pinios Gor (Tempe) to Katerini - the northern m the New Zealand Division during W Hotel here we called Faulty Towers low standard of service and acco skirted round Mount Olympus and

village of Kastania some 800 feet above Servia where 18 NZ Battalion was stationed. We were there for about an hour before any women appeared and when they did we learned that they thought we were Germans. They had decided to come out and let bygones be bygones even though some of these women lost husbands and babies to the military actions and removal of food by the Axis forces. When we told them we were from New Zealand we were welcomed like long lost friends not an enemy being forgiven.

Our way back to Athens included a stop at Thermopylae where we saw a memorial to Leonadis and his 300 Spartans who fought the Persians until all were killed. The New Zealanders fought a rearguard action in this same area in an effort to deny the Germans in 1941.

We just had an overnight stop in Athens this time before taking the bus to Patras to catch the ferry to Brindisi in Italy. On the way we stopped to have a close look at the Corinth Canal which is a 70 metre deep cut across the isthmus between the Gulf of Corinth and the Aegean Sea. Again New Zealand sappers were involved with the demolition of the two bridges here in the face of German paratroop landings. Unfortunately even now we do not know whether two of these sappers were killed by the explosion of the demolition charges or by enemy action. We found very little to commend Patras to our memory other than dirt and litter.



*Corinth Canal with a ship at the far end*

The ferry trip across to Brindisi in Italy we were told would take us 12 hours. This in fact turned out to be 17 hours. The method of getting on board this ferry

was rather primitive as we had to climb up a long very narrow flight of stairs from the vehicle deck to the accommodation decks. Our veterans found this most awkward and the younger ones in our team assisted in every way we could. The Italian crew stood back and waved their arms - we think it was to try and keep themselves cool for all the good that it did. On arrival at Brindisi we found warm temperatures and polluted skies. We were told that this was not pollution as that only occurred in northern Italy.

Our bus which was to take us to Cassino was waiting by the wharf. We were to learn that once again the information given to us regarding time was incorrect by almost 100%. This journey was estimated at between 3 and four hours and took seven. The bus driver was trying to fly as he was really moving along the Autostrada. However we eventually arrived at our hotel in Cassino at 2330 but soon found that we could not even get a drink of coffee - and our last stop had been at 2000. Our party was not impressed.

The next morning we went to breakfast and found that there were two meals - one for tour parties and the other for normal guests. The breakfast for our party consisted of bread rolls, cheese and coffee or fruit juice. The others had bacon and eggs. Another failure to be impressed. Even breakfast was not without its traumas as we had to demand coffee and one chap who ate all the bread rolls on his table was told that that was the lot for the remainder of the people who were to be seated at that table.



*"Buster" Falloon on Sherman tank in Cassino*



We soon were organised onto our bus after breakfast and were taken firstly to the Benedictine Monastery of Monte Cassino which had been destroyed by bombing during the war. The building had been completely rebuilt and was again restored to its previous state. Within the walls the paintings and statues had been restored where possible but the chapel decoration was incomplete as the artist had died before the paintings were finished. Just nearby on the side of a hill was the Polish Cemetery. It was hard to believe that some many of those who had survived the fighting at Cassino could not return to their own country at the end of the war as they had been "tarnished" by contact with people from the west.

One could see how easily this place completely dominated the whole area and its importance during the war. The Monastery covered important road and rail junctions and from the heights could control all movement within a considerable distance. One of our party had been in 18 Battalion and Armoured Regiment during this part of the War and saw heavy fighting in the town. (See photo above) He had difficulty orienting himself as he said that all the buildings had been destroyed and they had alleys of rubble down which they had to fight.

From the Monastery we were taken back down the hill to the Commonwealth War Cemetery where many New Zealanders were interred. The cemetery, like all the others that we had been to was beautifully kept and was so peaceful. Even this place was overlooked by the Monastery as can be seen by the accompanying photograph.



*Commonwealth War Cemetery at Cassino showing how the monastery dominates the area*

This visit virtually ended our trip in the steps of the 2nd New Zealand Division in the Middle East. We had seen much in the short time available to us and had learned in a very small way what it must have been like. What we could not feel was the vagaries of weather, sometimes hot, sometimes freezing cold and wet over part of the battle, the ever present spectre of death or wounding, and the dirt and sometimes boredom which accompanies such campaigns.

Our final stop in these parts was Rome. Rome was large and had many interesting things to see such as the garish monument to Victor Emmanuel III, the Coliseum, St Peters and the Vatican City, the Spanish steps and the Trevi Fountain (remember the movie "Three Coins in a Fountain") - which during our visit was covered in scaffolding and hessian. Few of our party enjoyed Rome.

One couple in our party were robbed, by three Gypsy Women with babies strapped to them, within half an hour of checking into the hotel. We were all warned about the child pickpockets who were busy at work and whose approach was that of young beggars. We saw a tiny tot, who could have been no more than five or six years old sitting on the pavement by herself at practice slipping a coin from her palm through her fingers. We wondered why the police ignored this but were then told that the kids would thumb their noses and say that they were under age and could not be sent to prison or punished and that Italian law made it impossible for the police to clear the streets.

The eternal city we found to be one where we had to be eternally aware of the dog crap on the streets, Gypsy Women with babies, child pickpockets, extremely pushy pedestrians who would push you off the footpath into the traffic, and most unfortunately, the Italians who were not interested in visitors. We visited friends in the United Kingdom, and visited friends in Vancouver, Canada on our way home. Thus ended our most enjoyable and memorable trip. Now we had the task of rebuilding our bank balances for our next trip and the return to Turkey.

# A DIVERSION - The Editors Own Puzzle

## ANSWERS

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | O | O | O | W | N | O | G | Y | L | O | P | P | A | L | E | S | S |
| O | Q | W | E | R | T | Y | C | P | S | P | K | E | S | O | M | M | E |
| L | A | S | W | A | R | R | A | R | E | A | N | G | C | L | A | S | U |
| O | Z | O | A | N | E | W | Z | E | A | L | A | N | D | T | K | S | E |
| M | E | W | N | Y | T | O | N | S | K | L | A | S | A | R | U | O | D |
| O | N | I | S | S | A | C | A | K | L | H | O | W | I | L | R | U | N |
| N | T | S | E | X | I | S | B | I | U | Y | N | T | D | A | B | T | I |
| S | P | L | S | E | D | P | O | L | Y | H | A | A | R | O | H | E |   |
| E | I | L | O | E | M | O | W | P | D | I | E | R | R | E | T | A | S |
| N | D | I | O | N | L | U | A | R | A | U | T | D | V | V | R | F | K |
| C | I | T | Y | T | A | Q | U | E | I | G | A | N | G | O | S | R | O |
| A | R | R | A | S | X | I | S | C | H | I | A | R | E | S | H | I | O |
| I | E | Y | G | S | A | N | G | R | O | I | B | G | M | E | C | C | R |
| R | Z | E | L | E | A | D | N | E | H | C | S | S | A | P | U | A | B |
| E | E | Q | I | M | A | J | E | T | I | S | C | R | O | B | L | E |   |
| M | G | B | A | P | A | U | M | E | N | C | E | R | F | T | E | S | L |
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| M | I | N | Q | A | R | Q | A | I | M | T | V | S | A | K | B | R | T |

POLYGON WOOD  
 SOLOMONS  
 BROOKSEINDE  
 YPRES  
 SOMME  
 NEW ZEALAND  
 CASSINO  
 KRITHIA  
 GALLIPOLI  
 TEBAGA GAP  
 ITALY  
 ORSOGNA  
 ARRAS  
 BAPAUME  
 PASSCHENDAELE  
 SIDI REZEGH  
 TOBRUK  
 SANGRO  
 SOUTH AFRICA  
 MINQAR QAIM  
 ANZAC  
 MESSINES  
 CRETE

There is one other battle honour which is easy to see AHMED QWEL, but that is not a New Zealand one.



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# MORE MEDALS

## New Zealand Meritorious Service Medal

E43290 WO1 K.S. McEwen 1 Mar 90

## New Zealand Armed Forces Award

U46386 Maj D.J. Begley 8 Jun 89

We are sorry to see that Dave has left the Army and has emigrated to Australia. We hope that this move will bring success to whatever venture he follows.

## New Zealand Army Long Service and Good Conduct Medal

|         |      |      |            |           |
|---------|------|------|------------|-----------|
| Y662767 | SSgt | C.J. | Henderson  | 27 Jul 89 |
| E46740  | SSgt | M.K. | Anderson   | 14 Aug 89 |
| S44383  | Sgt  | A.P. | Willisroft | 17 Aug 89 |
| R904766 | Cpl  | D.C. | Stephen    | 17 Aug 89 |
| G755372 | SSgt | C.   | Whakatope  | 8 Dec 89  |
| U46892  | WO2  | M.P. | Shelford   | 12 Dec 89 |
| Q46727  | SSgt | A.M. | Greeve     | 15 Dec 89 |

## Gold Medal for Piping

Lt Greg Wilson, 25 Construction Squadron, recently competed in one of the premiere competitions of the Scottish Piping Season at Inverness, Scotland, where he won the Gold Medal in Bagpiping. It is not known in which section of the competition he competed.

## Youth Skills Competition - Auckland June 1990

Spr M. Geluk, SME, placed 3rd - House wiring.

Spr J. Evans, SME, placed 2nd - plumbing.

## Appointed to a Commission

|      |                                              |           |
|------|----------------------------------------------|-----------|
| WO 1 | P.G. Packer                                  | 12 Mar 90 |
| WO 1 | R.W. Bulman, formerly of RNZE but now RNZAMC | 28 May 90 |

## Promotions

|       |             |          |           |
|-------|-------------|----------|-----------|
| Maj   | J.A. Tymkin | t/Lt Col | 12 Apr 90 |
| t/Maj | K.M. Lang   | Maj      | 13 Mar 90 |

## Postings

Maj B.A. Stewart posted from Administration Officer NZDLS Canberra to NZASR at the same location wef December 1990.

Capt Peter Amyes transferred from the RNZE to the RNZAF on 12 March 1990. He will no doubt be back piloting a magnificent flying machine. We wish him well in his new appointment and hope that he will not forget the Corps.

Lt G.W. Chao transferred to the Army Reserve, General List of Officers on 17 March 1990.

## Exercise Longlook

The Editor has no information as to who was selected from RNZE to attend this Exercise. Thank you units for keeping the Editor informed.

## Afghanistan

NZ Army Sitrep 32/90 dated 27 Aug 90

Four members of the team returned to New Zealand in August. The next team consisting of Lt Col S.G. Heaton, Capt D.J. Pirie, Lt S.R. Maindonald, WO 2 Abernethy and Sgt G.S. Downes have completed their pre-deployment training and three members will leave New Zealand on 30 August and the last two members departing on 6 September 90.

## Gallipoli

Major Tom Jones, currently in Iran with the New Zealand UN contingent (UNIMOG) was seen in Istanbul in April 1990 by the Editor. He, like the editor, was on his way to Gallipoli for the 75th Anniversary of the ANZAC landings on 25 April on those shores. (See article on Gallipoli).

## Tonga

Army Sitrep 33/90 dated 3 Sep 90.

A team of seven RNZE personnel will assist the Tonga Defence Services Construction Troop, working on an extension to the Tonga Workshop over the period 1-12 October 90. Equipment for the workshop has been supplied from the NZ Force South East Asia.

## Tokelaus

Army Sitrep 34/90 dated 10 Sep 90.

A team of 35 Engineers and nine support staff involved in Project Gabion will travel to the Tokelaus this week to undertake reconstruction of buildings and sea walls.

## Army Basketball

Spr D. Taurima was selected for the Army Men's Basketball team which is to compete in the National Third Division Finals to take place in Palmerston North in September 1990.

## New Zealand Fire Service Rugby Team

Two Army Firemen have been selected for the New Zealand Fire Service Rugby Team. They are Cpl K.A. Edh of Burnham Camp and Lcpl D.R. Davies of FMG, Linton.

## Combined Services Soccer

Cpl J. Lynch of SME has been chosen as the Captain of the 1990 Combines Services Soccer Team. He was also named as the **Player of the Tournament**.

Spr T. Hay of 1 Field Squadron was also selected for the team.

Well Done chaps.

## Old Comrades

Former WO 1 "Blue" Stirrat was seen in Porirua in mid September 90. He is travelling to all points of the compass from Palmerston North, delivering foodstuffs to garages and the like.

---

## MAKING YOUR MORTGAGE DOLLAR GO FURTHER

This short article regarding mortgage payments has been extracted from a paper prepared by Major J.O. Thomson, BA, RNZSigs, now the Chief Instructor at the School of Signals, Waiouru.

The value of this article has resulted in the Editor changing his monthly mortgage repayments to fortnightly payments, and increasing the amount paid by a few dollars.

The advantage is immediately apparent as the comparison prepared by his bank showed a **SAVING** of \$86,000 (yes read it again) and **REDUCED** the period of mortgage from 19 years 3 months to 10 years 9 months.

One point to note however, is that some banks do not, at present, permit a fortnightly mortgage repayment. New homeowners and personnel taking out a mortgage ought to check up first that the lending institution from whom they borrow money will allow fortnightly repayments.

## Read on

Many soldiers have mortgages that account for a large percentage of their income. There are various ways of increasing the efficiency of the dollar used to repay these mortgages. A talk to the bank manager can save the mortgagor a lot of money. Some examples of what you can achieve are presented to prompt a visit to the bank manager (or to find a new one).

## Fortnightly Payments

Many soldiers pay mortgages on a monthly basis. Considerable savings are achieved if the monthly payment is halved and paid fortnightly (26 fortnights equates to 13 monthly payments). A loan of \$60,000 over 30 years at 15% paid monthly, (\$758.670, is shortened to about sixteen years and four months with a resultant saving of over \$122,000 if paid in fortnightly installments of \$379.33.

## Size of Payments

Soldiers should be advised to reassess how much they can afford for mortgage repayments. On the above \$60,000 loan paid monthly an increase of \$10.00 per repayment will reduce the time taken to repay the loan by nearly six years, a saving of over \$41,000 for less than \$3,000 outlay. For fortnightly repayments an extra \$5.00 per repayment will save \$3,036 by shortening the period some four more months over the 13 years five months already saved by paying fortnightly. If these small additions produce big savings then a reasonable proportion of any second income will produce even larger savings.

However if a soldier is struggling with present repayments a lengthening of the repayment term and resultant reduction in each repayment is a viable option. If this option is taken the soldier should reverse this action as soon as he is financially able.

## Lump Sum Payments

When a quantity of cash is available and is considered surplus to immediate needs, considerable benefit can



arise from using it to make a lump sum payment on your mortgage. Using as an example the above \$60,000 loan, paid monthly, the effect of \$1,000 and \$30.00 payments after five years will be examined. After five years the principle owing will be about \$59,200. A one time payment of \$1,000 at this stage will reduce the principle to about \$58,200 and reduce the period of the loan by over three year years. This one time payment of \$1,000 will save over \$30,000 in repayments. A one time payment of \$30.00 (one meal at a restaurant) will reduce the period of the loan by several months, and will save about \$2,000. If the interest is calculated monthly, hold the lump sum in an interest bearing account until just before the mortgage interest is calculated, then use it to make the lump sum payment. If the mortgage interest is is calculated daily, then make the lump sum payment as soon as you can make it.

### Location of the Mortgage Document

You will gain an advantage by leaving the mortgage document with the bank when the mortgage has been repaid. While the bank holds the mortgage document no solicitor fees need be paid to get further advances against the mortgage. This option is often a cheap way of getting a loan a mortgage interest rates are usually less than than personal loan interest rates.

### Transferable Mortgages

Not all mortgages can be transferred from property to property. When a soldier is posted from one camp to another, and his mortgage is non transferable, it will be an expensive exercise for him to sell up and take out a new mortgage. Using the above loan again, after three years the soldier has only paid about \$400.00 off the principle. He has however outlaid nearly \$27,000 in interest repayments.

### Points to check when taking out a mortgage

1. Can fortnightly repayments be made?
2. Can lump sum payments be made?
3. Is there any restriction on when lump sum payments can be made?
4. What is the upper limit of a lump sum repayment before penalties are incurred?
5. Is the interest calculated daily or monthly?
6. If interest is calculated monthly what date is this calculation made?
7. Can the loan be transferred if soldier posted?

## CREDIT CARD PROBLEMS AND ADVANTAGES

There are many types of credit cards available to the soldier. They provide a convenient method of purchasing goods and for making short term personal loans. If they are not used carefully however, they can cause a major reduction in the efficiency of our soldier's dollar. Two of the more common cards are VISA and MASTERCARD. MASTERCARD has a credit limit of the 10% of the applicants income. VISA has no income related credit limit, instead a maximum of \$8,000.00 is available depending upon the applicants credit worthiness.

With VISA it is possible (although hopefully unusual) for a soldier earning \$18,000 per year to have a credit limit of \$5,000. Using the VISA card as an example the case of what can happen to a young soldier who, having proven his credit worthiness as a single man and then gets married will be examined. The extra costs in the first year of marriage, if not handled carefully, can place an unwanted strain on the finances.

If the soldier exercises his right to use the maximum credit available and only repay the minimum required amounts each month, his net buying power for the first year would be his net income (say \$14,700) plus the credit limit of \$5,000, less such things as rent and interest repayments (say \$3,700), giving a possible total of about \$16,000. The annual interest payments on the credit card loan of \$5,000 would be more than \$1,000, over 6% of his net income. Therefore his buying power for the following year, when the credit limit has been reduced and interest payments made, could be as little as \$10,000 (a decrease of 37.5%). It would place a considerable strain on any budget to try and live on the disposable income. If the soldier were to repay any principle then his buying power would be further reduced.

With forethought it is possible to get nearly two month free credit by using a credit card. (Buy at the beginning of the month and you will not be billed for the item until the next month. You pay for the item at the end of that next month.)

If the card is not fully repaid at the due date, all the next months purchases usually attract the maximum interest payable, even if only one cent is outstanding at the end of the month. The careful use of the credit card will increase the efficiency of the soldier's dollar. The carefree use of the credit card will reduce the efficiency of the soldier's pay considerably.

**Note:** Some credit cards, such as American Express, require a "membership fee" to belong to the organisation, apart from any other costs.

