

The RAEME CRAFTSMAN

THE MAGAZINE OF
The Royal Australian
Electrical and Mechanical Engineers

Craftsmen of the Australian Army



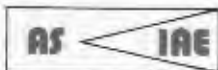
The Story of RAEME



Theo Barker



NOVEMBER, 1992 NUMBER 27



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EDITORIAL

Firstly thanks to LTCOL Terry Oldfield who was responsible for the last edition of the Craftsman and also to MAJ Mike Averay who has served on the editorial staff for the last two editions and is shortly to leave the Army.

Secondly I would like to thank all those who sent in articles for this issue. The number and diversity of articles was encouraging however because of space constraints not all articles were able to be included. Keep up your contributions and include plenty of photographs.

Finally my thanks to the editorial staff for their efforts in preparing articles for publication. Wherever possible we have reproduced articles as they were received,

however where it has been necessary editing has been kept to a minimum

BRUCE AMOR

*Have a safe and happy
Christmas and New Year*



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FOR NEXT ISSUE

Articles should be sent to:

The Editor
The RAEME Craftsman
J-4-05
Russell Offices
Canberra, ACT 2600

DEADLINE

5th March, 1993

Please Note: Photos should be coloured if possible.

FRONT COVER PHOTO

The book "Craftsmen of the Australian Army — The Story of RAEME" by Mr Theo Barker was launched by the CGS LTGEN J.C. Grey AO at the Australian War Memorial on 6 Nov 92. The book is available for purchase from the Corps Shop at RAEME Training Centre.

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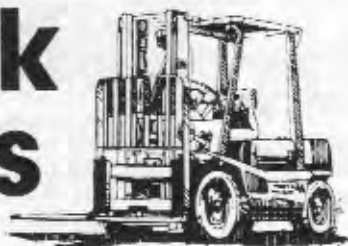
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A Message from **THE DIRECTOR GENERAL**

A number of decisions have recently been taken which will have a profound effect both on the Directorate and the Corps. For the past 50 years, successive Directors and Directors General of Electrical and Mechanical Engineering have discharged both Head-of-Corps and Head-of-Service responsibilities. The Head-of-Corps function is concerned primarily with personnel management, training, trade structures, doctrine, workshop facilities and equipment, establishment and Corps management type issues, whilst the Head-of-Service function is concerned primarily with technical issues of a maintenance engineering or materiel maintenance nature and EME systems and procedures.

From 1 October 1992 the Head-of-Service function is to be separated from the Head-of-Corps function. Responsibility for EME systems and procedures will transfer to GOC Log Comd who is now responsible to the CGS for Army logistic policy and advice. Responsibility for all technical issues, including control of MEA, will transfer to ACMAT-A and day to day control will be exercised by a Director General of Engineering - Army (DGENG-A) within Materiel Division - Army. The DGEME-A position is to be disestablished and the Corps will be headed by an officer of Colonel rank who will be designated Director of Electrical and Mechanical Engineers-Army (DEME-A). The DEME-A will retain those Head-of-Corps responsibilities presently assigned to DGEME-A and report to DCGS, with the Directorate being part of General Staff Division. The Directorate is to be collocated with RAEME Trg Centre in Bandiana as soon as practicable and this is likely to be when the new RAEME Trg Centre Headquarters/Corps Trg Wing building is completed in 1994.

It is important that these initiatives are not viewed as either a diminution of the importance of the EME service or as a challenge to the *raison d'être* of the Corps, for they are neither. They are necessary steps in Army's strategic planning and development process which is described in the document 'Army Into the 21st Century' and will improve the provision of soundly based engineering advice into Army's decision making processes. I am confident that the end effect of this will be equipment with improved supportability, reliability and availability in an environment of reduced funding. I would also stress that the Corps retains the highest credibility throughout Army and this is especially so amongst Army's senior officers who continually remark on your professionalism, cooperation and motivation. Reorganisation and restructuring initiatives are not confined to Australia. Recently I was fortunate enough to visit our sister Corps in the United Kingdom and Canada and found that both of these organisations are faced with similar demands to those with which we are confronted. I am confident that we will end up with an EME system which will serve us well into the 21st Century.

By the time that this Issue of the Craftsman is published we will have launched our Corps history, *Craftsmen of the Australian Army - The Story of RAEME*. The publication itself is a notable milestone in the history of our Corps and I thank all those who either contributed to the book or assisted with its production. It is an excellent publication and I commend it to all members of the Corps both past and present.

On the sporting front, although the RAEME Rugby Union Team were unsuccessful in their quest for the EME Rugby World Cup, they acquitted themselves extremely well during the tournament. They were fine ambassadors for the Corps and we have a solid base upon which to build a team for the future. Of



course the tour would not have been possible without the generous support of the individuals, units, clubs and messes of the Corps, and the commercial sponsors. My sincere thanks to them all.

Over the next few months the Corps will lose a number of experienced senior non-commissioned officers, warrant officers and officers as the current voluntary redundancy programme takes effect. There is no doubt that those remaining will feel the effects of this loss of corporate knowledge, however it would be remiss of me not to acknowledge the contribution these members have made to our Corps over the years. I hope that those leaving us maintain contact through the increasingly strong RAEME Associations located throughout the country.

On the 11th December I hand over the reins of the Corps to Colonel Larry Foley who will fill the newly established position of DEME-A. Colonel Foley is no stranger to the vast majority of our members and I wish him well in his new appointment. He will bring to the position a wealth of experience and a whole new energy and drive and I know that he will have the full support of all members of the Corps. I leave to take up the newly established position of DGENG-A within Materiel Division - Army. Whilst I am very much looking forward to the challenges of my new appointment, I very much regret that my time as Director General is rapidly drawing to a close. It has been a great honour for me to have had the opportunity to lead the most professional Corps in the Army today, and I thank you for your loyal support over the past two years. I hope to have the opportunity to personally say farewell to as many members of the Corps as possible during the various Golden Jubilee activities scheduled over the next eight weeks.

With the onset of the festive season I would also like to take this opportunity to convey my best wishes to all members of the Corps and their families. Have an enjoyable and safe holiday period and a very Merry Christmas. *Arte et Marte.*

WELL DONES

Queen's Birthday Honours List 1992

The professionalism, leadership and technical expertise of Corps members was recognised in the Queen's Birthday Honours List announced in June. Six RAEME members received awards.

Captain Peter Leeman was awarded **The Medal of The Order of Australia** for service to the Army in the field of Air Defence.

Warrant Officer Class One Ian Robert Angow was awarded **The Medal of The Order of Australia** for service to the Army in the field of equipment maintenance management.

Warrant Officer Class One Trevor Clyde Wolfenden was awarded **The Conspicuous Service Medal** for conspicuous service as Artificer Sergeant Major, 20th Divisional Engineer Support Squadron Workshop.

Warrant Officer Class Two John Francis Duggan was awarded **The Conspicuous Service Medal** for conspicuous service as the Artificer Sergeant Major of A Squadron, 5th Aviation Regiment.

Warrant Officer Class Two Richard George Stuart was awarded **The Conspicuous Service Medal** for conspicuous service whilst participating in an aviation search and recovery task in Vanuatu.

Sergeant Jean Baptist Coad was awarded **The Conspicuous Service Medal** for conspicuous service with a 171st Command and Liaison Squadron detachment in the Solomon Islands.

All recipients are congratulated on their achievements which have been recognised through these awards.



Civvies on Parade

During the 1/92 Loadmasters Graduation parade held at the ADF Helicopter School, Mr Darren Wolf was presented with a Commanding Officers Commendation by LTCOL P.A. Bysouth, DFC. Mr Wolf, an employee of Hawker Pacific Australia, was presented with the Commendation for the diligent performance of his duties. Whilst dispatching an aircraft from the flight line, Mr Wolf noticed that no air was exiting from the bleed valve exhaust, indicating a possible air bleed valve failure. This type of malfunction could have caused serious engine problems.

The action taken by Mr Wolf after noticing the bleed valve problem prevented the possible jeopardising of the aircraft and aircrew.

Mr Wolf served in the RAAF as an Instrument Fitter for nine years prior to joining Hawker Pacific. He has been employed by Hawker Pacific as an Avionics Tradesman and Supervisor since April 91. Mr Wolf is one of fourteen civilians working at the ADF Helicopter School Maintenance.

The ADFHS Maintenance Wing is manned by 115 personnel, consisting of 57 Army, 44 RAAF and 14 Hawker Pacific personnel. The number of civilians in the ADF Helicopter School is expected to increase over the next 18 months with the advent of CSP.

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AUSTRALIAN SUPPORT CONTINGENT UNITED NATIONS TRANSITIONAL AUTHORITY IN CAMBODIA FORCE COMMUNICATIONS UNIT WORKSHOPS

By Captain S.B. Atkinson

Greetings from the Land of Cambodia!

The Workshop of ASC UNTAC sends greetings to all members of the Corps as we celebrate RAEME's 50th birthday. The Workshop comprises 47 personnel from five corps: RAEME, RASigs, RAE, RAAOC and RAINf. We also have a RAAF representative, making us quite a collection. The Workshop incorporates the unit's Engineering (water purification, construction, electrical reticulation and plumbing) facilities as well as normal workshop areas.

On 15 April 92 the advance party for ASC UNTAC left Melbourne bound for Bangkok amidst teary good-byes but with a gleam of anticipation in the eye. As we got off the plane we were hit by that 'refreshing' Asian smell and by a wall of heat (35°C) that caused most to take in a short gasp of breath. A short time later we arrived at Pteah (meaning 'house' in Khmer) Australii which is where the major Australian facility is located. Dirt, dust, humidity and heat are vague recollection from these early days. The somewhat shabby buildings were certainly better than a vacant site imagined, but it was obvious we still had a long way to go. Members of the Advance Party from the Workshops were CPL Michael 'Ned' Needham in the Veh SGT's position, SGT Ron Tripp (RAE), CPL Troy Doman and SIG Phil Elliott (both RASigs).

Upon arrival at Pteah Australii we were met by CPL 'Red' Redburn, one of the original UNAMIC members who arrived in November 1991. He regaled us with stories of intrigue about the country. Ned and Red (that rhymes doesn't it) spent the next few days looking around at the 'trade repair' and 'RPS' facilities in Phnom Penh. These were numerous if you knew where to look and who/how to ask for the required item (preferably in Khmer). This is certainly where our interpreter Phanna Ong came into play. A Cambodian Air Force officer on attachment, Phanna has proved to be invaluable to the Workshop, advising on the places to buy and how to barter the best price. Some of the services available were quite surprising and the prices amazing - for example US\$150 to repair a vehicle with major panel damage.

Preparation of the camp for the arrival of the main body was progressing at an alarming rate and they arrived on 13 and 14 May complete with baggage, except for CFN Chad Duncan's gear which was last seen heading East towards Vietnam. Chad didn't get his gear back, however he can't complain since he recently became a father along with CFN Kim Jolley, the first for both of them.

The ASM, WO2 Russell Cliffe, seemed to have a little less hair and a few more wrinkles than when I saw him last: probably a consequence of the difficulties of receipting, preparing and packing the vast amount of stores required by the unit - in

particular for the move by sea to Cambodia. Most of the preparation took place at Broadmeadows Log Bn (BLBn) and the unit is indebted to MAJ Trevor Oakey and his boys at BLBn for their assistance during this phase. Also worthy of mention is CPL Steve Cook (RAAOC) whose skills and experience were a tremendous asset during this difficult time.

Back in Phnom Penh things were beginning to take shape. After a false start the Workshop found its home in the South Eastern corner of the camp where it has been steadily expanding its borders ever since. The area that was to become the Workshop's empire began life as an old transport yard way back when the camp was an officer's training school. When we arrived in April the area was bare except for a set of bays covered by a fairly rickety roof. From that time much has occurred: concrete has been laid, servicing ramps set up, a tool store constructed and the roof repaired. For a while the Workshop floor became the **Hoteles Australii** for some of the Main Body, complete with 65 well ventilated bed spaces and running water (mainly through the roof). Unfortunately the occupants were not keen on paying much rent so we managed to evict them after some haggling - 'get out or we'll send Menzy around to see you' and 'yes, we do need to run up the 62.5KVA at 0330 hrs each day' etc.

Cambodia in May is pretty hot. On most days the temperature hovered around the 42°C mark while nights below 26°C were few and far between. The first rains were fantastic, although it would have been nicer to receive 20 weeks worth of rain over a period longer than four hours. On the operational side of things, the unit had people in 23 locations at that time which meant the logistic system needed to be on the ball. These locations ranged from single men with man pack radios out with UNMO's to the main element at Phnom Penh. Fortunately the equipment in operation at the unit was confined to a few vehicles, personal weapons, RAVEN equipment and INMARSAT.



Workshops in the beginning.

AUSTRALIAN SUPPORT CONTINENT CONTINUED

Soon after the Main Body arrived, the Workshop was given the responsibility of installing radios in the newly arrived fleet of UN vehicles. 1500 vehicles were fitted out over a period of one month. The ASM and his team (an all corps effort) certainly had their work cut out for them. This task was soon followed by the arrival of the unit's vast quantity of stores which were subsequently moved by road — by a hundred local vehicles of questionable serviceability — into Phnom Penh where they were broken down for the various troops and detachments. Soon after, most of the elements deployed filling out the smaller detachments already deployed and establishing a significant number of new ones. As I write the unit has deployments in some 54 locations, from the north western Thai border to the south eastern border with Vietnam and even a small number beyond the borders in Vietnam, Laos and Thailand. This is a huge area with most locations readily accessible only by helicopter — fortunately the UN has a fleet of MI 17, MI 26, C130 and C160 aircraft which regularly traverse the length and breadth of the country. Also of note is the fact that the unit has recently been allocated two MI 17s to ensure that the courier system works effectively. These cover the entire country three times weekly.

It was at this time that the FRG was deployed with 2 Signal Squadron to Battambang in the north west of the country. Led by Ned Needham and more recently CPL Peter Benson, the FRG maintains the dependency in the western area of the country and has a substantial capability. Mechanical, EIR and water purification/field engineering tasks are all in a day's work for the men of the FRG who rotate roughly on a four monthly basis. The only other permanently deployed element of the Workshop is a water point providing around 40 000 litres of purified water at Stung Treng in the north of the country. This supplies over one thousand personnel with purified water daily.

Back in the Workshop it was business as usual once everyone had left. GE Section with CPL's Bob Spierings and Rob Gay merrily set about destroying most anything they could find. Over in EIR our only two RAEME Radio Mechs, CFN's Paul Phillipott and Sean Woodward keenly set about creating the first bodgy video repair facility in Cambodia. The twist for them was that the unit actually owns most of the videos in Cambodia; still it was a nice thought. Meanwhile on the floor LCPL Brett Johnson did his best to upset most people although our resident Psych Nurse CFN Paul Clarke got him sorted with little difficulty (he didn't even use the straitjacket). Down in Elec, CPL's Andrew King, Malcolm 'Frog' Henri and Craig McLeod were as quite and helpful as all Elec Fitters are. Kingy, in particular, gently went about helping out the customers when things went wrong, although we had to stop him using the electric start on people. SGT Grant Ellis and his trusty offsider CFN Stuart Monteath successfully developed a cunning plan to wear me down with spot-checks, stock-takes and generally anything they thought would ruin my day.

The wide dispersion of the dependency also creates a few difficulties in getting FRT's out to the various locations. This is done through a combination of air and road movement which creates a fair bit of variety. One of the Workshop's aims is to visit each major location at least monthly for a preventative maintenance check. This is often achieved when an FRT is dispatched to locations or combined with other visit programs as space on transport is available. The wide dispersion of equipment and the difficulties associated with a rapid FRT deployment (out to isolated locations) highlights the need for good operator maintenance. This has certainly improved since May and has been assisted, in the case of generators, by the distribution of handbooks developed by Kingy and Frog for 4.5



The largest FRT vehicle in the world, an MI 26

and 15KVA generators. Other measures have included revised non-tech inspection forms and a fairly pro-active local 'MAS' (Mad, and Angry and Serviceable) service provided by the ACE and the Art Tels SSGT Steve Brown who arrived in June. The length of the tour has shown up problems that are not generally experienced on Australian exercises. Equipment failure patterns are different and the need for accurate RPS scaling cannot be highlighted strongly enough. The unit spent a lot of time in this area during the preparatory phase with SGT Terry Pollett (RAAOC) and his boys tearing their hair out with the number of lists that were made and changed countless times before our deployment. The end result, however, was a pretty good level and type of stocking which has well suited the operation thus far. The stores situation will be improved with the UN development of the 'Letter of Assist' programme which will allow stores to be called forward from Australia on demand at UN expense. Until this programme is in place the use of 'controlled exchange' and local fabrication is continuing; however we have nearly exhausted all of our resources.

The Operation has been a tremendous opportunity to meet with those from other military forces and compare ideas; not to mention the opportunity to pick up on the knowledge and experience of the UN Field Services organization with whom the Workshop has developed an excellent working relationship. Certainly much of the credit for this needs to go to CPL Paul



Corporal Robert Gay from Corryang, Victoria, passes on a little Aussie 'know how' to Mr Pan Lee, a local employed at the main Australian army camp in Phnom Penh, Cambodia.

AUSTRALIAN SUPPORT CONTINENT CONTINUED

Luck who has been instrumental in the development of this area. A Recce Mech, Lucky has worked hard, getting involved in a range of activities well outside the scope of his field. Our relationship with Field Services has helped in a number of ways, not the least being the provision of generators to assist with powering the numerous facilities around the countryside. In fact at Pteah Australii the 62.5KVA units were initially replaced by a 100KVA unit and subsequently by 255KVA units (truly an awesome sight) installed by our own electricians. I thought for a while SGT Gary Millerd (RAE) was going to burst a blood vessel when he was told that we were getting them! We now have our eye on a couple of 1200KVA's currently powering the main UN area in town - only joking, 450s should be big enough for the time being.

On the social side of things, UNTAC has decided to support the Bangkok marathon and the largest bunch of runners comes from Workshop. Lead by CPL Mick Voss (RAAOC), the team has got off to a great start. CPL Bob Kaindl is among the deranged group who seem to think that running 20km on a Sunday morning (one of the six early morning sessions they do each week) constitutes a 'Fun' run - twisted people.

The mission has developed an enormous amount since we first stepped off the plane and it has been a great experience to see how the operational aspects have shifted and changed and now the system actually does work! It is difficult to say just how the unit will look for the main rotation period in April/May next year as so much depends on elections, the attitudes of the different political organization and UNTAC's revised communication needs. So I guess that will be one of the developments to look forward to in the future. Until then **Arte et Marte** and Merry Christmas.

PS: Just in case you want to drop anyone a line over here the address is:

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1992 INTERNATIONAL MAINTENANCE MANAGEMENT CONFERENCE



The Director General Brigadier John Kingston, AM — DGEME — A addressing the Conference

Brigadier Kingston recently presented a paper to the 1992 International Maintenance Management Conference. The conference was held in both Melbourne and Sydney and was attended by senior managers from both the public and private sectors. Brigadier Kingston's presentation gave an overview of materiel maintenance and maintenance engineering in the Army and also examined some of the challenges faced by 'maintainers'. Copies of the presentation are available from the Ed.

Birthday Greetings from our Sister Corps — RE ME



TO: Representative COLONEL COMMANDANT, MAJGEN A.D. POWELL, BRIG J. KINGSTON and all ranks RAEME.

FROM: Representative COLONEL COMMANDANT, MAJGEN D. SHAW, MAJGEN M.S. HEATH and all ranks RE ME.

Birthdays 

Many thanks for your kind felicitations on our 50th Anniversary celebrations.

Our own warm congratulations on your Golden Jubilee Year.

As comrades in arms we are sure our alliance will continue to flourish for the next 50 years and beyond.

Very best wishes to you all and Happy 50th Birthday.

**HAPPY
BIRTHDAY!**



Birthdays





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101st FIELD WORKSHOP

THE RAEME BASTION

By LT P.C. McAloney

Introduction

Next time you go for a drive along the Hume Highway heading out of Sydney towards Canberra, cast a glance to the right about a minute past the ever popular Uncle Leo's truck stop (he must sell more than just fruit and vegetables) and you will see the Corps' most senior Land Command unit, 101st Field Workshop. Whilst other units become Reserve, are disbanded or amalgamated into Log Groups or even the mysterious BASB, 101 continues on.

History

The history of the workshop goes back 35 years, which doesn't sound that long, but when you consider that the Corps is celebrating only its 50th birthday this year, it's a fair stretch.

The 101st Field Workshop was originally formed in 1957 as the 101st Infantry Workshop in Puckapunyal, to provide second line RAEME support to the 1st Independent Infantry Brigade. The Brigade had recently been formed and constituted the first Field Force formation in the Australian Army.

In July 1960 the unit moved from sunny Puckapunyal to its present location on McDonald Road, Ingleburn. This was the site of the original RAEME Training Centre. By the end of 1963 the unit had been renamed the 101st Field Workshop.

In 1966 the workshop conducted an extensive road movement and deployed to Dorrigo, NSW, shook out any remaining cobwebs and were ready for Vietnam. In May 1966 101st Field Workshop deployed into South Vietnam as part of the 1st Australian Task Force based at Vung Tau. For 12 months, the workshop performed its role of field repair and recovery until relieved by the 102nd Field Workshop (which started a long tradition of imitating 101).

After returning to Australia in 1967, covered in commendations, compliments and with eager young women lining the streets and squirming in anticipation, the unit returned to Ingleburn to adopt its present role.

On 27 November 1982, the City of Campbelltown granted 101st Field Workshop freedom of the city, an honour which dates back to the Middle Ages when cities would not allow armed soldiers to enter their walls. To honour certain units, a city would grant that unit freedom of the city. The workshop marches annually on Anzac day and this year we will be celebrating the tenth anniversary of the freedom of the city of

Campbelltown.

The workshop has close links with Campbelltown RSL sub-branch. An example of their support has been their sponsorship of unit sporting teams, for which in return we give the RSL members a whipping at various social and sporting events.

Role

The role of the 101st Field Workshop is to provide second line repair and recovery support to units of 1st Brigade; not an easy task due to the care and attention certain units give to their

equipment. As an additional role, the unit is tasked to provide personnel, stores and equipment to constitute the 1st Logistic Support Group (ODF) Workshop. This clearly shows the versatility of the workshop; sharp edge fighting spanners (such as LCPL KJ "SASR are wimps" Hunter) or rear echelon super-pogues (such as CFN Michelle "Sportsgirl sale" Bond).

An additional role the Brigade Commander has given the workshop is to provide

soldiers for every parade the Brigade is remotely connected with. Fortunately the workshop is versatile enough to handle this extra tasking as well as keep up that high standard of RAEME support the Brigade has come to expect (a view that is partly due to the fine efforts of the sump brothers CPL Craig "Sump" Debnam and CFN Chuggy "Bigger Sump" Chugg).

Capabilities

The 101st Field Workshop is traditionally capable of deploying a Main Repair Group (MRG) and one Forward Repair Group (FRG) in support of conventional or low-level operations. It can also provide an inspection function if required at an Equipment Collection Point (ECP) or any other tasks thrown our way (and there are many, such as parades).

The workshop is not equipped nor established for mechanised operations. However, with three Armoured Personnel Carriers (Fitters) (unless WO2 Stewart leaves one behind on the highway) and one Armoured Recovery Vehicle Light currently held by the workshop, we can provide a significant mechanised repair and recovery support capability. The "buckets" also make an excellent RRF as our "enemy" have found out (CPL Buzz McKenzie and SGT "Wanna see my tattoo?" Cairns are still cleaning their underwear). They also impress the civilians at parades and Open Days.



The original site of 1 Platoon, 101 Field Workshop in Vung Tau, South Vietnam 1966

101st FIELD WORKSHOP CONTINUED

1992/1993

1992 has been an incredibly busy year for 101. The year has been so packed with activities that the average mortal would have been burnt out some time in January, however 101st has shone through. (Unfortunately we did lose a few ex-members such as CPL Foghorn Legg and LCPL "Little green tow-truck driver" Blair.)

Some of our activities have included a brilliantly managed driver's course, parades, Club Darwin K92, parades, Defence Aid to the Civil Community, more parades, IMTs at Cessnock, parades, a couple of Subject 2 for Corporal courses (not as well managed as the Driver's course), more parades, a Rugby Union final, the inevitable more parades, IMTs in Singleton (ah ... Singleton), the ubiquitous parades, an Australian Rules grand final, an Open Day, and finally another parade; and that's just till September!



101 parades through Campbelltown

Next year is even bigger with the promise of even more parades (you beauty!). An added bonus is the prospect of Club New Zealand for the LSG Workshop and Club Puckapunyal on Predator's Advance 93.

So if you want a life packed with adventure and excitement (and parades), if you want to use the full potential of your trade (and parade) skills, if you want to serve with a unit with a rich and glorious history (of parades) then join the British Army. However, if you want a unit where the diggers make the unit and the fun never stops then contact your SCMA rep (they need the work anyway) and put your posting preference in for the mot senior Land Command RAEME unit:

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THE 3RD BRIGADE ADMINISTRATIVE SUPPORT BATTALION

At 1130 hrs on a typical day in sunny North Queensland, CPL Beth Dipple is actioning a stores request from 1 ARAR. CAPT Sven Bohnstedt has just finished inspecting his 27th set of teeth for the day, CPL Troy Odgers is carrying out a CES inspection of his section's trucks, CPL Greg Wilson is preparing x-ray equipment for use in the field, CFN Darryl Gammon is aligning the RF on a 524 radio and SGT Bob Spillane is conducting training of his administrative staff.

What do these people have in common? They are all members of the 3rd Brigade Administrative Support Battalion (3 BASB). In the world of Logistic Groups and Maintenance Battalions you may well ask what manner of beast is a BASB.

The Australian Army's administrative and logistic system can be traced back to the British model of World War II. IN the last 50 years it has been subsequently fine tuned to suit the changing needs of the army.

In recent times the ADF's strategic concept of credible contingencies, foreseen method of operations and force structure guidelines have led the army to review its methods of providing administrative support once again.

This review led to 3 Bde determining that to centralise its service support units into one single unit would greatly enhance the administrative support to the Brigade. In late 1990 the Land Commander directed that 3 BASB be raised and that it be operational in time for Exercise Kangaroo 92.

This directive led to the disbandment of 9 Transport Squadron, 2 Field Ambulance, 16 Field Dental Unit, 3 Field Supply Company, 29 Combat Supply Platoon and 102 Field Workshop and the subsequent raising of 3 BASB on 1 July, 1991.

The organisation of 3 BASB now comprises a Bn HQ, an Ops Cell, Admin Coy, Transport Squadron, Field Supply Company, Medical Company, Field Dental Company and Field Workshop. On amalgamation, some of the unit's functions were



CPL Greg Wilson



CPL Beth Dipple

centralised - Company Repair Parts Store went to the Fd Sup Coy, Company medics to the Med Coy and Q stores to Admin Coy. This centralisation allowed a single point of contact for the BASB sub-units in regards to these areas.

The Battalion is commanded by LTCOL Mike Saw (RAAOC), 2IC is MAJ Tony Watts (RAInf), OPSO is MAJ Mike Flowers (RAEME) and the RSM is WO1 Wayne Langford OAM (RAAMC).

The role of 3 BASB is to provide 2nd line administrative support to 3 Bde and units allotted to the Brigade.

The unit logo is a profile of the head of a 'Wapiti'. Never heard of it? The Wapiti is a large member of the deer family of North America weighing in at about 500 kg. The Wapiti was chosen due to the fact that it generally have five pointed antlers. Each antler represents one of the five services provided by 3 BASB. The unit motto is "United in Support".

The Ops cell, commanded by MAJ Flowers, coordinates and controls the provision of admin support to Bde units. It is the sole point of contact with customer units dealing directly to the Ops cell for tasking. The Ops staff, comprising of a CAPT and SNCO from Tpt, Med, Sup and RAEME and a LT SO4 Finance, then coordinates all agencies necessary to undertake the task.

Admin Coy, commanded by the Bn 2IC MAJ Watts, consists of the units cooks, Q Store and Pay Cell. It also provides clerical support to the Bn.

The Tpt Sqn, commanded by MAJ Steve Jones, provides 2nd line Tpt Spt to the Bde. Tasks include troop lifting, combat supplies distribution and LZ/DZ ops. The Sqn is made up of HQ, two Tpt Tps (Mdm) and a specialist Tpt Tp. Each Tpt Tp has 24 task vehicles, which gives it the capability to carry the fighting elements of an Infantry Bn. The specialist Tp has three sections which provide capabilities not previously available within the Bde. The sections comprise fuel, water and heavy lift vehicles.

3rd BRIGADE ADMINISTRATIVE SUPPORT BATTALION *CONTINUED*



CAPT Suen Bohnstedt

Med Coy, commanded by MAJ Darrell Duncan, is established to provide three treatment sections. Each treatment section is capable of holding 25 stretcher patients for short periods. Med Coy also has a Radiography section, a Pathology section, Health and Evacuation section. In low level conflict, Med Coy would collect casualties and give them initial treatment in order to stabilise them for evacuation back to a surgical unit.

The Dental Company, commanded by MAJ Mark Bergsma, is responsible for the dental treatment of 3 Bde. It is structured with a staff of 22 which is divided into the HQ (6 pers) and four sections of 4 pers each. Each section is headed by a Dental Officer and supported by specialist clinical and technical staff. In the field each section is capable of supporting 700 soldiers.

The Fd Sup Coy, commanded by MAJ Mark Harnwell, provides 2nd line supply support and ancillary services to the 3 Bde. The Coy consists of a HQ/Admin pl, a Control office, a Combat Supplies pl and a stores pl. Included in the Stores Pl are two mobile Memtech Bath units each with a capacity to shower 60 pers per hour. The Fd Sup Coy currently holds in excess of 2800 individual items. The stock within the Coy is divided into Bn and Gp and Bde Gp holdings. The Bn Gp stock is held to support an Infantry battalion with supporting elements. The stock consists primarily of medical items, repair parts for integral battalion vehicles and weapons and some limited general stores. The remainder of the Coy stock supports the rest of the 3 Bde.

The Fd Wksp, commanded by MAJ Dave McGahey, provides 1st line repair and recovery to equipment of the BASB and 2nd line repair and recovery to equipment of the Bde. Upon the formation of the BASB, 9 Tpt Sqn Wksp Tp was absorbed into the Fd Wksp to become the Tech Spt Pl. The Wksp comprises a

HQ/Admin Pl, a Production sect, GE Pl, Field Repair Pl, EIR Pl, Tech Spt Pl and a Recovery Sect. One element that is normally found in a Fd Wksp but absent in the BASB environment is an Ops cell. This is due to the external operations function being carried out by the Bn Ops cell and most internal operations by Production Control. The Fd Wksp is able to deploy two battalion support elements, up to 15 FRTs and up to four recovery posts. Most of the workshops equipment is air portable in C130.

3 BASB has developed the capability to independently deploy a composite group of technical components. This element has been called the Battalion Support Group (BSG). The primary roles of the BSG are to provide step-up during a move of the Bn whilst in an operational setting and to act as an independent administrative element in support of an infantry battalion group operating in a Forward Operational Base. The structure of the BSG is usually flexible but would normally contain an Ops Cell, elm, a Tpt Tp, Med Tmt sect, Dent sect, composite sup pl and an FRG. It should be noted that the BSG is not an established sub-unit but is formed on an as required basis. Usually only one BSG would be deployed as the provision of a second would severely restrict the Bn's ability to provide the necessary support to the remainder of the Bde.



SGT Bob Spillane and PTE Suzie Kirwan



CFN Darryl Gamman

3 BASB INVOLVEMENT IN EXERCISE K92

Exercise Kangaroo 92 has been and gone, the vehicles washed and the cam nets stored away to await 3 BASB's next foray into the bush. As the BASB's first exercise supporting the 3rd Brigade in an operational setting things went surprisingly well with only a few minor hiccups that were quickly ironed out.

The road party, consisting of about one hundred and fifty vehicles set out in high spirits loaded to the gunwales with all the important stores one requires for any exercise - two minute noodles, jelly babies and half a dozen good paperbacks. If all went well they would meet the air party in five days time in Katherine.

Those left behind carried on as best as only those with no stores, trucks, files, repairs etc. can do until they flew out to meet up with the road party. Arriving at RAAF Base Tindal at one in the morning the air party was greeted by the smell of dust and the buzz of about ten million insects. So far so good. The trucks were where they were meant to be at the right time, although not all their drivers, or passengers for that matter, had on their happy faces at that time in the morning. From Tindal on to Katherine to meet up with the road party at the staging area.

With the dawn of a new day the BASB moved from Katherine to the BMA located at MacDonald Airfield just north of Pine Creek. Soon long lines of vehicles from all over 3 Brigade were parked awaiting their turn to move into their positions. This was made all the more difficult by the six foot tall spear grass.

Within twenty-four hours the final adjustments had been

made and barbed wire and sand bag surrounded pits were springing up everywhere. Now to worry about where exactly did that truck full of rations disappear to and just how many breaks in a five hundred metre length of Don-10 cable can there be?

All the units within the BMA shook themselves out and then the role of the BASB began in earnest. Requests for transport, stores, rations, EMEFIXs and CASEVAC came pouring in. The Tpt Sqn trucks rumbled in and out all day and night, the Med Coy wards were filled with people suffering from heat related illnesses and the Sup Coy worked into the night distributing stores and rations. There were a few procedural problems at this stage but with a little liaison and practice between units everything began working like a well oiled machine with only the occasional bit of grit.

Speaking of grit, the BASB would just like to thank the aviation boys for providing the BMA mobile fan service, as all who were within the BMA know that for the first week the heat was oppressive with absolutely no wind. Anyone doing shift work at night in a blacked out tent would also appreciate the term "like a Turkish bath".

Despite the rigorous patrolling plan within the BMA during the day it appeared that the enemy could come and go as they pleased, wandering the perimeter, under the cover of darkness. Night after night the Tpt Sqn reported the enemy on the perimeter which the Fd Wksp backed up on the odd occasion. The enemy, days later, were also found to be shapechangers, being able to change from anything between one to six foot high, walk on two or four legs and wear fur or feathers.

Over the duration of the exercise BASB elements were detached to support other units as far south as Tindal, east as Jabiru and north to Melville Island. Hundreds of support tasks were carried out, scores of patients admitted and discharged from the Med Coy and many tonnes of stores issued by the Sup Coy, not to mention many extremely dirty and sweaty bodies showered by the Bath Detachment (the most popular people in the BMA).

Much to the relief of many people the two weeks in location at Club Mac were soon over and it was time to pack up and return home. The air party were champing at the bit to get to Tindal to catch the freedom bird and the road party eager just to get going.

Exercise Kangaroo 92 was to be the test bed of 3 BASB. Although the exercise was a short one, it proved that the BASB was capable of providing an effective level of administrative support to 3 Bde. The BASB concept does work and if current indications are anything to go by it is the way of the future.

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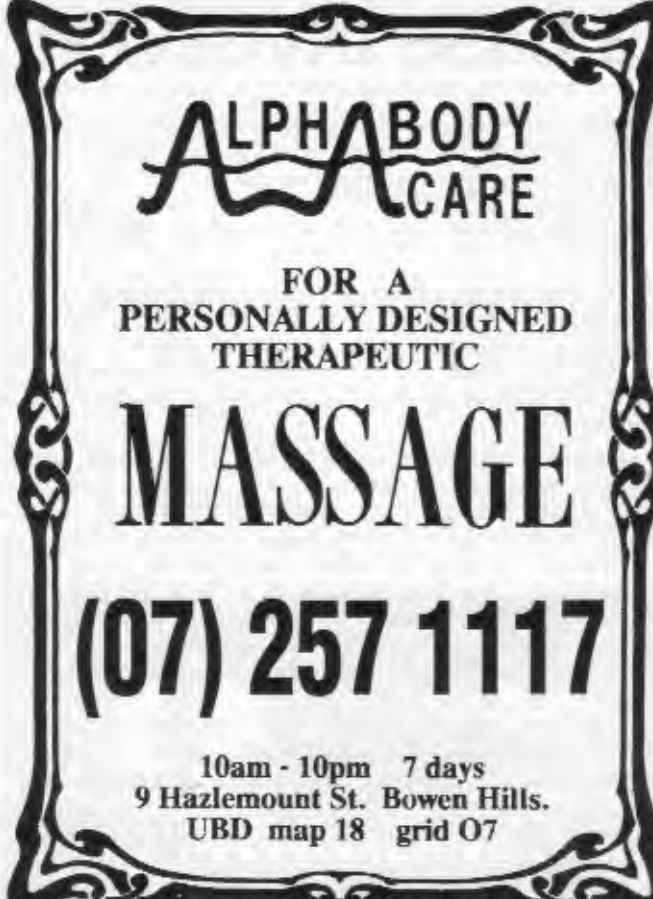
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173 WATCHAMACALLIT SQUADRON

by LCPL Phil GIBBS



War Bird on patrol – K92 (A14-690) will be retained as an exhibit at the Australian War Memorial

Please forgive the vague introduction to our article, bear with us and all will be revealed, I think!

As the last issue of the 'Craftsman' went to press, 173 was busily preparing for K92. After packing and unpacking great-coats a couple of times, one or two false starts, and a HUGE overspend on the fun-budget, we got there, en masse. After three days and as many homes in and around Darwin, we settled in at the airport, Nomads and Porters, trucks, trailers and Rovers, Orange Force, Blue Force, umpires etc. It didn't matter that at times we weren't sure just which side we were on, the squadron performed, and justified the "better, faster, further, higher" tag. During K92, the squadron aircraft chalked up over 1400 flying hours (ie, just under 50 hours per day). The experience gained will sure prove invaluable in the future.

It's worth adding (even though this is a RAEME 50th birthday mag), that it wasn't just a RAEME effort that achieved the results on K92. Everybody from Quies and clerks, cooks and medics, handlers and pilots, all busted foofoo valves and pulled their weight. Lessons were learnt, wheels were reinvented, and the next time the cones are thrown on the mud map, 173 will be there again, still doing it better, faster, further, higher ...

Post K92

Since K92, the squadron still is, but is no more! 173 is now officially part of 1st Aviation Regiment. All '2nd Aviation Regiment – More Alert' T-shirts have been converted to cotton waste. The workshop is now a mere Tech Spt Tp and the red-

back squadron as a whole, whilst still supporting Generals, will now be known as 173 EW Sqn, or 173 Svy Spt Sqn, or 173 Surveillance Sqn, or 173 Gen Purpose Sqn (the truth is, even we don't know yet, and if we did we couldn't tell you anyway!). This, dear readers, accounts for the ambiguity of the introduction of this article.

What it all boils down to is, there are a lot of changes taking place here at Oakey at the moment. New names, new roles, new buildings and new horizons beckon the fixed-wing flyers. The Porters are still going (maybe back to Pilatus), Kempy has gone (to Oakey Wksp Bn as ASM), the 'other' Nomads are coming (still) and Gibbo is back on the floor practicing his side step. A state of flux would aptly describe us at the moment (as in, 'fluxed if I know!').

Apart from the minor changes as detailed above, most other changes have involved the 'old Allison Shuffle'.

After doing a double engine change on A18-314 prior to its trials at ARDU, we perfected the routine with 315 at Mt Isa and 309 at Yulara Resort. More practice on several in the hangar saw 315 star again at Longreach and then we took the show on the road with 315 still performing, this time a double act at Holsworthy. Talk about OJT, the troops can now effect a Nomad engine change faster than MCS can 'Fish Haering' up the paper-work.

That about says it all for 173, for this issue at least. Till next time, hoo-roo, and remember, — what's in a name! or, a rose by any other name, will still do it better, faster, further, higher

THE FUTURE WITH THE

V A R L E Y V S 4 0 0 0 V E N T U R E R

*By Lieutenant Colonel Ken Arnett
SO1 General Engineering
Directorate of Electronic and General
Procurement — Army*

INTRODUCTION

One hundred and sixty five medium maintenance shelters are to be introduced into service over the next year. One hundred and thirty six are destined for RAEME, nineteen for RASigs and ten for Operational Stocks. The shelters are being manufactured by the Newcastle firm Varley Engineering to high quality standards. They have been through an extensive development programme and rigorous testing by the Maintenance Engineering Agency (MEA), the Engineering Development Agency (EDA) and field trialling by various Land Command RAEME units.

When these shelters enter service with both first and second line units, they will add significantly to the Army's field repair and maintenance capability. Along with the Perentie based Lightweight Shelter they will replace the LandRover and the International machinery vehicles. The total project cost is some \$12 million, which, while it is a great deal of money makes these shelters the most cost effective of their type in the world.

PROJECT HISTORY

The requirement for shelters goes back a very long way. Folklore suggests that our experience in South Vietnam, where the Field Workshops were deployed in static locations for years on end, required a solution other than having a vehicle, which itself required considerable servicing and maintenance, permanently parked under our workshop equipment. The resolve was that when it came time to replace the Landrovers and 5 Tonners we should have a system with the inherent flexibility for movement on all conceivable modes of transport but also capable of sensible static operations. Hence the removable shelter concept was born.

PERSONALITIES — THE LEGION OF THE DAMNED

The requirement document was initiated in the mid eighties by Colonel Mike Ford as the Director of Logistic Development

and Lieutenant Colonel Newton Ellaby as SO1 Plans in DGEME. Lieutenant Colonels Ed Sullivan and Alan McLucas and Major Geoff May from the DGEME Plans staff further developed and refined the requirement until it achieved Project Approval in 1987.

In Materiel Division, Army Office the project was advanced through the Realisation Phase of the Materiel Cycle by a succession of Project Officers. Major Ken Powell RAE in 1986/87 undertook the Requirement Study to define the requirement. Major Ahmed Mustaffa RAE in 1988/89 developed the detailed specification while Mr Graeme Pettiet carried out the purchase of the considerable quantity of fittings and fixtures that were to be provided to the successful tenderer as Government Furnished Equipment. Lieutenant Colonel John King RAEME supervised most of this activity under the direction of the then Colonel John Kingston who was the Director of Electronic and General Procurement (it is nice to be able to share the glory and whatever else with the boss). Major David Welch RAEME as the Project Officer and I took the project over in 1990 with the intention of progressing it to fruition. Some minor disruptions like the walls did not work, caused delays in the production program that extended the start date beyond what was expected but a better than anticipated production rate will see the project completed on time. Major John Low RAAC is hopefully the last of the Project Officers and will see the shelters introduced to service in 1993. Many others have been involved in the development of the project and should be allowed to share the glory or perhaps, not escape the blame. Colonel Larrie Foley as the DEGP-A 1991/92, Mr Wayne Killingsworth EDE as the project engineer, Warrant Officers Class 1 Ivan Vrankovic RAEME DGEME staff, John McMab RAEME MEA and Kevin Nichols RAEME ASM 3BASB are all in it up to their respective necks. These last three have been repeatedly threatened with a brass plaque with names emblazoned, permanently affixed above the rear door of every shelter if things go wrong.



The assembly line at Varley Engineering, Newcastle. Note the fabrication of the wall frames in the foreground.



Environmental Chamber trials at EDE

THE FUTURE WITH THE VARLEY VS 4000 CONTINUED

DESCRIPTION

General Description

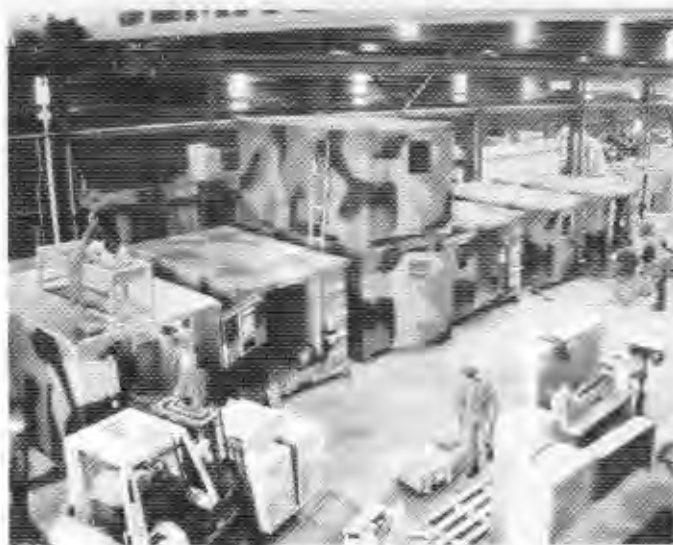
The purpose of the shelters is to provide a suitable working environment for the conduct of maintenance operations in the field. The shelters have been constructed in such a way to provide a workable environment under most climatic conditions encountered throughout Australia. They are required to be easily transportable, usually on the Unimog MC2 four tonne GS Truck, but also as ship, aircraft and semi trailer loads. For this reason they are ISO compatible to the extent that they have a two thirds ISO IC footprint and are fitted with ISO corner fittings. Vents have been included to provide pressure equalisation for air travel and the basic structures have been tested with static and dynamic loads to ensure that they can withstand the forces encountered in land, sea and air transport. Throughout the development, trialling and testing of the shelters considerable care and attention has been taken to provide a convenient and safe ergonomic design to meet the user's requirement. Common characteristics and features of the three shelter types are listed at the end of this article.

CONFIGURATION

The shelters will be available in three basic types that will be configured in fifteen variants. All will be fitted out with necessary basic workshop requirements for bench and storage space, first aid kits, gas bottle restraints and bench vices and grinders etc suitable to their task. Some of these smaller items will be left up to units to fit but please when you do it, get it right as the bench tops are expensive. (You will see what I mean when they arrive). The more particular features for the variants are detailed below.

Type 1 - General Repair (Expanding Side) Shelters. There will be 105 Type 1 Shelters in the variants outlined below. The basic features of the Type 1 include:

- a. Expanding Side — one side of the shelter folds out to increase the usable floorspace by approximately 50%. The expanded side is fully enclosed with removable blackout curtains.
- b. Ventilation System — the Type 1 shelters have a ventilation system capable of up to 40 air changes per hour that will provide an even airflow throughout the work area. Being an



Fitting out of Government Furnished Equipment, furniture and electrical. The "Topless" shelter is being used to ensure that furniture arrangement is practical prior to final fitting out



The finished product in the field

open sided shelter the provision of air conditioning was not a practical option.

Table 1 - Type 1 Variants

Serial (a)	Variant (b)	Features (c)
A	General Engineering	Lathe, Pedestal Drill
B	Weapon Repair	Weapon Racks, Parts Bath
C	Vehicle Repair	Lots of Benches
D	Electrical Repair	Generator and Starter Test
E	Arc and Shielded Gas Welding	TIG, MIG, AirPlasmaCut
F	Production Control	Benchspace

Type 2 - Non Expandable Radio Frequency Interference (RFI) Screened Shelters. There are to be twenty five Type 2 Shelters in the variants outlined below. The basic features of the Type 2 are the same as for the Type 3 described below, but additionally include: RFI screening that will provide at least 60dB attenuation to electric and magnetic fields in the frequency range 100kHz to 10000 MHz which will enable the repair and maintenance of RFI sensitive equipments in a relatively RF free environment.

Table 2 - Type 2 Variants

Serial (a)	Variant (b)	Features (c)
G	Telecommunications	19" Racking, Antistatic
H	Electronic Calibration	More 19" Racking than you can jump over.

Type 3 - Non Expandable Shelters. There are to be thirty three Type 3 Shelters in the variants outlined at Table 3 below. The basic features of the Type 3 include: a 6kW airconditioning system, an air extraction fan and compressed air adaptor.

Table 3 - Type 3 Variants

Serial (a)	Variant (b)	Features (c)
I	Aircraft Elec/Inst Repair	Shadow boards
J	Arty Computer/Laser Repair	Dust partition, Laminar flow benches, wash basin
K	Electronic/Instrument Repair	ditto
L	VILADWS Repair	ditto
M	Diesel Repair	Hartridge Test bench
N	Hydraulic Repair	250Kg gantry, parts bath
O	Aircraft Repair	250Kg gantry, * refrigerator

* Must have been looking the other way that day.

THE FUTURE WITH THE VARLEY VS 4000 CONTINUED

COMMON CHARACTERISTICS

Common characteristics and features include:

- a. Structurally;
 1. length 4013mm
 2. width 3420mm,
 3. height 2250mm,
 4. tare mass (approx, depending on type) 1200 Kg,
 5. gross mass all types not to exceed 4000Kg,
 6. Aluminium main frame,
 7. panel walls, roof, floor and door are a sandwich of 'Alumply' (1mm Aluminium, 2 wood ply, 0.5mm Aluminium, single wood ply) exterior skin, over 40mm Polyurethane fire retardant and insulating foam, and a 1 mm Aluminium inner skin,
 8. the Type 1 shelter with the expanding side is appropriately reinforced.
- b. Externally;
 1. Camouflage paint,
 2. Roof access ladder, hand and tiedown rails,
 3. Rear door platform and ladder,
 4. C of G markings,
 5. Levelling jacks,
 6. Forklift pockets,
 7. ISO corner fittings,
 8. a Utility port.
- c. Internally;
 1. eye friendly green,
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Letters



TO THE EDITOR

THERE IS LIFE AFTER RAEME

by Bruce Eklom

Whilst moored at Townsville's "Breakwater Marina" and visiting my brother, SSGT Tony Eklom, I came across a copy of the May 92 RAEME Craftsman. A number of articles in that issue and a multitude of names prompted me to write the following few words.

Briefly since electing discharge in Jan 83, after 20 years service, my wife and I have owned two restaurants in Melbourne, both of which were successful. After 5 years of "serving the public", I managed to convince Pat, my wife, that my dream was her dream. Consequently we sold up and bought "MAI TAI" a 43 foot cutter rigged sailing sloop.

Since then we have lived aboard and cruised the east coast of Australia, laying up during the cyclone season in different marinas.

The following is a synopsis of some humorous and interesting incidents on board the cruising yacht, "MAI TAI".



MAI TAI East side Whitsunday island, June '92



The skipper hard at work on the helm of MAI TAI, July '92

We were anchored at INSKIP POINT at the southern end of FRAZER ISLAND when a house boat towing an "olive drab" inflatable came into view at about 1600hrs. As it came nearer I could make out 8 or 9 blokes on board, none of whom were drinking. "Bloody weekend warriors" I thought, so when they were close enough I called out across the waves "You blokes in the army?" "Yeh" came the reply. "I'm ex RAEME" I yelled back. "Sounds like ***#!** Bruce Eklom to me" came the reply.

Turns out that 16AD Regiment were on exercise at Tin Can Bay and a group of guys with the weekend off had hired the house boat to do a spot of fishing. The man who never forgets a voice was MAJ Noel Burnell, whom I hadn't seen in 22 years! Another coincidence was that the RSM WO1 Hickey, who invited me on board, was the same apprentice intake as my brother SSGT Tony Eklom. I had a most enjoyable 9 hours with everyone, and then had to row home in the dark. Thanks guys!

Finally, thanks to my brother, Tony who was able to liberate a RAEME flag for me. (It is an old one, with 101 on it.) I have met many other ex-servicemen. I fly the flag on ANZAC day and whenever I enter a marina. So far it has attracted a WO2 Provost, WO1 Engineer, numerous RAEME types and lots of people who ask "What's that flag mean?" "That's the Royal Australian Electrical and Mechanical Engineers flag" "O yeah, what's that mean?" "What did you do?" "Well RAEME fixes just about everything the Army uses, I was an Electrician" "Gee mate, would you like a cold beer? By the way my alternator has been playing up, could you

Did I tell you the time I was given this rope by an ex mate. It floats and won't get wrapped around the prop while towing the dinghy. Well maybe next time.

Take it easy, but Take it.

ED

Bruce, your regards are thankfully acknowledged and returned in kind. Enjoy.

IVAN



THE DESIGNATION OF THE CORPS

Dear Sir,

For many years the RAEME Association in NSW has discussed, argued, debated and, above all, lamented the loss of our "ROYAL CORPS" designation, which slipped from our grasp in the early 1970s.

For the benefit of newcomers to RAEME the following information may be of interest.

When the Corps was established on 1 Dec 42 it was given the title "Corps of Australian Electrical & Mechanical

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LETTERS TO THE EDITOR CONTINUED

Engineers". On 10 Nov 48, in recognition of the Corps' splendid service during WW2, AEME was granted a "Royal" prefix by HRH King George VI and the Corps became "The Royal Corps of Australian Electrical & Mechanical Engineers". Worthy of note, it thus became the only Arm or Service in the Australian Army with the prefix "Royal Corps".

Early in the 1970s, without announcement or explanation in Corps Instructions, our unique title started to disappear from Corps writings, document headings and instructions in favour of our short title ie "Royal Australian Electrical & Mechanical Engineers".

On 9 Aug 85, in response to a letter from the RAEME Association (NSW) about this matter, the then Director confirmed we had, in fact, lost our "Royal Corps" title and quoted CAG 113 of 2 Dec 71 as the authority.

What then is our proper title? Defence Instructions (Admin) currently lists us as "The Royal Corps of Australian Electrical & Mechanical Engineers". This same title is used in our Corps prayer.

Since Nov 87 the "RAEME Craftsman" has claimed it is the magazine of "The Royal Australian Corps of Electrical & Mechanical Engineers" and the Corps grace plays it safe by omitting any mention of the Corps title.

There can be no doubt we have lost our "Royal Corps" title and I believe cannot get it back without Royal assent, but need it be lost forever?

Surely this is the type of thing from which military customs and traditions derive. Some units are now wearing WW1 and WW2 colour patches on puggarees. REME Officers wear spurs with mess dress (presumably the spurs General Montgomery said the Corps had "won in battle". Why can't RAEME use our "Royal Corps" title on ceremonial occasions or when we are proposing the Corps toast at mess dinners? At least it would keep the face alive that we were once the only "Royal Corps" in the Australian Army.

I take the opportunity to thank Major J.A. Heron for spelling out the abbreviations used in his article in the May 92 edition of the journal. I am sure many of our retired members like myself will agree it made the reading of the article so much more enjoyable, not having to guess the abbreviation meanings.

Yours faithfully,
J.W. MARMENT

President The RAEME Association (NSW)

☆ ☆ ☆

Few matters provoke as much debate amongst members of our Corps as the contentious issue of our title. The following information was researched by WO1 I Vrankovic and is offered in response to the questions raised by the President of the RAEME Association (NSW)

The following is an extract from the book "The Craftsmen of the Australian Army - The Story of RAEME" by Mr Theo Barker:

".....AEME and several other Corps... were honoured by His Majesty King George VI on November 10th 1948. Australian Army Order (AAO) 99, December 31st, 1948, promulgated the following information.

"Grant of the Title 'Royal' to Certain Corps of the Australian Military Forces.

In recognition of their services during World War II, His Majesty the King has given his approval to the granting of the title "Royal" to the undermentioned Corps etc of the Australian Military Forces, whose designation will, in future, be as follows:

- The Royal Australian Armoured Corps
- The Royal Australian Survey Corps

- The Royal Australian Corps of Signals
- The Royal Australian Infantry Corps
- The Royal Australian Chaplains Department
- The Royal Australian Army Service Corps
- The Royal Australian Army Medical Corps
- The Royal Australian Army Dental Corps
- The Royal Australian Army Ordnance Corps

The Royal Corps of Australian Electrical and Mechanical Engineers

- The Royal Australian Army Pay Corps
- The Royal Australian Army Provost Corps
- The Royal Australian Army Nursing Service

Henceforth, the acronym for the Royal Corps of Australian Electrical and Mechanical Engineers was RAEME."

The article goes on to state:

"...AHQ insisted that logistic bodies had to have the word "Corps" in their title, while DME (Brigadier C.A. Geyton OBE) insisted that AEME was a Corps of Engineers not an Engineering Corps. Because of this RAEME emerged as the "Royal Corps of Australian Electrical and Mechanical Engineers".

To explain the current designation of the Corps, the following is an extract from a letter written by Brigadier Arnos (RL) to Colonel Foley, The Senior Executive, RAEME Corps Committee on 21 Jul 89.

"...when RAASC was split up with part becoming RACT and part going to RAAOC, the then Deputy MGO Brigadier Lawson (an RAAOC Officer) unilaterally and without reference to RAEME initiated an approach to the Queen to designate the three logistic Corps as:

- 'Royal Australian Corps of Transport'
- 'Royal Australian Army Ordnance Corps'
- 'Royal Australian Electrical & Mechanical Engineers'

The appropriate documentation was signed by Her Majesty and that was the first Brigadier Deane as DGEME or Brigadier Martins as Rep Col Comdt heard about the matter. Despite much protestation no one in the system was prepared to go back to the Palace to say we'd got it wrong; so the matter stands."

The DGEME-A has directed that when referring to RAEME as a Corps the correct designation is "The Corps of Royal Australian Electrical and Mechanical Engineers".



OBITUARIES LIEUTENANT COLONEL M.J. CONDON

Lieutenant Colonel Mick Condon died on 7 August 1992. Lieutenant Colonel Condon enlisted in 1955 as a 10th Intake Vehicle Mechanic Apprentice. He served in the ranks of our Corps for the following nine years and in 1964 he graduated from the Officer Cadet School. During his career LTCOL Condon held a wide range of staff and command appointments including OC 1 Armd Regt LAD, OC 1 Mdm Wksp and CO 4 Base Wksp Bn. He served in South Vietnam in 1971. Lieutenant Colonel Condon retired in 1986.

Mick was an outstanding character and Corps identity. He had the ability to relate to all ranks and was a popular commander. Mick's willingness to accept a challenge, his competitive nature and his fondness for a game of football will be remembered by all who knew him.

As a Corps we extend our sympathy to his family.

106 FD WKSP — Seafaring and Sporting Spanners

by CAPT Bill GRADDEN OPSO MKII

1992 has seen the emergence of a new capability at 106 Fd Wksp, the amphibious recovery mechanic. In addition to the constant stream of second line repair and recovery tasking to support 6 Brigade activities, 106 Fd Wksp's Recovery Platoon (with a few vehicle mechanics and fitter affiliates) has recently shown an affinity for saltwater tasking.

In early June of this year, predominantly Recovery Platoon based assets from 106 Fd Wksp deployed to Moreton Island by LCMS to disassemble a 15m mast located at the historically significant Cowan Cowan signal station. The mast was erected in 1947 and used to signal passing ships, but with the advent of reliable radio communications the station was superseded by VHF and the complex subsequently fell into disrepair. Disassembly of the two storey, 700kg mast proved to be a tricky affair but a pooling of knowledge and skills saw it safely removed and transported to the mainland Brisbane City Council workshop for refurbishment.

In addition to saving part of our national heritage, the 'tow ropes' also undertook a 500m ditch digging task and lopped limbs from several large trees which were threatening some of the local houses.

In late June, CPL Wayne Gifford and CFN 'Bart' Bartholomai had the 'misfortune' to be placed at Sabina Point SWBTA to support the embark/disembark activities from HMAS Betano during Ex Tasman Link. From day one the procession of drowned vehicles began.

Firstly there was the recovery of a 2 Combat Engineering Regiment Mack Tipper and Inter TD15 dozer. These vehicles had already been subjected to two swims (two high tides) and were about to get a third wash. A combined effort by the recovery crews from 106 Fd Wksp, 104 Fd Wksp and 1 Fd Regt Tech Spt eventually saw the engineers vehicles free of their watery graves and back on dry land.

The next few days saw the crew recovering from this ordeal by restful contemplation (sunbaking) and stress relief exercises (fishing). However this idyllic lifestyle was brought to an abrupt end by 72 EW who succeeded in sinking a Mog (with a direction



Planting of Olive trees on St Helena Island. L to R 'Greenies' WO2 Wayne Luck and CPL 'Molly' Molloy help restore the natural nature on St Helena Is whilst SSGT Finch supervises.

finding shelter) to the axles whilst attempting to disembark from HMAS Betano. In a race against the rising tide the recovery crews waded and even swam to and from the casualty and eventually extricated the vehicle from its impending saltwater doom with the help of a TD15.

106 Fd Wksp's already high standing with the 'islanders' in Brisbane and the local Department of Environment and Heritage was further enhanced in late July when WO2 Wayne Luck and band of merry men again sailed off in an LCMS, this time to St Helena Island.

The purpose of this trip was to complete tasks started when the unit was located at Coopers Plains, and to undertake some new ones. The first group deployed on 20 July, again by LCMS and proceeded to conduct minor repair on the island's roads and causeway. They also refurbished an old tip site and opened a sand quarry which would later provide fill for an erosion site. They also lifted some historical artillery pieces and did their bit for the environment by relocating olive trees to a wind swept area devoid of cover.

The second group under control of SSGT Ian Finch concentrated on the removal of sand from the newly opened quarry to the erosion site. In total the Unimog tipper moved some 243 loads of sand, which led to a few quips about the raising of an Engineer Field Workshop.

In addition to these major activities, 106 Fd Wksp has taken on numerous other small tasks which have enabled unit members to gain skills and experience that would normally not occur during the training year. These have included:

- Removal of bitumen surfaces under playground surfaces at Coopers Plains State School;
- Lifting historical artillery pieces at Fort Lytton; and
- Displays of military equipment for National Engineering Week in King George Square.

And just for something completely different, 106 Fd Wksp is conducting Adventurous Training on Moreton Island later this year (life's tough in the sub-tropical Army!).

On a different track, 106 Fd Wksp has also continued to demonstrate its sporting prowess. In light of the unit's recent successes, its impending absorption by 6 BASB will come as



LCMS and disembarking JD450C "The JD450C wading ashore onto Moreton Island, WO2 Wayne Luck at the helm."

SEAFARING AND SPORTING SPANNERS

CONTINUED

relief to Comd 6 Brigade who doesn't appear to enjoy handing trophies to 'logies'.

The unit orienteering team consisting of CAPT Bill Gradden, LT Rolly Hosking, CPL Stewart Nicholson and CPL Paul Lynham swept all before them, convincingly winning the



Tadana Crane at Fort Lytton
'CFN Craig Law lowers a restored gun into its cradle. It may not have been mounted on a boat, but it did shoot at them.'

Brigade Minor Units Orienteering Trophy and producing an aggregate time quicker than the fastest major unit. In recognition of their ability, CAPT Gradden, LT Hosking and CPL Nicholson were selected in the team to represent 1 MD Army at the Australian Defence Force Orienteering Championships.

Hot on the heels of this achievement was the selection of LT Doug Wheadon, CFN Cameron Lutz and CFN Shane Andrews in the RAEME Rugby side to tour England. All three are important members of the unit rugby team which has been enjoying good form of late, downing 8/9 RAR, LWC and 2/14 QMI (LH) in recent matches.

Additionally, a hastily organised rifle team consisting of LT Tony Mitchell, LCPL Ian Jeisman, CFN Sue Castley, PTE Lachlan McKenzie and CFN 'Nudge' Ludman achieved an above expectation placing of second in a recently conducted south-east Queensland tri-service shoot. (It would seem the Steyr is easier to point than the SLR.)

Finally, the unit cross country team consisting of CAPT Bill Gradden, LT Rolly Hosking, LT Tony Mitchell, CFN 'Sid' Sidoti, CFN Simon Ritchie, SPR Darren White, PTE Stephen Willcos, CFN David McKinnon, CFN Jason Cowie and PTE Jason Beer took out the Brigade Minor Units Cross Country Trophy and achieved a very credible third overall result for South-East Queensland.

Noteworthy individual performances include CPL Tim Reynolds selection in the ADF Lawn Bowls team to compete in New Zealand later this year, and CPL Paul Lynham and PTE Lachlan McKenzie's success at the recent south-east Queensland inter-service golf selection trial which will see them play in the Queensland inter-service golf championship to be held at Coolangatta in October.

All in all, despite the relative lack of field activities to support (shucks!) 106 Fd Wksp has been fortunate to get its members away on interesting and technically challenging activities, made all the more attractive by sun, sea and surf.

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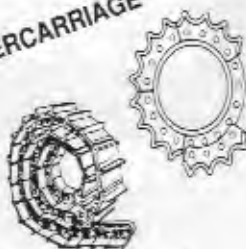


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Jacksons Airbase PLES BILONG BALUS

by CAPT Mal NORRIE

Well for those of you who read the PNG article by MAJ Geoff Hutchins in the last issue you will have noticed there are four of us fortunate souls posted to the Air Transport Squadron (ATS) of the PNGDF. Here in PNG as at home, RAEME is expanding its presence into the defence aviation world. Jacksons Airbase, Port Moresby is the "ples bilong balus" of the PNGDF. RAEME personnel and their positions at ATS are:

MAJ Bob Turl - Senior Engineering Officer
CAPT Mal Norrie - Engineering Officer
WO2 Sandy Johnson - Maintenance Coordinator
SGT John Knipe - Airframe Instruction

We also have our token cockroach WO2 Don Murphy (RAAOC) in the supply store. The unit has a total of 16 loan personnel (the remainder being RAAF personnel, 1 Pilot (Trg Flt Comd), 1 WOFF (WOE/ASM) and the remainder being FSGT's & SGT's in the Maintenance Flight and the Field Training Centre.

So what is ATS and what does it do. Not surprisingly the squadron provides the PNGDF with an air transport capability. This is provided currently by, three Arava, four Nomad, and two CASA aircraft. There are also three UH1H Iroquois helicopters which are currently operated in Madang by a civilian firm, Heli Nui Guinea under DCP contract for the PNGDFA. On the manning side the squadron has an establishment of 166 personnel, of which 96 belong to the maintenance flight.

The squadron has undergone some dramatic changes over the last 12 months. As many of you may be aware, ATS was previously located at Lae across the runway from the original 183 Sqn buildings. The squadron began moving mid last year and now occupies a very modern hangar and buildings opposite

the Port Moresby airport. The new Jacksons Airbase was a joint project between the ADF and PNGDF and was constructed under DCP funding. The new facility is a far cry from the WW2 galvanised iron hangar and huts at Lae, and will take the PNGDF well into the next century.

AIRCRAFT

On the aircraft side, the squadron took delivery of two new CASA CN235 aircraft in February this year. These aircraft have replaced the ever faithful DC-3. The CASA is manufactured in Spain by Construcciones Aeronauticas Sociedad Anonima.

The last DC-3 which flew in August, has now joined the other four DC-3's at the back of the hangar awaiting disposal through the supply system. The DC-3 has provided the PNGDF with loyal service for 20 years and will be sadly missed. Although re-engining the DC-3 with a turbo prop Pratt and Whitney was considered a viable option, the old lady of the skies lost out to the more modern systems and looks of the CASA CN235. So for any enthusiasts out there with a few spare dollars here's your chance to own a low hours DC-3.

OPERATIONS

The squadron, in providing air support to the PNGDF is currently kept busy by operations on Bougainville island. Primary tasks are troop movements and resupply between PNG and Bougainville, and reconnaissance in the AO. The squadron has a detachment on Buka Island adjacent to Bougainville which provides maintenance support to aircraft in the AO. This detachment is manned by PNGDF personnel only, as loan personal are forbidden to enter into the Bougainville area.

THE FUTURE

The future for the squadron over the next 12 months looks to be busy and challenging. The Iroquois are soon to be relocated



Left to right: MAJ Turl, SGT Knipe, WO2 Johnson and CAPT Norrie discussing modifications to the CASA



Putting the lost DC-3 to rest. Left to right: LT Steve Karu (Engineer), WO2 Sandy Johnson, LCPL Sawi and CPL Kombe

**JACKSON AIRBASE
PLES BILONG BALUS *CONTINUED***

aircraft come new systems and technology. The CASA is certainly no exception and is providing a challenge to the knowledge and experience of the Maintenance Flight. Ensuring sufficient and adequate training is conducted for both of these aircraft will be high on the squadron's priority list.

The corps is certainly well represented throughout PNG and in all areas of engineering — the Balus is certainly no exception. So to olgeta yupela hosat i bilong lain RAEME, olgeta mipela hia long ATS, laik yu kisim gutpela Krismas na amamas tru nupela yia.

Bia mi go nua, lookim yu bihain.

to Port Moresby. The squadron will then progressively begin to take over their operation and maintenance from Heli Nui Guinea until the DCP contract runs out in mid 1993. This will be the first time the squadron has operated rotary wing aircraft and is sure to keep us busy. As always with the introduction of all new



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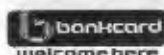
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3RD COMBAT ENGINEER REGIMENT WORKSHOP**

WHAT'S IN A NAME?

The Career Advisor (CA) RAEME was conducting career interviews with the OC of the Townsville Detachment of the 2nd/3rd Field Engineer Regiment Workshop (2/3 FER WKSP). The CA RAEME asked the OC if there were any problems that he wanted to discuss: "Well sir," said the OC, "I'm a bit confused. I married a widow who has an adult daughter. My widowed father married her, and so my wife became her father-in-law, mother-in-law, and her daughter became my stepdaughter and my stepmother.

My wife's daughter then had a child to my father, who is my brother and also my wife's grandson. My wife too had a child, who is his grandfather's brother-in-law and uncle of his own uncle. On the other hand my father speaks of his brother-in-law when referring to his grandson, and my son calls his sister grandma.

I am now under the impression that I am my mother's father, and my grandson's brother, and that my wife is the daughter of her son-in-law and the sister of her grandson.

At this point I do not know whether I am my own grandfather, my brother's father or my son's nephew, since my son is my father's brother-in-law. To top it all off, just when I convince everyone in Townsville that I am in a separate unit to 18 Fd Sqn, they put me under their command. They don't change my name outside of Lavarack but in 3rd brigade I'm known as 18 Field Squadron Workshop (18 Fd Sqn Wksp) but my HQ in Brisbane is now 2 Combat Engineer Regiment Workshop (Cer Wksp). I get mail for 2/3 FER WKSP TSV DET, 2 CER WKSP TSV DET and 18 FD SQN WKSP. Now they tell me I'm 3 CER WKSP!; WHO THE HELL AM I?

☆ ☆ ☆

Talk about an identity crisis! Well ladies and gentlemen what a year it has been. We here in the 3rd Combat Engineering Regiment Workshop have had challenges not unlike those of the OC in the above quote. For a while we didn't know if we were Arte or Marte. Now it is official: we have a name we can call ourselves and to be proud of.

The 3rd Combat Engineer Regiment came into being on 1st July 1992. The Regiment consists of three sub-units: 18th Field Squadron (18 Fd Sqn), 25th Support Squadron (25 Spt Sqn) and The 3rd Combat Engineer Regiment Workshop (3 CER Wksp).



"Course it took all these blokes. Do you know how many times it had to be done?"

The manning of the Regiment compared to when it was a Fd Sqn increased from approximately 260 personnel to 290 personnel. From that, the Wksp reaped six positions which now gives us a total of 35 personnel. Our role according to doctrine has not changed but our command structure has. Once the current OC Wksp leaves he will be replaced by a captain (surely an indication of the massive amounts of responsibility and hardship the LT OC has had to endure). But enough of the technical stuff, let's look at the year that has been ...

After commencing BRL on 1 Dec 91, we returned to work around 13 Jan 92 to commence preparations for the mother of all exercises - KANGAROO 92. Battle procedure oozed out of every pore as the men prepared for the exercise in the wet. "Wet" did I say? - yes people the dreaded wet Northern Territory during the months of February, March and April; it was going to be a most testing and soggy exercise. But we were not going unprepared; we had packed just about every conceivable wet weather mobility/recovery device that we could carry. PSP (perforated steel plate) was loaded on to each vehicle at four sheets per vehicle, large aluminium APB anchors were taken to act as recovery anchor points in the boggy mud and a small ark measuring 90 cubits by 9 cubits by 15 cubits just in case. As is the case with most perfect plans, we arrived only to find that it had been raining up until about three days prior to us arriving. For the entire time we stayed at our secret location in Pine Creek it rained (23 drops) only once. A couple of days after we left a cyclone came through; we blame the supply system and the RAAF for delivering the wrong part at the wrong time in this case. We did receive letters of gratitude from the many tyre firms along the way to K92 especially the manufacturers of eight tonne trailer tyres.



PT at 1600 during K92 - "In the wet?"

Since K92 nothing really exciting (apart from the raising of the Regiment) has happened, I guess the only thing to do now is mention the hails and wails from the Wksp. CFN Darren Johnson came to us from B Sqn 3/4 Cav Regt late in April this year. He was offered a lucrative cultivation deal in Cairns and elected early discharge from the Army. CFN Bill (Bubbles) Childs received a posting order to 5 Avn Regt Wksp. After seeing the

WHAT'S IN A NAME CONTINUED

airconditioned office that he would be forced to work in, he chose to take some leave to console his thoughts; the only problem was that he never asked anyone before he went on leave! The member is described as being 178 cm tall and weighing approximately 80 kgs; he has blonde hair and blue eyes. He was last seen waving good-bye to the Wksp on Friday 14 August.

Other people who have or soon will be leaving legitimately are:

LT Tony "it's alright, we've got four wheel drive" Tripley. It looks like he's going to MEA on promotion to CAPT at this stage but stay tuned for more details.

WO2 Jeffery "the best home brew I've every tasted (and I've tasted a few)" Tierney, who has gone to the Puckapunyal Logistic Battalion as a WO1.

SGT Rory "I'm posted, no I'm not, I'm posted, no I'm not" McIvor who has had more postings taken from him than Jeff Tierney was offered. He is/is not* going this year. (*delete as applicable).

CPL Bjorn "I've discovered how to network market real estate" Porsbro, who is going to OCS (old civvie street) in January 93 after a 10 year stint (five years in this WKSP-doing it tuff).

CPL A1 (just a roach) Hall - our CPL RPS man who we thought rated a mention even though he is RAAOC - going to SME also January 93.

CPL John "Leprosy, I'm not half the man I used to be", Scotman who is moving down the road to Townsville Log Coy to give his reconstructed knees the chance to recover and reconstruct.

CFN Mark "black is beautiful" Burby who is off to complete the year 12 education course and then on to Duntroon for a restful 18 months.

On the incoming side of the coin we welcome the following people:

WO1 Gus Ryan, who thinks he got the better end of the deal in the one for one swap with Jeff Tierney. Gus takes over as ASM on 5 Oct 92.

SGT Mick (Hello Wksp's; CPL O'B - I mean ST O'Brien speaking", O'Brien from 3 BASB Field Wksp. He's here to replace Rory who is/is not* going somewhere else maybe. (*delete as applicable).

CPL Pete (Long fellow, large fella, big thing?", Langthaller who came to us from 5 Avn Wksp only a matter of days after Bubbles Childs took early retirement.

CPL Geoff "Roll it on robbie", Condon again from 3 BASB Fd Wksp to take up the new appointment of Fitter Elec CPL in the Wksp.

And finally ...

CPL Gadsby from Townsville Log Coy who is here to replace CPL Scotman. I'm not really game to make a smart comment about him: not because he's about twice my size, but because he's away on the RAEME Rugby trip to the UK and therefore cannot defend himself.

Well that's about it in a nutshell ladies and gentlemen; we are now firmly established as 3rd Combat Engineer Regiment Workshop and would appreciate it if all correspondence was addressed as such. We trust you have enjoyed the show and, should you require a fact sheet on anything you've read please drop us a letter remembering to enclose a stomped self-abused antelope for us to answer your request. Hooroo!

One last thing - we are now opening our phone lines for a phone poll on whether or not Rory McIvor should be posted from this Wksp. For a YES vote please phone 0055 15535. NO voters should ring 0055 15942.

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RAEME TRAINING CENTRE

DR FITZGERALD SERVICE RECOGNISED

by CAPT J. SEUL

Dr John 'Jack' Fitzgerald was awarded a GOC Training Command Commendation for his loyal and dedicated service of 23 years as the RMO RAEME Training Centre. MAJGEN Frank Hickling, GOC Training Command presented Dr Fitzgerald his commendation recently, during his inaugural visit to RAEME Training Centre.

Dr Fitzgerald commenced his association with the military some 50 years ago when he joined the Army Cadets in England as a 15 year old. Following his medical training and a two year stint of national service, Jack with his family moved to Australia and he commenced duty as the RAEME Training Centre RMO in 1966, a position he still holds and enjoys today.

Dr Fitzgerald is a highly respected member of both the local community and the medical fraternity and until recently, operated in private practice in Wodonga. His dedication extends beyond the care and welfare of serving members to their families, such that Dr Fitzgerald has become an integral part of the unit. The commendation is just reward for his dedicated service.



Major General F.J. Hickling presenting Dr John Fitzgerald with his commendation

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RAEME TRAINING CENTRE

READY RESERVE AT RAEME TRG CENTRE

by SGT C BOWMAN & SGT G. MacDONALD

Two Ready Reserve soldiers marched into RAEME Trg Centre on 1 July 92 to attend the 2/92 Clerk Production Course. These were the first Res soldiers to be trained at RAEME Trg Centre.

CFN Daniel Kennedy an 18 year old, comes from Hervey Bay in Queensland. Next year he is to attend James Cook University to study psychology. His goal is to eventually obtain a commission in the Army. CFN Ben Reinmuth who celebrated his 18th birthday during the course comes from Brisbane. He has always wanted to enlist in the ARA, but as positions were limited he applied for the Ready Reserve scheme, hoping later to change to the ARA.

Both students marched into RAEME Trg Centre with a positive attitude which was reflected in their end of course results. Their level of training was consistent with the Regular Army IET students and they required no extra training on arrival at the school. CFN Kennedy was posted to 2/14 QMI and CFN Reinmuth to 5 Tpt Sqn Wksp.



Picture — Sl Corps Trg Wing, MAJ S. Barr with CFN Kennedy (left) and CFN Reinmuth (right) after being presented with their Certificate of Training.

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RAEME TRAINING CENTRE

A FAREWELL TO 3103495 WO1 BRIAN TINGWELL

by LT R.J. LOVE

WO1 Brian (Tinga) Tingwell, a staff member at RAEME Training Centre retired on the 11 July 92, after 36 years of service.

Brian began his Army career with the 20th National Service Battalion on 3rd January 1956 as part of a compulsory National Service program. After joining the Army he was posted 19 times throughout Australia in Land, Logistic and Training Command postings. Brian also saw service in both Vietnam and Papua New Guinea.

A formal Farewell Dinner was held in the RAEME Corps Sergeant's Mess on 26 June 92. This dinner allowed for the celebration/commiseration of Brian's farewell from the Army. As testimony to his achievements, in excess of ninety guests attended from around Australia to officially say farewell.

During Brian's outstanding career, he was awarded the Vietnam Medal, Defence Force Service Medal, GOC Field Force Command Commendation and a Commanding Officers Commendation from the RAEME Training Centre.

Prior to his retirement, WO1 Tingwell had been working as the OIC Recovery Section. During Brian's time at RAEME Training Centre it was noticed that Brian considered himself a budding capitalist, as he endeavoured to establish a trout farm in the Vehicle Wing wading pool. This enterprise was undertaken with the SI of Vehicle Wing at the time, MAJ Mark Martin, in order to establish a trout fishing day for the hard working Vehicle Wing staff.

Vehicle Wing on behalf of the Corps and the Recovery trade, would like to say 'thank you' to WO1 Brian Tingwell, not only because of the work that he has done during his time in the Army, but also, for his invaluable advice and expertise which he has freely offered to all members of the Defence Force.

Finally, we would like to wish Brian, his wife Elaine and family, good luck and best wishes for the future.

Brian now resides in the Albury/Wodonga area.



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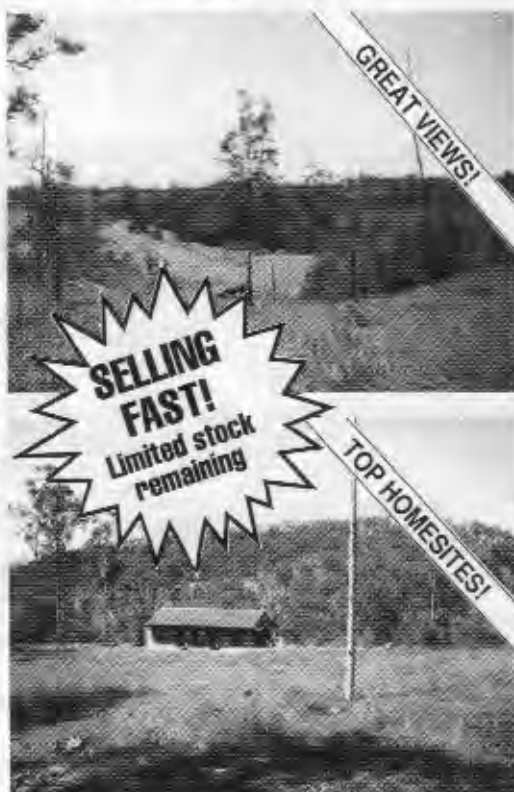
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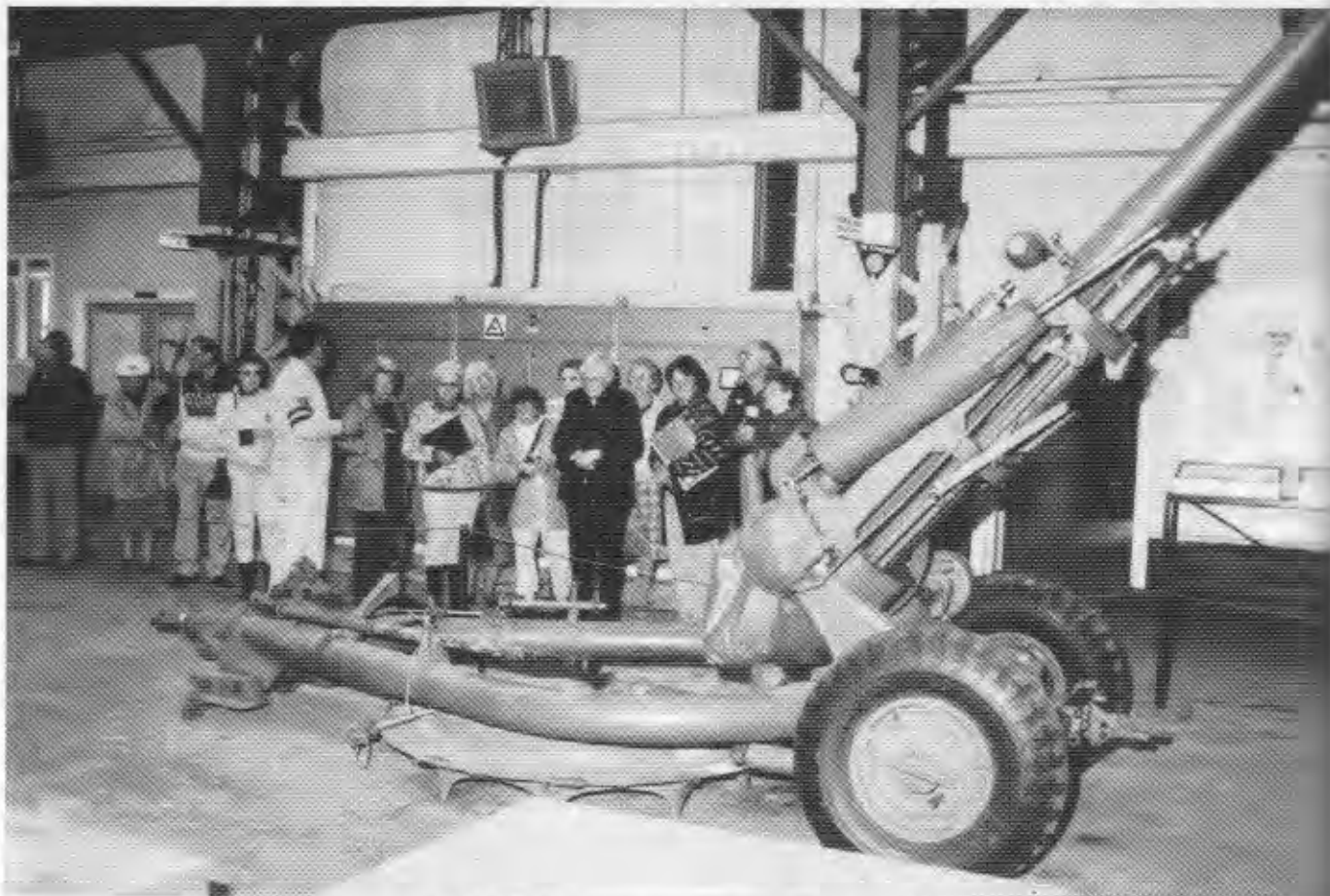
INDUSTRY VISIT FROM ALBURY "SCHOOL FOR SENIORS"

by LT. J.J. HUTTON

On Tuesday 28th July 1992 a group of senior students from Albury "School For Seniors" visited the RAEME Training Centre. The visit was part of a "High Technology in Industry" programme being undertaken by the senior students at the Wodonga College of TAFE.

The purpose of the visit was to give the group, aged 50 - 75,

an overview of today's complex training methods, in particular the teaching of the high-tech skills required today. The group spent nearly two hours at RAEME Training Centre and were shown through all the major elements of the establishment. A high level of interest was shown by all and this was reflected in the amount of questions asked of RAEME Training Centre Staff.



WO1 Mick Blakeman escorting the students through Armament Wing, RAEME Training Centre

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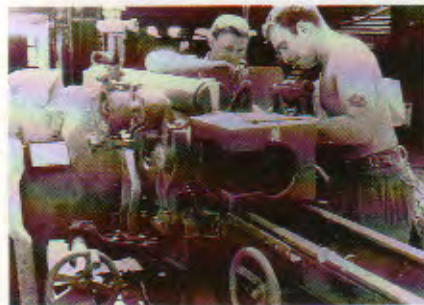


Golden Jubilee

The Past

The Australian Electrical and Mechanical Engineers (AEME) was formed on the first of December 1942. Until victory in the Second World War, AEME units and personnel served in Egypt, Palestine, Libya, Cyrenacia, Greece and Crete, Syria, Malaya, New Guinea and the South West Pacific. In recognition of service during World War Two, AEME was granted the title of 'Royal' by King George VI on the tenth of November 1948.

Units and personnel of the Royal Australian Electrical and Mechanical Engineers (RAEME) have subsequently served in the Malayan, Borneo, Vietnam and Gulf Campaigns.



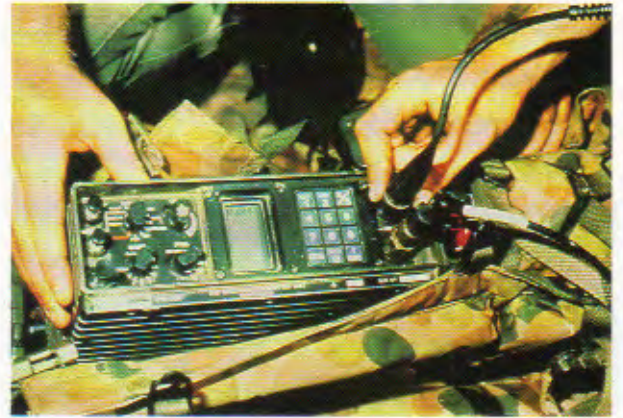
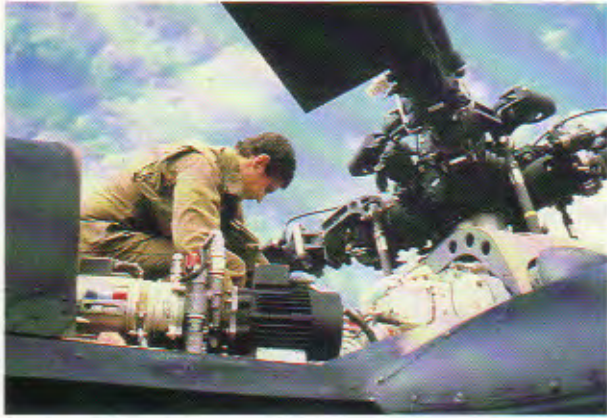
Photographs courtesy the Australian War Memorial



The Present

*T*oday the men and women of RAEME continue to be responsible for ensuring Army equipment operates reliably and efficiently and is repaired as quickly as possible after failure or damage. They are involved in logistic support and training activities throughout Australia. RAEME also provides valuable technical support and guidance to overseas countries and participates in many United Nations Peacekeeping Missions throughout the world.





The Future

With rapidly changing technology and ever increasing operational requirements, the Corps of RAEME will continue to have heavy demands placed upon it. The foundations laid by the members of the Corps over the past fifty years provide a sound basis for meeting these future challenges. The next fifty years will undoubtedly prove that the Corps is continually eager and versatile enough to accept responsibility for supporting Army equipment into the twenty first century.



The March

The origins of the RAEME March can be traced back to the Royal Electrical and Mechanical Engineers (REME) March. In 1967, RAEME was given approval to use the the tunes 'Lillibulero' and the well known song of Disney's seven dwarfs 'Heigh-ho, its off to work we go'. This tune was ultimately discarded by REME in favour of an arrangement of 'Lillibulero' and a French tune 'Aupres De Ma Blonde'. In 1959 'Lillibulero' was adopted as the RAEME March and an alternative to 'Aupres De Ma Blonde' was sought in combination with it. 'The Boys in The Backroom' was selected to combine with 'Lillibulero' and became the official RAEME March.

The Badge

"Upon a lightning flash, a horse forcene gorged with a coronet of four fleurs de lys, a chain reflexed on its back and standing on a globe. Above, a crown upon a scroll bearing the letters RAEME". The horse and chain are symbolic of power under control, and the lightning flash, of electrical engineering. The horse forms part

of the crest of the Institution of Mechanical Engineers and, together with the lightning flash, is intended to mark the close relationship existing between electrical and mechanical engineers in the Army and in civil life. The globe is indicative of the impact of engineering on the world generally.



The Patron Saint

In 1990, Saint Eliquius was officially adopted as the Patron Saint of the Corps of RAEME. Born the son of a craftsman at Chaptelut near Limoges in 588, the young Eligius showed such talent for engraving and metalwork that he was apprenticed to a goldsmith. After completing his training, he received orders from King Clotaire II in Paris to make him a throne. The honest young craftsman produced not one, but

two thrones from the material provided, which so impressed Clotaire that he made him Master of the Mint.

King Dagobert I shared his father's high opinion of Eligius and gave him the estate of Solignac in Limousin for the foundation of a monastery which was occupied by monks of the combined Columbian and Benedictine orders in 632. Eligius subsequently converted the King's gift of a house in Paris into a Convent headed by Saint Aurea. Saint Eligius' career culminated in his appointment as Bishop of Noyon and Tournai, in which capacity he played a leading part in the ecclesiastical life of his day, but he never forgot the skills which brought him renown, and he continued to practise his craft until his death at the age of 71. Saint Eligius was buried in the cathedral at Noyon, and a statue of him may be seen in the Henry VIII chapel at Westminster Abbey. He is well known on the continent (the French know him as Saint Eloi) and he is the Patron Saint of metalworkers and farriers.

The Motto

"ARTE ET MARTE"
(by Skill and by Fighting).

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VIEW FROM THE TOP

by CAPT Phil HOLMES

7 LOGISTIC COMPANY



There's no doubt about it, you can't beat the Top End as a posting locality. Warm weather and the great outdoors are unbeatable up here — you've just got to learn not to swim with the crocs! So next time you're shivering doing your dream sheet, think about a place in the sun with 7 Log Coy Wksp Pl, Darwin.

While the rest of the world contracts, we're expanding at a rapid rate. It's just a pity the toolboxes aren't coming with the tradesmen, but what's new? In the last 12 months we've grown from a handful to 1 offer, 22 ORs and seven civilians. This Christmas we welcome another seven members of various trades, and 2 Cav Regt Tech Sqn are arriving, bringing the RAEME strength to over 100 in Darwin.

2 Cav will bring their own challenges to the Top End, as it hasn't even been decided how to support them up here yet. We'll cross those bridge as they come, and until the high up decisions are made we'll do what we can.

It's been a very busy year and will be right to the end. In the beginning the Wksp had to move across town for two weeks before K92 kicked off. Here's how CPL 'Big Mal' Ogden saw it...

7 Log Coy is now residing at new premises in Coonawarra Rd, Winnellie, Darwin. No one is really sure when we started to move from the old workshop to the new, but it was some time between January and February. We were told (the worker on the floor) that we were moving to a better facility, by necessity because the old Workshop had been "earmarked" for bigger and better things. Although to this date, it remains empty.

Generally, the move was dreaded by the workshop people, with time very limited because of K92 just around the corner. Anyway, back to the move. It was your typical Army move, thought through and planned to counter all possibilities. This was accomplished in three set phases:

- load up truck with as much as possible,
- drive truck to new location, and
- unload truck and return for next load.

It seems simple doesn't it?

WRONG!!

Upon arriving at new location, we found the old tenant still in occupancy (the NT Police). The word was passed around, "Oh sh...! what now!"

So we wait.

Well eventually, all the gear arrives in the new workshop and we wait.

Seemed to be a bit of a power struggle for space, "mm maybe this facility isn't so big after all."

After boundaries and section areas were allocated the big race was on, to set up before K92.

Civilian contracts were put out to get the hoist installed, compressed air lines run through the Workshop and the machine shop levelled and bolted down. To cut a long story short, we've been told the compressed air lines will be completed soon.

Now, after the dust and confusion of K92 has settled the



CPL Mark Weldon is the only Recovery Mechanic in an area stretching from Broome to Carnoowal and Darwin to Ayers Rock. He has his work cut out for him.

workshop is about as set up as is going to be, although there is a lot of scope for improvement; such things as a battery shop and an overhead crane — well, any crane really.

So once again, the workshop is ready to "provide a service," as we've been constantly told. Overall, the task was accomplished, as we're here and turning out work, but as most blokes said, "Struth, I'm glad that's over."

Well not much has changed on the floor since then. They tell us they can't work on the building until they buy it from the owner, who's lost in the Greek Islands somewhere! One day....

In the meantime, every man and his dog has visited either on a swan or on exercise, even before the dust had settled from K92; and there was a lot of dust.

The workshop also provided help to the Variety Club Heart-to-Heart-Bash in September.

Workshop facilities were provided for the preparation of one of the competing vehicles and a wrecker and 6 x 6 support vehicle went along on the Bash. CPL Mark Weldon provided entertainment by "deliberately" bogging and recovering the Mack Wrecker in a huge mud hole, while CPL Steve Paul and CPL Bob Wade gave the geriatric vehicles a helping hand.

The next event on the calendar is the unit exercise in October. Exercise BREAKOUT 92 will take the Workshop once around the Territory via the Barley Table Land, Ayers Rock, Alice Springs and the Tanami Desert, with a spot of abseiling near the Victoria River on the way. Should be a big one. Then we wrap up the year with the Top End RAEME 50th Birthday, which promises to rival Bandiana in festivity if not in scale.

So throw in an application for repost and come and see where it's at in the Top End, and leave the dreary southern climate for those who deserve it.

P.S. Contrary to the last RAEME liaison letter, there is another command job for a Captain — 7 Log Coy Wksp Pl.

UNIT JOTTINGS

MAINTENANCE ENGINEERING AGENCY

Should there be any doubt as to MEA's existence all rumours are now cast aside and we are now in a position to advise our customers that we are alive and well and open for business as usual.

Earlier this year with the transfer of functions from Log Div-A to Log Comd. MEA suddenly found itself under command of HQ Log Command but still being tasked by Army Office (DGEME and bits and pieces that were left over from Log Div). There was some initial confusion over where and who we were to get our funding from, who wanted to own us, and more importantly to whom did we want to belong. This has since been resolved with the issue of The Ryan Study, and as of 01 OCT 92 MEA has come under command MAT DIV-A.

Through all this confusion over ownership, we have undergone some internal changes which should be for the better. With the demise of HQ 3MD, the MAS have now come under our control, and the elements of MEA which were once located at Broadmeadows and then Sturt St, are now firmly ensconced in the former Melbourne Wksp Coy building in Miles St.

As the dust settles on the new organisation, the snow also settled on some of our keen adventurers who have just returned from trekking The Canadian Rockies (See article in this issue).

ARMY COLLEGE OF TAFE "APPRENTICES UNITE FOR A GREEN FUTURE"

The Army College of TAFE is establishing a memorial avenue of trees along the major roads within Latchford Barracks.

The Army Apprentices School moved from Balcombe to Latchford Barracks, Bonegilla in 1983 and was renamed the Army College of TAFE in January 1991.

Every graduating class of apprentices and its staff will be allotted a tree. This will be dedicated by way of a concrete plinth with a brass plaque attached, positioned in front of each tree.



One of the original Army Apprentice School, Balcombe entrance gates, now located at Army College of TAFE, Bonegilla.

A reunion of all ex-apprentices and staff will be held for the dedication ceremony on Saturday 12th December 1992 at Latchford Barracks. This will be in conjunction with the Graduation Parade of the 46th Class Apprentices.

In addition the various Trade Wings will be open for inspection and memorabilia from the historical collection will be on display.

It is hoped that as many ex-apprentices and staff can make the pilgrimage to Latchford Barracks for the dedication. This memorial will provide a living history to future tradesmen and women who graduate from Army College of TAFE.

BROADMEADOWS LOGISTIC BATTALION

By Sergeant Charlie North and Lance Corporal Bruce Nethercote

The past four years have seen many changes to the face of RAEME within the Broadmeadows Military Area. The first major change occurred on the 14th December 1988 with the amalgamation of 3 Base Workshop Battalion, 32 Supply Battalion, Melbourne Movement and Transport Unit and DSU Broadmeadows to form Broadmeadows Logistic Battalion (BLBn). Prior to this, Melbourne Workshop Company had been absorbed into 3 Base, so it too became part of the Battalion.



Abselling during adventure training. (L to R) LCPL R. Herbert, RSM WO1 G. Tloutin, LCPL P. Parkinson, WO2 J. Martin and WO1 E. Zuber.

At this stage 3 Base was renamed Equipment Maintenance Company. In January 1991 this was changed to Maintenance Company, but just when you thought it was safe to change all the signs again, you guessed it ... we changed name once more. As of the 2nd December 1991, Maintenance Company became Equipment Company and it appears that this name will stay (fingers crossed!!)

The last name change was, however, more than merely cosmetic. It coincided with the introduction of the concept of Fleet Management into the Battalion. For those not familiar with Fleet Operations, it involves the management of all aspects of the running of fleets of equipment, including finance, storage, repair and maintenance and disposals.

The equipment operated, stored and repaired at Broadmeadows is split into two broad areas; Fleet Operations—

UNIT JOTTINGS — CONTINUED

Vehicles who are responsible for B and C vehicles and weapons; and Fleet Operations — Miscellaneous Equipment who are responsible for all other equipment, including refrigeration, communications equipment and generators to name a very few. Recently, the concept of Total Quality Management (TQM) has been introduced. Despite the changes, the Battalion's primary aim is still customer satisfaction.

When 3 Base was absorbed into the Logistic Battalion it had over 200 RAEME personnel. Four years on, that number has been reduced to 66. This is commensurate with the overall reduction of the amalgamated unit's strength of around 1000 personnel down to a proposed structure of 342 personnel comprising 94 military and 248 civilians. Of those 94 military, RAEME will have 28 positions. The new structure will be manned by 25 per cent military and 75 per cent civilian staff.

RAEME personnel currently account for 66 of the 283 military staff at Broadmeadows, yet despite our small numbers we feature very prominently indeed. RAEME personnel can be found in virtually all aspects of the Battalion's operation. In our senior ranks, the Commanding Officer (Lieutenant Colonel Jennifer Watkins), Logistic Operations Officer (Major 'O.P.' Mohan), and the Officer Commanding of the dauntless Equipment Company (Major Trevor Oakey) are all RAEME. RAEME subalterns hold positions in Equipment Company headquarters and in the Battalion's Training, Finance, Computer Systems, Planning and Customer Liaison cells.

RAEME Warrant Officers hold senior positions in Equipment Company, the Customer Liaison Cell and Fleet Operations — Miscellaneous Equipment. Our Quarter Master is also RAEME.

RAEME Senior NCO's can be found throughout the Battalion — in the Calibrations Team, in the General Engineering Section and even as administration staff in Battalion Headquarters. Our Corporals and Craftsmen are also spread to the four winds, performing vital roles in all aspects of the Battalion's operation, but primarily in Equipment Company's General Engineering, Calibrations, and Inspection Sections and in the Broadmeadows Service Station.

The Battalion has had good representation in a variety of sports this year. Our injury troubled Aussie Rules team narrowly missed out on the finals series. Other sports in which we participated strongly were Touch Football, Basketball, Golf, Volleyball and Shooting.

The Battalion's annual adventurous training exercise went very well with strong support from the RAEME contingent, including the CO, LTCOL Watkins, Exercise Second-in-Command, Lieutenant Steven Sims and our WO Training, Warrant Officer Class Two Vince Voncina. A cold week was spent in the Dargo High Plains white water rafting, abseiling and horse riding.

Upcoming events include the annual Rugby League grudge match with RAEME and RACT versus the rest and another adventurous training activity involving a five day horse-back trek to the high plains around the Freeburgh/Mount Jim area. This year the Battalion Birthday parade and celebrations will be bigger and better than ever and we are all looking forward in anticipation.

TECHNICAL SUPPORT TROOP SCHOOL OF ARTILLERY by WO2 BOB ZELESKO

1922 started with a few changes with Captain Glen Falting (Basil) arriving from Brisbane in a typical RAEME Officers bucket of bolts called a car. Another new face was Nicole Duncombe (clerk production) who had big shoes to fill as Rick Wegener (Fronter) was the heat seeker during 1991, and had provided much of the entertainment for the troop at P.T.; especially after he

had singlehandedly eliminated the ASM from any PT several weeks during a normally quiet PT session.

One other change was SGT Trevor McManus who replaced Old Man Dean Tallack. Boy, has Dean been missed by revhead Mick Burton and his old faithful rotary. Never let the fitters believe they can out gun the greasers. Speaking of greasers, have you ever seen two greasers who can eat more than the whole troop put together. Well CPL Bradford and CPN Mark Austin would put the best to shame (pity they can't play volleyball like they can eat). Anyway back to the changes, SGT Len Smith left half way through the year leaving an opportunity for CPL Cherie Ryan to be promoted. The RPS has a new approach — no more GG's.

Well now for some of the activities that occurred during the year. Due to the achievements of the troop in 1991/92 we finally were recognised by the CDF and presented with a commendation for changes to work areas and the improvement in productivity. This has left some of the gunnies a bit down in the mouth, demonstrating again that spanners are equal to any number of Artillerymen in all aspects.

Our glamour section lead by WO2 John Pierre Gronke (Shonky Gronke) and SSGT Mick Cronin (ski pig) have had the Boffins well held until half way through the year. But Boffins are Boffins and no man could restrain them and their antics for that amount of time. CPL John Benbow has finally seen the light and has decided life on the outside is the way to go. However, don't hold your breath as he has found a new love and you could say it's Taylor made. Speaking of romance our resident Roach PTE Stuart Freeman has finally had enough courage to tie the knot.

During the year TST figured well in preparation for the School of Artillery open day which saw a flying fox built and a small arms display set up. This attracted many thousands of thrill seekers. Also half of the troop are involved in the drill team which saw LCPL David Reid and SPR Phil Daly (resident chippy and guru) display their talents on Good Morning Australia. (Can't understand why Phil was one step behind the rest!) However we all know you can't trust those bloody Engineers.



Troop stop for a well earned break

The last but most eventful activity for the year was the adventurous training trip to the snow. The troop spent five hard days and nights on the ski slopes of Perisher Smiggins unleashing their talents and providing much entertainment for onlookers, with CFN Geoff Wicks (skeg) leading many of the members astray both on the snow and in the Brumby Bar. A great time was held by all.

Finally the RAEME 50th anniversary has left the School of Artillery TST largely untouched. Oh! we have provided a few people for the odd parade but otherwise it has been pretty much business as usual.

However I will leave you with a parting gesture and an abstract from the OC's yearly calendar.

JAN — The beach party begins with the arrival of the new OC.

FEB — The GE and VEH sections relocated to the Manly Beach complete.

UNIT JOTTINGS — CONTINUED

- MAR — The remainder of Tech Support relocated to Manly Surf Club. — Tech Support won almost single handedly the Unit Surf Carnival.
- APR — Tech Support completed its first full day of work without going to the beach.
- MAY — Practise and planning for the snow trip.
- JUN — Snow trip planning and recon completed.
- JUL — Tech Support relocated to Perisher Smiggins.
- AUG — Tech Support completed its second full day at work.
- SEP — Tech Support relocated to Manly.
- OCT — CDF awarded Tech Support for increasing productivity leisure time.

SYDNEY WORKSHOP COMPANY "12 MONTHS DOWN THE TRACK" by SGT DAVE DUNNE

It has been 12 months since Sydney Workshop Company took up residence at Banksmeadow.

The relocation from Mascot was not easy. Moving, combined with the necessity to continue providing support to our dependant units, initially meant long hours and plenty of hard work.

The move was completed however, and the official opening was set for 20 Nov 91 with the CGS invited to do the honours.

All was ready for the opening, the workshop was spotless, and the machinery was oiled and gleaming. The ASM, WO1 Col Ross thought that the morning before the big day he would take the OC Major Gavin Barwick and the PCO Captain Joe Gardner for a "walkaround". They began at the Orderly Room moving down the entrance hallway and were exiting the Headquarters building at the main entrance at the precise moment Mr Robert Dicker (civilian motor mechanic) exited the main workshop area, some 30 metres in front of them through a 10 metre unopened roller door in a runaway Unimog. It is all to their credit that none broke down and cried, as a 10 metre roller door was left blowing in the breeze. It was obviously a depressing sight to the OC of the unit who had invited the CGS to officially open the workshop the next day. All concerned maintained what was left of their composure as it became obvious the door had to be fixed and fixed quickly, if it was to be ready for the opening. Thus the challenge was made by the OC — "fix it" — and like most challenges made to RAEME, it was met.

The CGS duly arrived and performed the "official opening", expressing his pleasure at gaining such a fine facility. It was then on with the party.

The party was brief and in the way of most Log Comd RAEME units it was back to work the very next day.

One of the largest repair programs tasked to SWC, by Log Comd, was the re-engining of the Boal Bridge Erection (BBE).

This involved removing the Chrysler engine (petrol type) and replacing them with the 3-53 GM diesel engines. The age of the Chrysler engine and the ability to maintain it to a serviceable condition has become increasingly difficult due to the engine not being made by the manufacturer anymore. It requires approximately 650 hours to complete each BBE and has tested the stress management skills of all involved.

Another area SWC utilises to increase customer satisfaction is the inspection on site of various equipments used by our 130 odd customer units throughout NSW. To further enhance RAEME support to our dependents, SWC, after much discussion, is trialing the concept of an FRT to reduce the down time for our customer units equipment.

Along with our normal workload, SWC was called upon to share its expertise through detachments to other units, namely CAPT J. Gardner to ACT Workshop Platoon; the author and CPL C. Fogarty to Shoal Water Bay Training Area for Exercise Lions Revenge; CPL A. Butler and CPL Fogarty to K92; CPL Hutchins to 4 Fd Svy Sqn on Exercise NERVOSE 92 in the Kimberly region; CFN M. Harper for Exercise ARIGHT 91 conducted on the Cape York Peninsula; and CFN R. Smith to 26 Tpt Sqn for K92. In addition to these SGT M. Bowles and SGT L. Williams were both called up to pass on their wealth of knowledge by instructing on Subject One courses, conducted at the Junior Leadership Training Centre at Holsworthy.

The year was not all hard work however, and the annual Australian Rules football match against 1 Watercraft Wksp was played on the 10 Apr 92, with a resounding win to SWC. The team was coached by Sgt Peter Barr and included some outstanding players. 2LT Tesmer, who made it through the game by his brute strength, Sgt Ian (I want to be in the ruck all day) Nicholls, Cpl Mark (I can kick a goal from the centre square) Hutchins, Cfn Don (I thought it was rugby) Sizeland and last of all the man who played full back, and kicked two goals, Dennis (grandad) Mathews. After the final siren, we returned to the hospitable Watercraft Canteen area for refreshments and the trophy presentation.

Australian Rules is not the only game SWC excels in. Our Touch Football team won the Randwick Touch Football Association 2nd Division Grand Final. A number of SWC touch players were selected in the Randwick Area Representative team against other Sydney area Army and Air Force representative teams, with the view to selection for higher honours. One of these was SGT Mick Riley who was selected to play in the Australian Defence Force Touch team (over 30s) at the Australian touch football titles held at Hobart in May this year. Since then, SGT Mick Riley, Cfn Mark Harper and Cfn Greg Dempsey have been selected in the train on squads for the Sydney Defence Force Touch Teams. All three are hoping for a jumper in the teams playing at the Gold Coast in November this year. Congratulations to all three on a job well done!

SGT Ian Nicholls has represented both SWC and the Army on numerous occasions throughout the year in all facets of

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UNIT JOTTINGS — CONTINUED

shooting. To his and the corps credit Ian has represented the Army at the 2MD Interservice Pistol shoot at Holsworthy, gaining the distinction of the individual top score, and been to New Zealand last January with the Australian Army Representative team to compete against the host country for the Trans Tasman Trophy which, I am glad to report, Australia won. At the moment Ian is preparing for his departure to Perth, to compete in the National Teams Championship Selection Trials and for competition in the Aust Army Target Rifle Team.

SWC is involved in a wide range of training activities, which are co-ordinated by the unit Training section. Among the responsibilities of the section is the development, production and implementation of Training Management Packages (TMP), Junior and SNCO/Officer training days as well as organizing Mil Skills, Adventure Training and courses for all ranks.

SWC personnel have also been involved in various parades throughout the year as part of the CORPS 50th Birthday. Next year we will not only celebrate 51 years of the existence of the CORPS but also 100 years of support to the Defence Forces of Australia and our Allies, by this unit in its various form and names. SWC can trace its history back to 1983 when the NSW Defences Workshop was established at Victoria Barracks, in Sydney. Since its creation the Workshop has, on a number of occasions, changed name and role to suit the changing times. SWC has had sections stationed as far afield as Newcastle, Liverpool, Wagga Wagga and Ingleburn, with detached personnel serving in far flung places such as Fiji, Papua New Guinea, Indonesia and the continent, for Ex Long Look. In its time the Wksp has repaired everything from wagon wheels to today's satellite navigation equipment.



An aerial view of the new workshop

In 1973, the name Sydney Workshop Company was adopted and by 1977 all outlying sections had moved to Kent Rd, Mascot to again form the complete wksp after 39 years of separation.

In Aug 91 the wksp moved to its present location of Hills St Banksmeadow.

As a final note, SWC intends to hold a Centennial Celebration at the workshop, in the latter half of next year. Stay tuned for further exciting episodes of Sydney Workshop Company at work and play, where we will reveal more of the plans for the celebration.

ENTITLEMENTS & SCALES AND THE FIRST FIFTY YEARS WITH RAEME

by CHRIS ANDERSON, MARK HEYDON AND GARY SMITH

"RING RINGA" "HELLO COULD I SPEAK TO SGT Jones?" "Speaking" "Ah! Jonesy old mate, its your friendly Career Adviser here" "Oh!" "Listen I know you haven't been a Sergeant for long but how would you like your Cap?" "Promotion to Warrant Officer?" "Yes!" "Really?" "Yes and a posting out of Land Command as well!" "Well that would be fantastic! Where's the posting to?" "Ah well, yes, its to Errrrr, pause. Scales" "SCALES???" "Yes" "Sorry I'm enjoying being a Sergeant too much!" "CLICK"

Yes, sad thought it seems, a posting to 'Scales' has often struck fear into the hearts of normal men. There is, however, a select cadre of dedicated professionals who have discovered the secret of one of the best units on the ORBAT (or left off it!)

Before we get into our roll of honour a brief history of the unit.

Entitlements and Scales is a sub-section of the Directorate of Capital Procurement Melbourne (DCPM-A). DCPM-A and its predecessors form an important part of RAEME's past fifty years. The name SCALES has always conjured up images to the uninitiated of weight measuring devices or fish. Some people have even been low enough to nickname the personnel there as 'Mermaids' (figure it out for yourself). This has given the unit a somewhat preconceived role and at times, an image problem throughout the Corps.

Back in '57 the Military Board decided to set up a central Army cataloguing authority within Master General Ordnance (MGO) Branch. Responsible for the Cataloguing and Technical Documentation of all Army items of supply, "Scales" was born. The informal organisation was formed by the expansion of the existing technical documentation sections from within the Directorate of Ordnance Service known as ORD 9. The Supply Documentation Centre (SDC) was formally raised in 1966.

Things ticked along well until in 1985, when someone decided that things had ticked well for too long and a re-org was needed. DCPM-A was formed when Acquisition and Logistics (A&L) Organisation in Canberra, decreed that each service would form a Capital Procurement area. Navy set up in Canberra (strange! it's the furthest capital from the sea), RAAF and Army stayed in Melbourne. DCPM-A brought together the

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Head Office - Adelaide: 373 1159



UNIT JOTTINGS — CONTINUED

Entitlements and Scales personnel from SDC and the procurement cells from Log Comd. Initially DCPM-A were on the ninth and fifteenth floors of the tower building (350 St Kilda Rd) and they later moved to occupy the current location on the sixteenth and seventeenth floors.

DCPM-A currently comprises several sections, the most important bit (as far as the CORPS is concerned) is Ent and Scales. Scales (Brrr!) is where that select cadre of RAEME heroes hangs their hats. The current RAEME incumbents are:

SO2 ENT & SCALES Maj Jack Colville (Ex Pom Appy 1953A)

SO3 P & P CAPT Merv McCormack (23rd Intake)

SO3 M&E WO1 Chris Anderson (11/71 ATMV)

ART GE WO1 Bob Overend (Ex RNZEME 1971)

ART VEH WO1 Steve (Blue) Gillett OAM (104/74 ATMV)

ART TELS WO1 Chris (Slick) Djordjevic (24th Intake)

ART Planner WO1 Keith Johnston (Civilian Tradesman, Ring In!)

ART RADAR WO2 Gary Smith (30th Intake)

ART TELS WO2 Mark Heydon (78/73 ATET)

ART TELS WO2 Bob Constable (67/72 ATET)

ART TELS WO2 John Pelling (Ex Pom Appy 1965A)

ART TELS WO2 Rick McComb (28th Intake)

ART TESH WO2 Pete Winter (Ex Pom Appy 1961A)

ART VEH WO2 Darrell (Chook) Nelson (27th Intake)

ART VEH WO2 Bernie (Cos) Cosgriff (27th Intake)

ART VEH WO2 Martin (Marty) McKone (33rd Intake)

ART ARMT WO2 Garry Reid (61/71 ATMT)

ART ELEC WO2 Joe Stasse (28th Intake)

SGT ARMT SGT Bob de Bont (32nd Intake)

SGT VEH SGT Pete Townsend (34th Intake)

Though these are the serving members we have some retired CORPS members, whose regimental numbers were in Roman numerals, like George (I remember when Centurion was a rank) Major and Arthur (I was on the commissioning team for the WHEEL) Jarvis.

Even though the role is very similar to that of 1957, DCPM-A has made significant changes in the never-ending quest to supply the users with a better product. We are currently developing a Tech Spares Assessment, Modelling and Simulation Support System to allow us to better forecast initial spares. We are developing RPS Supplements to reduce the duplication of detail, quantity and size of RPSs needed to be carried by our units, to name just two of our developments in progress.

This unit, as with most, is what you make of it and can be a challenge in the twilight years of your career. As you look through our list of past members remember, it is by no means exhaustive, and if we have forgotten you, bad luck, send a letter of complaint to the MERMAIDS at DCPM. Next time we will include you. A special thankyou to those Ex-RAEME and civilian members who worked long and hard to help compile this article.

MERMAID ROLL OF HONOUR

WO2 ZIGGY AGOSTON, WO2 DAVE AMOS, LT JOHN BAKER, CAPT JOHN BEECHAM, MAJ ATHOL BEVIS, WO2 MICK BICKOFF, WO2 GREG BIRRELL, SGT TOM BRYANT, WO1 IAN BUCHANAN, CAPT ROY CALDER, WO2 NICK CASPEN, SGT LINLEY CHISOLM, SGT DON COOK, WO2 PETER COOK, MAJ STEVE COOLAHAN, MAJ SHORTY COOPER, CAPT ZUCK COUSINS, WO2 KEV COUSTAS, WO2 DENNIS CROWE, WO1 ERNIE DAVIS, WO2 JACK DIHM, WO1 JOHN DUMBLE, WO1 WAYNE DUNCAN, CPL MARK DUNNING, SGT ? DYKE, SGT MICK EATON, SGT PETER EDMUNDS, SGT GORDON ELGAR, WO2 MICK ELLIOT, WO2 FRANK ELLIOT, WO2 KEV ELSLEY, SGT STORMY FAIRWEATHER, MAJ JOHN FENTON, SGT GREG FINSTER, SGT TONY FOX, SGT KEN HARRIS, WO2 RON HEIGHT, SGT BOB HILTON, WO2 HARRY HOPPER, WO2

STEVE HOWELLS, WO2 ROCK HUDSON, WO1 MICK HUGHES, WO2 IAN HUGHES, WO1 MARK HURLEY, MAJ DAVE IRVING, MAJ ? JACKSON, WO1 ARTHUR JARVIS, WO1 PAUL JENKINSON, WO2 BRUCE JOHNSON, WO1 MICK LEONARD, WO2 JOHN LORD.

WO2 PHIL LOWE, WO2 ALAN LUCAS, WO2 RON MADIGAN, CAPT BRUCE MAGINLEY, WO1 GEORGE MAJOR, WO2 ROSS MAJOR, SGT BRIAN MALONE, CAPT DOG MARTIN, WO2 KEV MARTIN, CAPT EUGENE MCKEOGH, SGT EWAN MCLEOD, WO2 RON MERSON, SGT OWEN MILLER, O2 DUSTY MILLER, SGT NOEL MILLS, MAJ PAUL MUSTO, SGT SLUDGE NEWTON, CPL LYLE NOONAN, WO1 MICK O'HARA, SGT JACK O'NEIL, CAPT TREVOR O'KEY, SGT JIM OWENS, MAJ FRANK PARKER, SGT STEVE PEARMAN, WO1 GEORGE PELZER, CPL SHANE PHELPS, CAPT JOHN PHILP, WO2 TERRY PLUNKETT, WO2 SANDY POWELL, WO2 FRANK PREUSCHKE, WO1 JOHN PUTLAND, WO2 TED READ, WO1 BOB REID, WO2 JOHN SCHRADER, WO2 PAT SCOTT, WO2 SQUIZZY SQUIRES, WO PHIL STEERS, WO1 BOB STEVENS, CAPT MAX SUTCLIFFE, CAPT REG TAYLOR, WO1 HOWIE THOMPSON, WO2 BOB THOMPSON, CAPT STAN TILLEY, SGT ROD TURNER, WO2 MATT TYNAN, WO1 BUNGY WATERS, MAJ JOHN WENZEL, WO1 HARRY WERKA, WO1 GRAHAM WEST, WO1 DENNIS WOODS, WO2 STEVE WORKMAN, CAPT JIM WYLIE.

ACT WORKSHOP PLATOON

The Oldest Static Workshop in the Army by CORPORAL NEVILLE (NIFTY) MILLER

Even though RAEME was not formed until 1942 (as AEME), ACT Workshop Platoon has been functioning as a Workshop since 1922.

The buildings which house the Workshop were built in 1910 and were used as stables, coachhouses, hayloft and saddlery. The unit social club, the 'Bolt and Nut' is the old farriers shop which dates back before the turn of the century.

On 27 June 1911, the Royal Military College (RMC) was officially opened and among the staff of forty five, three were mechanics.

In 1912 the trade strength increased to six mechanics, one carpenter and two collar makers.

1913 saw the arrival of a tailor and bootmaker, the printer and plumber did not arrive until 1915.

In August 1922 all technical tradesmen were placed into the one building under the command of the Quartermaster, the senior tradesman at the time was an Electrician, SGT R.W. Sutherland.

The workshop closed down in 1931 when RMC moved to Sydney and was re-opened in 1937 on RMC's return.

It was not until 1942 that the Workshop was appointed an OC, CAPT C.L. Hartwell and the era of RMC Area Workshop began, but did not become an independent workshop unit mid 1944.

In 1973 the Workshop ceased to be known as RMC Area Workshop Platoon and became ACT Workshop Platoon under command of CAPT R.P. McNaught.

For the present, ACT Workshop Platoon has had a busy year with some members going to Exercise K92 and the majority of the unit attending their respective trade and promotion courses.

It has not been all work, as the unit has participated in abseiling training, and during Adventurous Training got to put it to practice along with canoeing down rapids and bushwalking in the snow.

During August CFN Peter Kemp, CFN Nathan Sams and myself attended Defensive Motorcycle Rider Training at Eastern Creek Raceway. One of the unit motorcycle riders who "did not need to go on the course" has since had an argument with a car. Get well soon CFN Heinz Kubank. I'll put your name down for the next course.

UNIT JOTTINGS — CONTINUED

During the year we have seen the departure of some old friends and the arrival of some new ones.

On strength at present are:

CAPT R.G. Parker,
WO1 I.E. Beattie,
SSGT A.J. Creeper,
SGT N.J. Cashman,
SGT M.A. Fay,
SGT K.R. Luke,
SGT B.G. Turner,
CPL C.L. Gaul,
CPL C.G. Hucker,
CPL C.D. Johnson,
CPL N.A. Miller,
CPL P.L. Nicholson,
CPL S.D. Rush,
CPL A.K. Snelling

CPL R.H. Stubbs,
LCPL A. Macri,
CFN D.L. Barnes,
CFN K.M. Cosheril,
CFN J.A. Harwood,
CFN P.A. Kemp,
CFN H.E. Kubank,
PTE M.A. Lawrence,
CFN S. Petherick,
CFN N.A. Sams,
Mr Tony Bailey.

The unit has a lot of old photos of past members, but no names to go with them. If any past members are in the Canberra area please feel free to drop in and have a brew, and maybe you can help us identify them. Any photos of past Workshop activities along with their history would also be appreciated. The unit Historian is CPL N.A. Miller, ACT Workshop Platoon, Plant Road, DUNTROON ACT 2600.

Telephone: (06) 275 9383

1st SIGNAL REGIMENT WORKSHOP "With Skill and Fighting"

In Gallipoli Barracks Enoggera there is a highly professional body of RAEME Officers and Soldiers that form the 1st Signal Regiment Workshop. The primary role of this Land Command Unit is to provide first line support to the Regiment as well as support to the other arms and services of the 2nd Division.

The Workshop is currently split between two locations with Telecommunication Repair Troop located some 1.8km from the main wksp. The OC, MAJ Joe McNeill, has drawn up plans that will see TRT move into a new building in the main wksp area. The plans have been approved and are awaiting funding, which, hopefully, will come this financial year.

The Workshop currently has 67 members, which includes 8 civilians. Key personnel in the Unit at the moment are:

OC MAJ J.J. McNeill (Joe)
ASM WO1 E.J. Jones (Ed)
Art Veh/WSM/Trg WO WO2 A. Davies (Boat)
QMS WO2 B. Ellison (Brad)
RPS WO WO2 I. Rowthorne (Ian).

Apart from RAEME there are also RASIG and RAAOC members on the establishment list. The job of the Sigs is to look after their specialist equipments while the RAAOC members run the stores side of things.

The training for the year started in January with a trip to the Greenbank training area to brush up on the deployment of the workshop in the field, followed by an IMT exercise. Then we all packed our bongos and headed up north with the Regiment to take part in K92. The trip north was halted briefly in Mt Isa while we waited for flood waters to subside. Upon reaching Darwin we set up shop in the old Darwin Wksp at Larrakeyah Barracks. We put up our tents and made ourselves at home. PT was conducted each morning and a few found the tropical atmosphere less than appealing. With a swimming pool at our back door and a tennis court at our front, it was not hard to see why moral was high. Fishing seemed to be the favorite activity during time off, although not a great deal was caught. Night spots such as the "PICKLED PARROT" and the "BEACHCOMBER" did a roaring trade and I am sure they will



OC, MAJ McNeill, who received a commendation in 1989, congratulates CFN Cooke on his commendation from GOC Land Command. CFN Cooke received his commendation this year for his contribution to improving comms during his term in the Western Sahara with the United Nations. (Minutso).

feel the loss in revenue now that we have gone. At the conclusion of K92 the Unit redeployed back to Brisbane.

The Workshop has its own training program for the ORs. Currently we are being introduced to the F88 Steyr in both weapons lessons and drill lessons. The lessons are prepared and presented by CPLs and senior CFN, with the SNCOs assessing. Full points to CPL Euler (Benny) who, upon seeing that his lesson had run in to brew time, downed tools and broke for brew, much to the amazement of his assessor, who said we're in a union.

As with all units we have our share of stuff-ups during the year. CPL "Stick" Larsen knows the feeling. He spent some time down the range trying to find the hole in the bottom of his 9mm F1 where the mag goes in. The armourer, CPL Errol Wetherbee also had the feeling when he couldn't fire his rifle because he had forgotten to put the bolt in, and then asked "since when do you need a bolt to make one of these things work"? Orders are also sometimes a case of foot in mouth. LCPL (Gnome) Costelloe had us confused with, "stop being where you are and be into two ranks", or there is LCPL (Washo) Washington with his, "Don't listen to what I say listen to what I mean."

SGT John Harvey recently had his house broken into while he was out and the thieves made off with a few items. That same night, thieves tried to steal his car but he sprung them and they bolted leaving his car to roll away and hit the neighbour's car. That is what you get for supporting Hawthorn I suppose.

Now to things more in line with the normal world. CFN Cook (Cookie) has returned to us from the Western Sahara while CFN Dan Frawley took his place on the Minurso rotation. CFN Joe Kinshela got married and is at this moment on his honeymoon. SIG Savage (Sav) saw the light and is now CFN Savage. CFN "Cowboy" Ryan has been voted "Mr Photogenic" by the Wksp since he received a beautiful glossy photo of himself passing through a red light. The bill was a bit steep though, and I don't think he smiled and watched the birdy. As for the rest of the crafties, they're out there breaking hearts, legs, arms, heads etc and generally doing what the RAEME Craftsman has been doing for decades and hopefully will for decades to come!

TECHNICAL SUPPORT TROOP 4th FIELD REGIMENT RAA Beautiful One Day, Perfect The Next BY CPL "PATSY" HERSANT

Hello from 4th Field Regiment, Technical Support Troop (4FD TST), you may ask where is 4FD TST? Well as our title suggests we live in far North Queensland a tropical paradise, where it is beautiful one day, perfect the next.

A little data just to let you know who we are and what we do. Our TST consists of an OC, a WO2 ASM, five sergeants and twenty two other ranks. Our role is to support two six gun, gun

UNIT JOTTINGS — CONTINUED

batteries, a headquarter battery and a regimental headquarters both in the field and whilst in the barracks.

The start of the year saw the hectic preparation for Kangaroo 92 and the miraculously incident free all night drive and try to sleep during the heat of the day trip. Our lack of sleep on the way up was soon satisfied as never a round was fired in anger. (Although we were woken during the wee hours of the morning to be told to stand to, as the enemy were to attack in one hour!!)

Upon our safe arrival home we continued with the yearly routine of LFXs (live firing exercises). Battalion support exercises, Battery deployments and finally the Commander Divisional Artillery's (CDAs) assessment. This is where the CDA and other assessors from the School of Artillery bless us with the presence and tell us how well or badly prepared we are just in case it hits the fan.

With all this behind us we feel that a little break is needed. This break is granted to us in the form of a two week standdown period which coincided with the September school holiday period.

In the period between stand-down and the end of the year we are to lose a few of the brotherhood to courses and perhaps get in the odd golf day or two.

Well readers now you know who we are and what we do, if any of you would like to enjoy a hectic life style with us at 4 FD TST just put us down as your first preference and you maybe lucky enough to join us here in paradise.

GENERAL RESERVE (GRes) RAEME IN THE FIELD

The Technical Support Section of the 1st Training Group went back to basics recently during Exercise 'ROUGH TERRAIN' - conducted in the Wide Bay Training area during the weekend 19/30 August. The aim of the Exercise was to practice unit personnel in Forward Repair Team (FRT) procedures, cross country driving and first line recovery.

Working in conjunction with the Unit Transport Section, members found themselves in many 'sticky' situations requiring a little nouse and initiative to regain mobility. The embarrassments were shared equally between the Bluebell and Playtime troops with valuable lessons being learned the hard way.

The TECH SPT SECT is comprised totally of GRes RAEME personnel with the basic role of maintaining unit equipment and supporting Training Group courses. Members include:

- ASM — WO1 Jim Buldo
- VMs — SGT Ian White, CFN 'Lucky' Sarathchandra, CFN Clinton Nicol
- FIT ARMT's — SGT Paul Buller, LCPL Peter McClear, CFN Geoff Wight.



The Correct Way



The Not Quite Correct Way

The enclosed photos show RAEME getting "stuck" into basic recovery techniques, and showing how it should be done during a deep water crossing.

The Section conducts EME operational training at least once each year to ensure skill levels are reviewed and upgraded. All members have shown keen interest and dedication to training and display a high level of professionalism in the field.

"A Little Paradise in the South" From the RAEME Element of Hobart Logistic Company

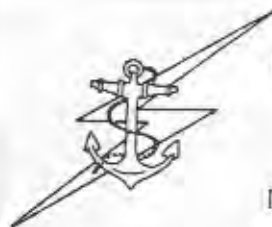
Nestled in a peaceful, quiet corner of the sprawling urban expanse of the township of Glenorchy with the gently flowing Derwent River running alongside and the overpowering feature of Mt Wellington forever present in the background, you will find the last remaining remnants of the once plentiful Royal Australian Electrical and Mechanical Engineers Corps.

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UNIT JOTTINGS — CONTINUED

Situated within the landscaped surroundings of Hobart Logistic Company there is just a handful of RAEME members, ably supported by a select band of civilians, left to carry on the proud tradition of the once powerful RAEME Corps. This soon to be depleted band of a dozen men and women work tirelessly to uphold the traditions and maintain the high standards of service always associated with the RAEME Corps. Under the careful guidance of the senior RAEME Rep, CAPT B. Jones, this small group led by Warrant Officer Class Two R.S. Woods and SSGT S.C. Ninness, (depending on which hat the ASM is wearing at any particular phase of logistic amalgamation), and backed up by three VMs, two Fitters, one Radio Mech, one R & I Clerk, two Q Store people and the ever present Recovery Mech, are celebrating the Golden Jubilee Year of the RAEME Corps by trying to maintain the presence of RAEME in the highest profile possible within the Defence Force community of Tasmania.

The last 12 month period within Hobart Log Coy has been one of consolidation of the processes required within a logistic establishment to enable it to provide services to a standard required by the users of that service. This has resulted in the movement of a few people from one office to another, the sudden appearance and subsequent disappearance of temporary dividing walls, the movement of equipment from one location to another (and eventually back to where it started) and the dismantlement of one entire procedure/system to be replaced by another which not everyone can tell the difference between. Computers have now become the everyday convenience that was expected, except now everyone has become a computer whiz overnight and what was a reasonably simple process is now governed by how thick the fingers are of the person using the keyboard. The abovementioned items are all part of the changing face of our role in the Army, but does a unit with an approx manning of 70 really require the use of 17 computer terminals and a Lap Top?

This is the year of the 50th anniversary of the RAEME Corps. Due to our depleting numbers here in Tasmania, as has been the case in the previous few years, we will celebrate the RAEME birthday with our ARES RAEME members at the very picturesque Fort Direction located at South Arm. The celebration will take the form of minor team games which should enable the build-up of a thirst large enough to require the consuming of a few quiet ales to toast the occasion and see us into our 51st year of existence.

It should be noted that after the demise of Hobart Workshop Platoon, the last ARA RAEME unit in Tasmania, the RAEME Corps members both present and retired started what is known as The RAEME Club to enable all members of RAEME whether ARA, ARES or Retired to meet and socialise with all members of their own Corps.

This Club presently operates from the facilities of the Hobart Log Coy Social Club and opens every second Monday Night for the use of all members of the RAEME Corps.

As the sun sets over our little piece of paradise in the South we close our doors for another day. We can only hope with a little hard work and a lot of luck that a RAEME presence can be maintained in one form or another within Tasmania as long as there are Army units on the island.

49 RQR

The Bushman's Rifles, as this unit has been known since around the Second World War is no more. The newly named "49 ERs" has changed from a special conditions reserve unit to being one of the three soon to be motorised ready reserve Battalions in 6 Bde.

The new look Battalion has been steadily building up manning and equipment levels throughout 1992 and, like 6 RAR and 8/9 RAR, will eventually have just over 100 regular members with the balance being Ready Reserve.

The members of Technical Support Platoon at present are the ASM, WO2 Bob Mackenzie from HQ 1Bde, the VMs, CPL "Fozzie" Otten from Army School of Transport, CFN "K.D." Ryan from 9 Transport Squadron, CFN Carl Sams from 2 Combat Engineer Regiment and CFNs "Norm" Gray and Troy Cramp from 1 Sig Regt Wksp, the fitters, CPL Norm O'Keefe from Bandiana Logistic Group and CFN "Weeds" Weeding from 2 Combat Engineer Regiment. The radio mech LCPL Daryl Le from 1 Sig Regt Wksp, and our Ready Reserve Elec Fitter, CFN John Kennedy from Sarina.

Take note that we still have around 13 Ready Reserve positions to fill. The last regular slot will be filled by LCPL Le-Cornu, the B1 storeman from the dissolving 20 Div ESS Wksp.

Many challenges have been met and many lie ahead. The unit has been training at a hectic pace and will deploy to Shoalwater Bay in October.

Many thanks to those who have assisted us so far, and good luck to CPL O'Keefe, CFN Sams and the rest of the RAEME Rugby Squad.

PUCKAPUNYAL LOGISTIC BATTALION

As Puckapunyal Logistic Battalion (PLB) prepares for its Fourth Birthday parade on the 10th December, the maintenance element of the unit celebrates the RAEME jubilee with the rest of the Corps. Throughout the Corps 50 year history, RAEME has always been represented in Puckapunyal. Puckapunyal Workshop, as it was known, began in 1958 and there are few, if any, RAEME Artificers who have not served under the workshop roof.

Over the past four years the RAEME element of PLB has along with the rest of the unit, undergone many changes. We have provided a 'blue print' for logistic fleet management. Prior to what was previously Puckapunyal Workshop Company being



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UNIT JOTTINGS — CONTINUED

divided into Vehicle and Communications/Engineering companys, the EME OPS cell was made a function of Operations Branch and then integrated into Fleet Management. Gone, after debate and essays, is the traditional RAEME ASM. Their production planning role now included in the job of Fleet Managers. Indeed, the title Fleet Manager is quickly earning the respect that ASM Traditionally held. PLB Fleet Managers are being exposed to aspects of equipment management which are much wider than just repair.

An identity who set a standard of lateral thinking and initiative for fleet managers is WO1 G.J. "Gus" Ryan. WO1 Ryan leaves the unit in late September and will be remembered for his enthusiastic and inventive approach to Fleet and Material Management.

Despite the changes to PLB, the workshop continues to provide A, B and C vehicle, General Engineering including carpentry, textiles and EIR maintenance. The workshop tradesmen undergo efficiency measuring in the form of Performance Indication Reports. For these EMEMIC has played a vital role. The unit disseminates monthly the average turnaround in equipment repair, manpower efficiency and other figures which gauge the production of the workshop. Moreover, the statistics and customer feedback show that all PLB craftsmen are applying their technological skills to uphold the Corps task of maintaining the 'punch in the Army's fist'. RAEME tradesmen have also embodied a large part of PLBs winning spirit in team sports.

To reduce inter-Corps rivalry, PLB has quelled a great deal of individual corps representation. Where once the different colours of RAEME, RAAOC and RACT could be seen, now only the colours of PLB dominate. For RAEME identity at Puckapunyal, the relocation of the large letters 'RAEME' which dominated the north wall of the workshop to the Corps museum last year was the largest sacrifice. However, after initial regrets, the reduction in Corps identity has improved PLBs esprit de corps as a unit. The three main corps are now working more closely, morale between individuals has improved and this year's field exercise accents a now merged team.

The Commanding Officer, LTCOL W.R. Jackson (RACT) has provided expertise which has made PLB the leader in logistic units. LTCOL Jackson completes his command of the unit this year, handing over to LTCOL B. Grant (RACT) in 1993.

Farewell John Mazurek from all PLB Craftsmen

A well known identity within Puckapunyal Military Area and RAEME has retired. Mr John Mazurek of PLB was farewelled on the 17th September 1992 after 42 years of dedicated service to RAEME and the Australian Army.

John arrived in Australia in 1949 and began his long association with the Army in 1950 when he began working for the Diesel Equipment Company who at that time had a contract for the repair of the Grant and Sherman tanks. Some readers may be aware of the fact that in 1950 the present workshop of PLB was not even built; in fact work was being carried out on the site of the present Tank Museum at Puckapunyal.

In 1957 the contract for repairs was lost by the Diesel Equipment company and John continued working for the new contract holder but this time at Mob Siding in Seymour. 1958 saw John move back to Puckapunyal into the new workshop building and become the foreman of the civilian work force, a position he shared for some time before becoming the permanent foreman. John remained in that position until his retirement and has seen many changes to the contract, the people and the Military area.

John retired due to ill health which has not dampened his spirits or dedication to the job. The Commanding Officer and members of PLB, wish John, his wife Irene and sons Tony and Chris all the best for the future in all endeavours they pursue.

16 AIR DEFENCE REGIMENT WORKSHOP 1992

The start of the year saw many new faces in the workshop, including the OC, AO, Trg Offr and ASM. The year started with a combined IMT and range practice at Murray Bridge Range in early February. The new were initiated by the hot weather and the rest were reminded of extremes of weather the Adelaide Hills area attracts. Most enjoyed the exercise as a multitude of weapons were fired allowing the year to get off to a good start. The RAEME motto 'With Skill and Fighting' was quickly employed and used throughout the year which alternated from being fairly quiet to very busy.

The workshop has provided support for all the Regiment's exercises, including Tennyson Storm, K92, Wandering Pharaoh, Crab Arrow and Tasman Link. During exercise Crab Arrow, the live firing was very successful with a very high percentage of hits including one by CPL Rodney Hawksworth, a Radar Mechanic. The CO was extremely happy, as the day he had chosen to take a guest, a direct hit was recorded. Needless to say our guest, MAJ GEN Blake was impressed.

The Workshop has also provided many personnel for guards, including the Royal Guard, Victoria Barracks Guard, freedom of the City parade and Guards for other visiting dignitaries. As part of the Regiment, the Workshop has had many visitors to the Rapier Compound. There was some discussion about installing a revolving door at one stage. All visitors passed favourable comments which reflect the dedication to the Workshop members.

Throughout the year there have been many individuals that have excelled, CPL Mark Griffiths was selected to play for the National Gridiron Tour in USA and UK; CPL Steve Gould won the world championship in Diplomacy (War Game); and CFN Dave McGree was selected for the National RAEME Rugby Tour.

On the sports field the Workshop has held its head above water, coming second in both the Regiment Swimming Competition and Cross Country. We won the Tug-O-War and Touch Football competition. That has hopefully put us on track to winning the Hayden Shield. One major Workshop sporting event held this year was the Pinks vs. Blackies Aussie Rules match. Everyone enjoyed the day, even WO2 Mudra who couldn't stop himself from arguing with the umpire. The final score, not including the body count was lots of goals to the Pinks and not so many to the Blackies.

In September, the Workshop ventured off to Albury and Falls Creek for Exercise Ice Predator. This was an adventurous training exercise consisting of learning how to cross country ski, followed by a three day expedition with pack on skis. All enjoyed it, except for LT Ash Fry, who couldn't stop making gorilla cookies in the snow. Many thanks go to the Army Adventurous Training Centre for their support throughout the exercise.

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UNIT JOTTINGS — CONTINUED

The remainder of the year will be spent preparing for Exercise Aces North in Darwin and then our return to Woodside in late November. The year has passed quickly, only due to the dedication and support of all of the Workshop personnel.

105 FIELD WORKSHOP

"Down Tools: Take up the Challenge!"

20 soldiers from Melbourne's 105 Field Workshop downed tools recently in order to take part in Exercise Loose Noose, an adventure training activity in the Gariwerd (Grampians) National Park.

By day, under the direction of Commando Company's WO2 Duczynski and CPL Van Den Haalen, the tradesmen turned their hand to rappelling and rock climbing and by night they took the opportunity to hone their night vision/IMT skills.

"It is rare these days for RAEME soldiers to get a shot at this type of training," explained CAPT Cheryl Jenkinson, the exercise co-ordinator, "but the troops have enjoyed the physical challenge and the chance to get out of the workshop to practice their soldier skills. The men proved yet again that the Corps can hold its own with the best of the Arms Corps."



Pictured above are CPL John Guerra and CFN Peter Curmi, both of General Engineering Platoon, taking the plunge over a 60m slope, aptly named "Wall of Fools".

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A DIFFERENT ASPECT OF RAEME: OAKEY WORKSHOP BATTALION

TEMPORA MUTANTUR, ET NOS MUTAMUR IN ILLIS
(TIMES CHANGE, AND WE CHANGE WITH THEM)

In 1960, 1 General Troops Workshop at Bulimba had a section known as the Light Aircraft Repair Detachment. Although there were troops posted to this detachment, they never worked on aircraft.

The first RAEME tradesman to actually work on aircraft were posted to RAAF Base Amberley in 1965 as the NO 1 Light Aircraft Conversion Course.

On completion of their training these tradesmen became active members of 16 Army Light Aircraft (ALA) Squadron, nominally an Army unit but until that time manned by RAAF personnel.

In 1966 as the size of 16/ALA Squadron increased it was re-established and named 1 Division Army Aviation Regiment in 1967. The regiment consisted of a headquarters, an Operations Squadron (16 Sqn), a training Squadron and a workshop.

In Aug 1972, 5th Base Workshop Battalion was formed from 1st Aviation Regiment Workshop and assumed responsibility for third and fourth line repair of all Army aircraft and direct support to the School of Army Aviation.

5 Base Wksp Bn moved to Oakey in 1973. On 14 November 1989 the unit was renamed Oakey Wksp Bn.

The unit's history has been one of constant change; not only in name but in size, expertise and capability. That change continues as the following contributions from some of the battalion's sub units indicates.

LIGHT AIRCRAFT WORKSHOP PLATOON (LAS)

The Light Aircraft Workshop was formerly the Direct Support Shop, but apart from the name, little else has changed. There still exists the same old Light Observation Helicopters; the same old Nomads; the same old professionalism, and the same old satisfaction that comes from being the best platoon in the Battalion.

LAS is responsible for all levels of maintenance to the Bell 206B-1 Light Observation Helicopter, the N22 and N24 Nomad and the Pilatus Porter. At the beginning of 1992 the platoon was achieving very good results maintaining 15 active and 13



Removing the main rotor blades on a Black Hawk is essential if the aircraft is not to fly for ten days or more.

storage aircraft, with a team of forty nine personnel. However, part of being the best means doing more with less; LAS now achieves outstanding results (maintaining two additional aircraft) with a team of thirty six.

Teamwork is the name of the game in LAS and everyone helps to carry the ball. Of course, as in any team, there are those who score occasionally and enhance the team's reputation.

Those who scored in '92 include:

- WO1 Mick Loneragan who was chosen for the Combined Services state lawn bowls team.
- SSGT Stretch Hanna who represented the Army at interservice lawn bowls, and graduated from the University of Southern Queensland with a Certificate of Aviation Technology with a Dean's Commendation.
- SSGT Pete Galeano who also graduated with a Certificate of Aviation Technology.
- CPL Danny Epple who is detached to Indonesia as part of the Nomad Training Team.
- CPL Bob Cooper who has scored a detachment on Exercise "Long Look".



Working with American servicemen on K92 was "DIFFERENT".

REPAIR PARTS STORE (RPS)

The RAAOC members of the unit, basically shy folk, declined the offer to "blow their own trumpet" on the grounds that "no-one should write for two corps magazines". However, our RPS people are a very valued part of the organisation and deserve a mention as a very essential element of Oakey Workshop Battalion. Without parts we can't repair aircraft; its as simple as that.

UTILITY HELICOPTER WORKSHOP PLATOON (UHS)

January 1991 saw the arrival of the Iroquois (UH-1H) helicopter at Oakey Wksp Bn. With the arrival of the Black Hawk in February 1991, Oakey Wksp Bn was maintaining five aircraft types. 1991 was a time of great change, much training and steady progress as the workshop adapted to the new responsibilities.

In December 1991, the workshop organisation was changed in order to manage personnel, equipment, tooling and publications more effectively. Thus UHS came into existence.

A DIFFERENT ASPECT OF RAEME — CONTINUED

UHS is a very heterogeneous group of soldiers, airmen and civilians who combine to form a formidable team — The UNTOUCHABLES. One has only to observe these rotary wing specialists at work to realise that UHS is writing a new chapter in the annals of RAEME aviation; that of the modern helicopter and the professionals who maintain it.

1992 has seen a relatively slow increase in manpower to UHS; the majority of these being Kiowa and Nomad converts, born again Navy "birdies" and expatriate Brits. The latest posting lists indicate that the turnover of personnel next year will be greater.

Hopefully lost experience will be supplemented by dedication and enthusiasm as trainees arrive from RAAF STT to fill vacancies in the team.

ANCILLARY SHOP (AS)

Ancillary Shop is divided into 7 sections. These are Sheetmetal (SMW), Systems Overhaul (SOS), Non Destructive Inspection (NDI), Aircraft Life Support (ALS), General Engineering (GE), Workshop Services, Paint Shop and last but not least Service Station (S/S) complete with the recovery mechs. The manning for AS is 1 officer 32 ORs and 23 civilians.

The main Belman hangar houses 3 sections; being SMW, SOS and NDI. These sections manufacture, repair, overhaul, bay service and inspect various components and parts from the 5 Army Aircraft types, plus any jobs that the other sections cannot handle. Tasks range from over haul of main rotor heads, composite panel, Kevlar and fibreglass repairs to the complete rebuild of an aircraft flying controls. Bob Saunders an ex SGT



CPL Wayne Smith assesses a task in the field

A/F Fitter and more recently over the past 4 years a civilian in SOS, has finally retired to go fishing, best of luck Bob.

Those of you who have been around Oakey in the last 19 years will no doubt remember "Tubes" Gerhardt, the unit painter. Tubes has been a civvy now for 3 years and runs the paint shop with 2 other civvy compatriots. Unfortunately the military establishment has been disbanded leaving 2 members out of a job, both have got their fingers in other pies though.

The Service Station at Oakey supports all units in the Darling Downs Military Area and also maintains the emergency vehicles such as the P4 Oshkosh fire trucks. The recovery mechs 'Bill and Robbo' ensure most of SE Qld's vehicles are either repaired or moved to a better location.

Last but not least ALS. This trade is new to the Army in name only, as they were called coach trimmers. Their primary task is to maintain pilots and aircrew survival equipment and also the textile repairs for Darling Downs Military area.

Ancillary Shop with all its sections and expertise have high demands places on them to repair or maintain not only our units assets but RAAF and Navy equipment as well. This keeps us all "on our toes" but the final result is one of high achievement and job satisfaction.



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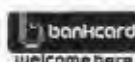
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PROFILE FROM THE BEGINNING

By LT S. Johnston

The Corps of Royal Australian Electrical and Mechanical Engineers was formed in 1942 during the chaos and turbulence of World War 2. Therefore with this being RAEME's Jubilee Year it is important to look at those who served with distinction since the Corps inception.

One such man is LTCOL DAVID SYME BLACK who enlisted on 13 Oct 1941 and was trade tested as an instrument fitter and posted to Northern Command Ordnance Workshop as a craftsman. During a review of academic qualifications it was found that Black had completed 3 years of an engineering degree.

In 1942 Black was posted to an anti-aircraft unit where he rose to the rank of Staff Sergeant - Black was then selected to attend an Officer Candidate School at Middle Head also in 1942. LTCOL Black topped this course, however due to administrative problems he was not commissioned. He was posted to 68 and 84 Aust Mobile AA SL Battalions respectively as a Troop Commander. Pending commission he then attended a bomb disposal course which consisted of American, Naval, Air Force, Marine and Army personnel and members of Australia's three Services. SSGT Black performed well and topped the course achieving a 92% average.

His commission finally came through and he was sent to New Guinea on 9 Dec 43. Whilst at Finchaffen, again after a review of academic qualifications he was transferred as OC of an AEME Field Workshop. At this time LT Black was appointed the Australian Army Liaison Officer to the American Air Base at Dreger Bay to co-ordinate and integrate air defence with the American Air Force. On return to Australia in 1944 he attended a Course on AA Radar and was then posted to 2/13 composite AA Workshop. LT Black then attended an Amphibious Landing Course in anticipation of the Tarakan landing.

As expected LT Black's unit went first to Morotai to prepare equipment for the landing. At this stage the war ended. With LT Black's vast experience he was tasked with sentencing all equipment returned by Army and Air Force units.

On return to Australia the then Captain Black was demobbed, and he returned to his civilian employment where he then completed a diploma in Mechanical and Electrical Engineering at Queensland University. He joined the Institution of Engineering first as an Associate Member and he is now a full member.



CAPT Black joined the CMF in 1949 as OC of the Field Workshop at Bulimba and later qualified for his majority in 1954. He then held a number of appointments before qualifying for LTCOL on 2 Apr 58. LTCOL Black's final appointment was DDEME Comm Zone in 1963, where he was awarded an efficiency decoration. LTCOL Black later became President of the RAEME Association.

LTCOL Black retired from active service in 1964 and was on the reserve officers list up until 1974. LTCOL Black and his wife now live on the north coast of NSW. His interest in the Corps has continued and earlier this year he contacted Brisbane Logistic Group and generously donated his service records and uniforms to the Corps. All of which are now displayed at the Corps Museum, RAEME Training Centre, Bandiana.

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EMEFIX 2010AD

By CAPT James T. Kirk, Plans Section DGEME-A

Location: Daly River, NT

Time: 0200 Hrs Local

'Buck, wake up! With a start, DFN 'Buck' Rogers surfaced quickly from his dreamless sleep, instantly recognising the silhouette and voice of the ASM shaking the foot of his sleeping bag. 'Grab your toolbox - I've got an urgent EMEFIX for you.' Buck groaned inwardly as he checked his watch - he'd only finished his gun picquet 20 minutes ago. Rubbing the sleep from his eyes, he climbed out of his warm bag and donned his webbing. Slung his Steyr over his shoulder, he walked into the back of the GMV and retrieved his toolbox. He smiled as he unplugged a small but rugged plastic case from its recharging port on the GMV's bench - score one for technology, he thought, no more lugging several kilograms of spanners all over the position. He quickly peered outside at the moonless but starlight Northern Territory night - yep, plenty of ambient starlight tonight. He grabbed his Night Vision Goggles (NVG) case from its rack and began to walk over to the Vehicle Repair Medium Maintenance Shelter.

As he walked into the opening in the camouflage net, the ASM greeted him with a quick brief on the EMEFIX. 'We've got a BUSHRANGER Infantry Mobility Vehicle for you to look at, Buck. Some kind of fuel problem, they think, but they definitely need it by the morning.' Buck nodded as they both turned to the sound of a vehicle approaching around the ring road. Buck walked outside to guide the vehicle into position, using his NVG to find the flattest block of dirt to work on.

The driver shut it down and climbed awkwardly from the large vehicle. They quickly exchanged greetings, and the driver filled Buck in on the problem. 'It's surging like it's going to run out of fuel, but I just topped it up at the halt parade service. Buck nodded and moved around to an inspection port behind a front wheel station. Opening the hatch, he unreeled a cable from his toolbox and plugged it into a quick-disconnect inside. Laying the toolbox flat on the drivers step, he flipped open the lid and was greeted by the soft green glow of the Liquid Crystal screen.

'That's impressive - what is it?' asked the driver. Buck typed in the command to start the interface between his computer and the vehicle's on-board microprocessor before answering. 'It's called AATIMS,' he spelled out 'but it's pronounced ATOMS. It stands for **Australian Army Totally Integrated Maintenance System**.' The driver nodded, but didn't sound convinced - this was going to be a long night! 'Okay,' said Buck 'this vehicle has **BITE** and **OBDS** built in, and that stands for **Built In Test Equipment** and **On-Board Diagnostic Sensors**. These are sensors that constantly monitor the performance of the main automotive components; such as the engine, transmission, drive train, brakes and fuel system. It has two main functions - at any stage, it can tell us either what has failed or what is about to fail.' The driver nodded again, looking thoughtful. 'But how does it know what's about to fail?' he asked.

'Good question replied Buck, watching his screen. 'This is how it works - not only do we have these onboard sensors, similar to what's in the black boxes under the bonnet of your Holden or Ford at home in the driveway, but the sensors also record all the trip data; a bit like a cruise control.' Buck went on to explain further how the trip data collection system had been developed in the early 1990s by the larger fleet carriers, such as BP and Shell for the fleet management of their tanker trucks. He explained how the system could capture such information as how long the vehicle was mobile or stationary, whether it was running laden or unladen, even down to how

much time the vehicle spent in each gear and in what rev range. It even measured brake performance, either through the G-Forces required to stop the vehicle, or more conventionally, through the length of stroke required by the master cylinder and each brake calliper. 'That's how we can get an idea when it's time to change pads or discs' explained Buck.

'Yeah, but you still haven't told me how it knows when it's about to fail' said the driver. Buck continued with his midnight lesson in information management systems. 'All that trip data is stored up in the memory of the microprocessor on board your vehicle. Each time we plug one of these toolboxes into the side of it, it automatically down-loads all that data to the toolbox. When I've finished here, I go and plug into our **Production Control Local Area Network**, which we call the **P-Con LAN**, and it automatically finds its way back to a central database, either by modem through the phone-lines or by satellite, or if we can't use that sometimes by trunk, radio or even by floppy diskette. All of this trip data is collected from all the vehicles in all three services, not just Army, and from there they can assess a likely failure trend! The driver looked perplexed, even by starlight. 'What do you mean, a failure trend' he asked. Inwardly cursing his own stupidity for not telling this guy to go and get some sleep while he worked uninterrupted, Buck explained. 'Let's say that a certain component in all of the vehicles of this type is failing consistently at 100,000 km. When I plug in my toolbox, your vehicle tells it that this component has completed about 98,000 km, and that it's due to be inspected in another 2,000 km. If this vehicle is about to deploy on a long task, then we would take the time to inspect or replace the component. If it was being used for routine tasking, then we would quite likely wait until the indicated mileage is reached.'

Buck explained further that the first thing his toolbox did was a systems check of all the vehicle's on-board sensors. The microprocessor would then down-load all of the trip data, including the overall vehicle mileage and the last date or mileage that each major assembly had been inspected. 'Remember the old TGM 120, the grey covered Vehicle Log Book?', asked Buck. 'Well, all of that information is now stored on-board in the microprocessor. We keep a copy in our P-Con LAN, your parent unit holds a copy in their database, and the Fleet Manager at Logistics Command holds it in his central database. That's the master file, and also where all the trip data is sent back to for technical evaluation and failure trend analysis.' Buck turned the toolbox so the driver could see easier and showed him the inspection and modification flags that had appeared there. 'This screen tells me that this vehicle requires inspection in the following areas, and also has a number of modifications outstanding,' Buck explained. 'The Fleet managers at HQ Log Comd and our RAEME specialists at MEA will examine how these trends are developing, and will authorise modifications through EMEI's. As well as updating our EMEI's, like they did in the old days, they also input these modifications into the P-Con LAN network. Every time I plug my toolbox in to talk to the LAN, or even to re-charge it overnight, they automatically share information with each other.' Buck went on to emphasise the two-way flow of information: raw data was collected by the Toolbox from the Vehicle and added to the other data flowing from all vehicles of similar type throughout the services. This data was carefully analysed and processed to identify any relevant technical and fleet management trends that may be developing; and then transmitted back as automatic prompts for the maintainer

whenever his toolbox interfaced with that type of vehicle. Buck also explained that EMEI's were now distributed by **CD-ROM (Compact Disc - Read Only Memory)**, accessed by what looked like a commercial CD player, and when updated were swapped on a new-for-old basis.

'OK, the vehicles sensors are telling us that the fuel system is fully serviceable,' related Buck, 'That means we'll have to go to the **Guided Prognostics** screen. Buck selected the appropriate sub-system from the prompts on his screen, and waited while the laptop selected the correct file from its hard-disk. 'This function assists in operator maintenance, and basically guides the maintainer through the various steps required to diagnose and repair each automotive sub-system on the vehicle. Buck explained that this helped to reduce the time spent in diagnosis of the fault, and helped reduced the initial familiarisation training hassles of learning new vehicle types. 'Everyone becomes familiar with the ins and outs of a vehicle after a time of adjustment and learning, especially with common or simpler tasks, but this system is foolproof and sure beats staring at the repair parts scale to figure out how it all comes apart!'

The driver yawned, and moved off for a few hours sleep. Buck returned to the task at hand. Quickly dialling up the fuel system, he examined the likely faults listed in the fault dictionary contained within the toolbox. He weighed up what he had so far: a vehicle surging like it was starving for fuel, but the onboard sensors told him the diesel injection pump and fuel pump were serviceable. Suspecting a holed or damaged fuel line, he selected the **CAD (Computer Aided Drawing)** schematic of the fuel system to check out where the lines ran through the armoured hull of the BUSHRANGER. Using the 'Zoom' function on his keyboard, he noted that the fuel lines were armoured for most of the distance between the fuel cell and the engine bay. Hoping that this would be a simple case of damage to a line or QDF from rough or careless treatment, (the prompt on his screen told him that to get the armoured panels off would involve another three hours work) he flipped open the engine access panels and peered in with his NVG. Even with the ambient light provided by the millions of stars overhead, the NVG were nearly useless in the darkened space. Taking out his UV flashlight, he bathed the area in soft purple light. Gotcha! He spotted the fault instantly - a flattened fuel line where it ran along the firewall on its way to the fuel injection pump. Bootmarks either side of the flattened pipe confirmed his suspicions; the drivers were using this as a footrest when doing their routine inspections.

The fuel line was stuffed - no doubt about it. He identified what part he would need to replace the damaged item and the toolbox instantly called up the part number and GSN from the repair parts scale on its hard-disk. He unplugged his toolbox from the vehicle and sauntered over to the Vehicle Repair Shelter. Tempted to 'accidentally' kick his ASM awake as he went past - 'Sorry, ASM, didn't see you sleeping there' - considering the ASM's temper at three in the morning however, he wisely decided against it. Climbing into the shelter, he plugged his toolbox into the P-Con LAN and waited for the two machines to complete their rapid interface. From the choices on his screen, he selected the correct key to get him into the Repair Parts Store (RPS) stock system. This would allow him access to how many of each item his RPS held; what was dues out, dues in, etc. He quickly selected the part number and GSN his toolbox had given him, and found that they had a few in stock.

Buck noted that the ASM hadn't placed any flags preventing him from indenting for the part. The system could 'earmark' this part in case a higher priority job came in; part in stock, no earmarks, no problems - the part was his. He punched the button to start the RPS accounting system rolling. Soon, the RPS Control Office computer would spit out a hard copy of his indent for his part, the computerised 'ledgers' would be updated, and if the stock level fell below the Provisioning Action Quantity (PAQ), it would prompt the RPS cell to order some more.

A quick phone call to the B2 store ensured that the storeman had rubbed the sleep out of his eyes and was waiting for Buck to collect his part. Signing for the part, he returned to the vehicle where the section of pipe was quickly fitted and the fuel system bled through. Should Buck have desired, the Guided Prognosis would have given him step by step instructions on how to do it, but his accumulated knowledge was sufficient that he didn't require the assistance of the toolbox. Plugging the toolbox back into the vehicle interface port, Buck ran the vehicle up, ensuring that not only did it sound alright, but that all the sensors were still in the 'green'. Dawn was rapidly approaching, and an exasperated Buck struggled through the detail required by the toolbox's exit screen. To make it impossible to simply un-plug and walk away without recording the relevant details of the work completed, the toolbox prompted Buck through each repair task he had completed before it would allow him to shut down. Noting the part he had replaced, (the vehicle's microprocessor already knew at what time and mileage it was replaced from its on-board clock and tripmeter) Buck quickly interfaced his RODUM screen and typed in the details of the fault he had identified. 'Might need some kind of kick plate there to shield the line', he thought as he typed. The ASM would read Buck's RODUM as soon as he switched on his P-Con LAN, the toolbox would automatically download any new information when Buck plugged it in to re-charge it.

A quick test drive confirmed that the vehicle was again serviceable, and Buck watched the vehicle slowly wend its way out of the position along the ring road and back to whatever task awaited it. Buck yawned again - it had been a long night. Buck noted that the trees around him were taking on more colour and definition as sunrise approached and he wandered back to his GMV just in time for stand-to. Yawning his way through stand-to, he climbed out of the weapon pit to be greeted by the ASM. He thrust a steaming brew and a hot jaffle into Buck's hands. 'Good work, now get some shut-eye.' Gratefully, Buck sauntered off to find his sleeping bag and do just that.

POSTSCRIPT

This article currently has no basis of truth. The Australian Army does not possess the capability to collect and manage performance data from its various vehicle fleets, nor does it possess a policy for the use of on-board sensors and diagnostics on wheeled or tracked vehicles. Although current and future equipments have been described throughout this article; the acronyms such as 'AATIMS' and 'P-Con LAN', the repair tasks, and most importantly, the repair times indicated here are for purely descriptive purposes and have no basis in reality.

Readers should be aware, however, that these on-board diagnostic systems are currently in use in the aircraft industry and are being developed for wheeled vehicles.

The hardware and related software to support these information management systems currently exists and is rapidly becoming cheaper and more capable.

The bottom line is: this technology exists now! The Australian Army operates the largest single fleet of off-road vehicles in this country. If we, as a Corps, are to take advantage of these emerging technologies, we must look to the future. The complexity that accompanies many of our equipments has meant that our proven methods are in danger of losing their currency. Already, the advent of computerised engine management systems on your everyday Holden or Ford threaten to leave our methods behind. With an open approach to adding information management systems and on-board sensors to the ring-spanners and open-enders of the VM's toolbox, RAEME could be not only lead other regional forces in up-to-date maintenance techniques, but could set the industry standard for the future.

Plans Section of the Directorate would be grateful for any constructive input from folks out there in 'Reader-Land'.

Exit 301 FD Wksp FRG ... Enter the LOGISTIC SUPPORT FORCE WORKSHOP STAGE CENTRE

By LT Paul Grey

1991-92 has been an exciting year for the LSF Wksp, Tasmania's only independent RAEME unit. With effect 29 June 1992 the LSF Wksp became one of the few post-FSR units to be increasing in size.



LOGISTIC SUPPORT FORCE WORKSHOP — ZEEHAN MAR 92

*Back Row: (L to R) SSGT Gillow, WO2 Clark, SSGT Bourne, SGT Hay, SGT Golder, SGT Rich, CFN Reid, LCPL Chandler, CPL Hardman
Centre Row (L to R) WO2 Borton, CPl Round, CFN Gergely, LCPL Briers, CPl Bird, CPl Smith, CPl Chouveau, CFN Scamfrotti,
CFN Walker, CFN Williams, LT Grey, CFN Godfrey, CFN Weinreich, CFN Smith, CFN McGrath, SGT Sobolewski.
Front Row: (L to R) CPl Radcliffe, WO2 Cubitt, CAPT Byard*

The workshop, formerly 301 FD Wksp FRG (COMM Z) ... and 6 EME Pl ... etc. was raised as the Logistic Support Force Workshop with effect 1 Apr 91. As a result it is to triple in size, from the original Authorised Establishment of 2 X ARA and 38 X GRes to 2/99. The Wartime Establishment makes the unit a full field workshop, with a strength of 170. Located at Brighton Army Camp, Tasmania, the unit's role is to provide second-line repair and recovery support to units of the Logistic Support Force. In peace-time the unit provides similar support to Land Command units within the Tasmania Region.

EXERCISE "LEAP FROG"

The AFX for 1992 took the form of a major recovery exercise in the Zeehan-Rosebery area on the west coast of Tasmania. The area is littered with mining equipment abandoned during the century of mining in the area. Equipment recovered by the unit included two Lister diesel stationary engines, a Fordson steel-wheel tractor, a Lanz tractor, a stamp battery, cableway terminus and support towers and a Jacques gyratory crusher. For good measure a 30 metre two-lane wooden bridge was demolished and recovered with the other equipment to the Zeehan Museum of Mining. The Forward Repair Teams tasked with recovering these times were led by SGT Bob Gillow, SGT Graham Bourne, SGT Glen Hay, CPL Dave Hardman and CPL Jack Radcliffe.

The bridge together with the cableway are to be reassembled and restored to serviceability for a working display. The other equipments recovered were far less serviceable, some being close to disintegration after decades in the wet bush of Tassie's west coast. However, all reached the Museum intact, where they will be restored by volunteer workers for static displays. As recovery tasks they presented an unusual challenge, having been abandoned in remote and inaccessible locations.



SGT Tony Rich and CPL Norm Smith in position

By far the worst of these was the Jacques gyratory crusher, which came to be known, inevitably, as the 'anti-christ'. The crusher, a multi-tonne cylinder and pestle, crouched like a dark, evil idol above a series of concrete terraces set into the steeply sloping side of a narrow valley.

The only access route, typically, was on the other side of the valley. Stringing cables over the valley, the recovery team, led by SSGT Bob Gillow, sweated for a week to break down the crusher into its components and lower them. The magnitude of the task left the team with an abiding respect for the pioneers who established the mine with only human and bullock muscle to do the job.

As Q displayed its usual efficiency in requisitioning suitable exercise weather there was no lack of practice in self-recovery

LOGISTIC SUPPORT FORCE WORKSHOP— N CONTINUED



The exorcism of the "ANTI-CHRIST" commences

on the soft tracks. Thus, the recovery was not only a valuable PR exercise for the Army in Tasmania but a uniquely challenging training environment for the craftsmen.

HAILS AND FAREWELLS

As ever, a number of valuable members have moved on to take up new postings.

LT Craig Chatterton, to 107 Fd Wksp
WO2 James Costelloe, to 12/40 RTR Tech Spt
SGT Greg Myers, to 1 Watercraft Wksp
CPL Selina Lyons, to OCTU 24 (6 Trg Gp)
CPL "Weefbix" Wheatley, to 3 Trg Gp.

The list could include WO2 Michael Koerber (ARA Cadre), except that the revolving door of Army posting sent him right back as WO2 "Chocco" Koerber, to the chagrin of all who toasted him on his way.

On the plus side of the ledger some good people have been gathered in. In the past year we've greeted:

WO2 Steve Borton (ARA), from Broadmeadows Log Bn
SGT Steve Sobolewski (ARA), from RTC
SSGTA Fred Ratcliffe, from Hobart Log Coy
CPL Peter Clarke, from 20 Support Squadron (RAE)
CFN Mark Rose, from 1/15 RNSWL
CFN David Featherstone, from 16 Fd Bty.

A warm welcome also to our new members, recruited to the unit: LT Paul Grey, 2LT Richard Heiden, CFN Nicholas Booth, CFN Rodney Gergely, CFN Kate McGrath, CFN Adrian Miller, CFN Lyle Parkin, CFN John Sinclair, CFN Nigel Taylor, CFN Bradley Turner, CFNA Jason Sandle and CFN Dave Williams.

CONGRATULATIONS

Congratulations to the following members on their promotion: MAJ Gary Byard (OC), LT Richard Heiden, SGT Tony Rich, CPL Warrey Bryce, CPL Andrew "Scotty" Chandler, LCPL David Briers and LCPL David Scarafiotti.

THE ROAD AHEAD

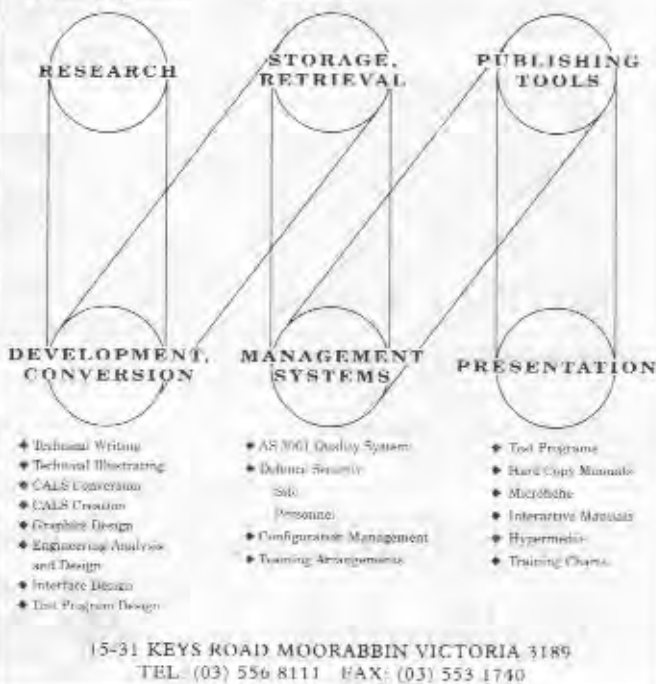
In 1993 a courses camp will be conducted in place of an AFX, but the diggers have mainland exercises with other LSF units in '94 and '95 to look forward to. Kangaroo '95 is to be a divisional exercise, and as such will require the full mobilization of the Logistic Support Force. It will be the first opportunity for the LSF to exercise as a formation and the Wksp is eager to practice its role.

In the meantime, an ongoing effort will be required to recruit the qualified tradesmen needed to make a GRes Wksp. Any RAEME members considering leaving the system should take a look at Tassie, a very popular destination for the ARA as a final posting. However, whether you come to stay or simply to visit, RAEME members can be sure of a warm welcome at LSF Wksp.



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BLACKHAWK EMEFIX

The First Black Hawk Transmission Change for RAEME

From 5th Aviation Regiment Workshop

At approximately 1330 hrs on 23 March 92 Black Hawk A25-108 from A Squadron 5th Aviation Regiment was conducting an insertion for 3 RAR. While in flight the crew detected a problem with the aircraft's main transmission and landed beside the Roper Highway, approximately 14 kilometres from Ngukurr. Ngukurr is located 315 kilometres East from Katherine by road or approximately 500km ESE from the 5 Avn Regt Wksp location within the BMA at McDonnell Airfield.

A Forward Repair Team (FRT) from A Squadron Technical Troop (A Sqn Tech Tp) arrived at the casualty, inspected the main transmission and found it to be unserviceable. The task was beyond A Sqn Tech Tp's level of repair and a Repair and Recovery Request (EMEFIX) was forwarded to 5 Avn Regt Wksp.

While this was happening HQ NORCOM (Air Contingent) without reference to the Regiment and unaware that the Workshop had the capability to replace the transmission, were busily arranging for CH47 Chinook and C130 Hercules support to transport the casualty back to Townsville. However, the Workshop already had experience with C130 transportation, and the Americans weren't prepared to pay for a new Black Hawk if they dropped it. Finally common sense prevailed and it was decided that we would replace the transmission in the field.

An FRT of eight men was assembled, consisting of LT David Farrugia, WO2 Richard Oates, CPL Bernard (Wags) Wagner, CPL Peter Hawken, LCPL Dave (Eggs) Eglington, LCPL Robert (Tank) Pontifex, CFN Paul (Tommo) Thompson and CFN Clint Winchester. Planning and arranging of stores and equipment took up most of the following morning. The equipment was packed into two Unimogs (one with Palfinger crane), one 110 Landrover and a General Maintenance Vehicle (GMV). At mid-day the FRT departed the 5 Avn Regt Wksp location.

At approximately 2000 hrs that night the FRT called into the local store at Roper Bar. The locals indicated that the aircraft was approximately twenty kilometres from the store. It was decided to spend the night beside the Roper River (which we later found out was home to several ten foot crocodiles) so that we would not come across the aircraft at night. The aircraft was still being guarded against enemy action and local souvenir hunters by the section from 3 RAR who were in the aircraft when it landed.

The FRT arrived at the aircraft the following day and found it located on the side of a dirt stretch of the Roper Highway beside a dry gutter. A quick assessment of the ground lead to the conclusion that the aircraft should be moved to the sealed Ngukurr Airstrip because if the weather turned bad the 24000 pound casualty would sink up to its belly in mud (the airstrip also had an excellent work area).

The road to the airstrip had several difficult spots but the aircraft could be towed along it. The problem was that there were no specialised aircraft towing vehicles available, and so in true RAEME fashion a 6x6 GMV was tasked to tow the casualty. The pintle mount was modified to take an aircraft towbar, and rotor blades, wings and external fuel tanks were removed from the aircraft to prepare it for towing.

At 1500 hrs an A Sqn aircraft flew in carrying troops from 18 Field Squadron RAE (18 Fd Sqn RAE) who were to relieve the 3 RAR soldiers. The aircraft dropped off its load and then returned to McDonnell Airfield to pick up more sappers from 18 Fd Sqn.

At 1530 hrs on day three the Black Hawk began its fourteen kilometre tow to Ngukurr Airfield. The casualty's tyres were never designed to travel along dirt roads, so after towing the aircraft for three kilometres at an annoying two kilometres per hour the tail wheel developed a puncture. The FRT had only one replacement tail wheel available for the repair task, and after it was fitted a path in front of the tail wheel was carefully cleared of stones for the remainder of the tow using a bannister broom. All large stones were kicked clear of the two main landing wheels for the next eleven kilometres of dirt road.

The FRT arrived at Ngukurr Airfield at 0330 hrs on day four, a total of ten hours' towing time. Everyone was exhausted by this stage and sleep came within half an hour of arrival with the aircraft being guarded by 18 Fd Sqn.

On day four the main rotor blades, external fuel tanks and wings were also transported to the airfield, and a work camp was set up. Later that afternoon disassembly of the aircraft began.

Stripping of the components surrounding the transmission proceeded on day five with most of the work being conducted during the morning or night due to the excessive temperatures (the aircraft thermometer peaked at 45 deg at 1300 hrs daily). There were few problems and the task was made easy using the Palfinger crane.

By noon day six the transmission was ready for removal. With the use of Palfinger crane the 1200 pound transmission and attached components were carefully lifted out with little trouble and placed onto a work stand, the replacement transmission and spare parts being flown in late that day by Caribou.



Towing Black Hawk A25-108 along the Roper Highway.

BLACKHAWK EMEFIX — CONTINUED

Fortunately the FRT took a vehicle mechanic (LCPL Pontifex) who, aside from conducting vehicle repairs, proved invaluable in producing modifications to tools and equipment. These modifications were essential to the task because it was the first ever main transmission change conducted on an Australian Black Hawk, and some special tools had to be made as required.



Removal of the Black Hawk's Main Transmission

On 1 April 92 both the servicable and unservicable transmissions were placed side by side and servicable parts were exchanged between them over a two day period. The tedious process was only interrupted when it was suspected that a screwdriver had been left inside the transmission while being assembled. To the relief of the FRT commander, it was later discovered in a tradesman's pocket who took great delight in an April Fool's Day joke.

At approximately 2100 hrs CPL Peter Hemer and CFN David Hicks arrived from the Workshop. Their task was to transport the external fuel tanks to Tindal. CPL Hemer, an aircraft structural fitter was also tasked with some minor repairs to the main rotor blades. On the following day the external fuel tanks departed for Tindal.

By the middle of day eight the aircraft and replacement transmission were ready for installation. Five hours later the casualty once again had a serviceable transmission, but considerable work still remained in the installation of its surrounding components and performance of functional checks. Assembly of the generators, hydraulic pumps and main rotor head was completed by the end of day nine, and by mid-day of day ten the aircraft was ready to commence its functional tests.

On the afternoon of day eleven two pilots and two load masters were flown in to conduct test flights and ground runs. Ground running and testing began later that evening and

continued through to the next day. Finally by the afternoon of day twelve after successfully completing all of its flight tests the aircraft was declared servicable. At the end of that day the Black Hawk departed for RAAF Base Tindal where it was refitted with long range fuel tanks for its journey back to Townsville. The FRT then packed its equipment and moved to Tindal where we met up with the 5 Avn Regt Wksp convoy returning from Exercise K92 the following day.

The 5 Avn Regt Black Hawk had been repaired within twelve days in the field. It proved to be an excellent training exercise and taught all of the FRT members (and some troops from 3 RAR and 18 Fd Sqn) about the complex task of replacing a Black Hawk main transmission, with the added twist of doing it under simulated combat conditions. Major repair tasks in the field quickly increase a tradesmen's experience level and build self confidence in both his work and leadership skills. The transmission change at Ngukurr did all these things, and also proved to the Regiment and the Australian Army that 5 Avn Regt Wksp is capable of maintaining and repairing our valuable helicopter assets in the field, no matter how difficult the circumstances and conditions.

To date this main transmission change has been the largest repair task completed in the field by the 5 Avn Regt Wksp. On the 20th of November 1992 the Workshop and its Regiment will celebrate their fifth birthday and will be declared fully operational. After seeing the work completed by the workshop on Exercise K92 I am confident that we will be well prepared to carry out our role of providing technical support to the Regiment whenever and wherever required.

QUEENS BIRTHDAY HONOURS TO WO2 'DARCY' DUGGAN

Very few members of our Corp have been recognised for their devotion to duty. However, now and again someone whose outstanding performance cannot be over-looked receives some of the recognition they deserve. A worthy recipient of such accolades is 448213 WO2 John Francis Duggan, who received the Conspicuous Service Medal (CSM) in this year's Queens Birthday Honours.

Known as 'Darcy Duggan' after the notorious criminal, WO2 Duggan has had a colourful career in RAEME spanning twenty three years. His travels have seen him serve in every RAEME Aviation Workshop in the Australian Army, as well as a tour with the Air Transport Squadron in PNG.

Although small in stature (a quality which gave him the ability to sleep comfortably between the bows of an F1 Truck) Darcy Duggan is a character with a big heart and high spirits.

Affectionately known within their Squadron as the Angry Short Man (ASM), WO2 Duggan has many admirable qualities not least of which is his sense of humour.

Darcy's recent achievements, and those for which he was recognised, were the contributions he has made as the WO2 Artificer Aircraft within A Squadron Technical Troop, 5th Aviation Regiment Workshop. His tireless devotion, dedication and hard work helped transform the Squadron from military symbols on a planning board, to a fully operational Land Command Sub-unit.

Honesty, integrity and dedication to the Corps are all qualities possessed by WO2 Duggan. These are also qualities to which all members of our Corps should aspire.

The Corps can truly be proud of the efforts of Darcy Duggan, CSM.

WELL DONE DARCY!

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Farewell —

MAJOR ARTHUR THOMAS McMANUS

On the fifth of July, the day before his 55th birthday, Arthur McManus retired from the Army.

Major Mac as he is most often referred, joined the CMF in February 1962 at 104 Infantry Field Workshop, Bulimba as a clerk. In July 1965 Arthur commenced Full Time Duty with HQ 2 CRAEME — COMMZ where he was promoted to Corporal, Clerk Tech. While still on FTD, he was posted to 2 Company, Royal Australian Service Corps but detached to Headquarters 6th Brigade and promoted to Sergeant.

In September 1967 Sergeant McManus was transferred to the ARA. On the 25th November 1968 Arthur deployed to Vietnam with Headquarters 1st Australian Task Force.

Upon his return in November 1969, he was posted to RAEME Training Centre as an Assistant Instructor in Corps Training Wing and promoted to WO2. Arthur remained at RAEME Training Centre until January 1975 when he moved to Brisbane working as the SO3 Personnel/Training in Headquarters 1st EME Group.

The posting to sunny Brisbane was short lived and in August 1976 he moved to Melbourne into the Maintenance Engineering Liaison Section on promotion to WO1. In October 1977 Arthur assumed the duties of SO3 Systems and was involved in the move of DGEME from Melbourne to Canberra. July 1979 saw "Mac" posted as the SO3 Branch Management in Log Branch DGEME.

Arthur continued in the position until January 1985. His management ability was recognised and during this posting (January 1981) he received a PSO Commission.

From January 1985 until January 1987, Arthur enjoyed a posting to the West with 5 EME Services Unit as the Training Officer. It was then back to Canberra and into the SO2 Selection Boards position in personnel Branch as a Major.

Major Mac returned to the Directorate in July 1990 where he remained until his retirement.

Arthur McManus did not necessarily adopt a high profile, however his work and influence within the Directorate and the Corps is worthy of mention. Major Mac, as the Staff Officer Grade 2, Personnel/Defence Cooperation and as Secretary of the Corps Committee has played a major and influential role in the publishing of the Corps History, the introduction and updating of Corps Instructions and the efficient running of the day to day functions of the Directorate. His efforts were acknowledged by Brigadier Kingston at a dinner to farewell Arthur and his wife Pam from the Directorate in June. Arthur will be farewelled from the Corps at the Officer's Dinner on the 27th November.

We all wish Arthur and Pam the best in their retirement and look forward to their company in the future.

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SECOND ROW (L to R) Buck Jones, Chairman, Al Kelb, Coach 'A' Team, Russell Sams, Rob Gadsby, Dean Taylor, Al Bradford, Martin Ryan, Karl Sams, Andrew Dawes, Andrew Condon, Russell Kronenburg, Paul Salter, Steve King, Robert Howe, Greg Hynds, Peter Scott, Coach 'B' Team.

THIRD ROW (L to R) Doug Wheadon, Dave McGree, Jason Whitfield, Rod Hannigan, Brett Biddle, Andrew Clarke, Cameron Lutz, Jason Murphy, Simon Ritchie, Stephen White, Tim Connolly, Darren Diffey, Brian Savidge, Shane Andrews, Ed Faulstich, Assistant Manager.

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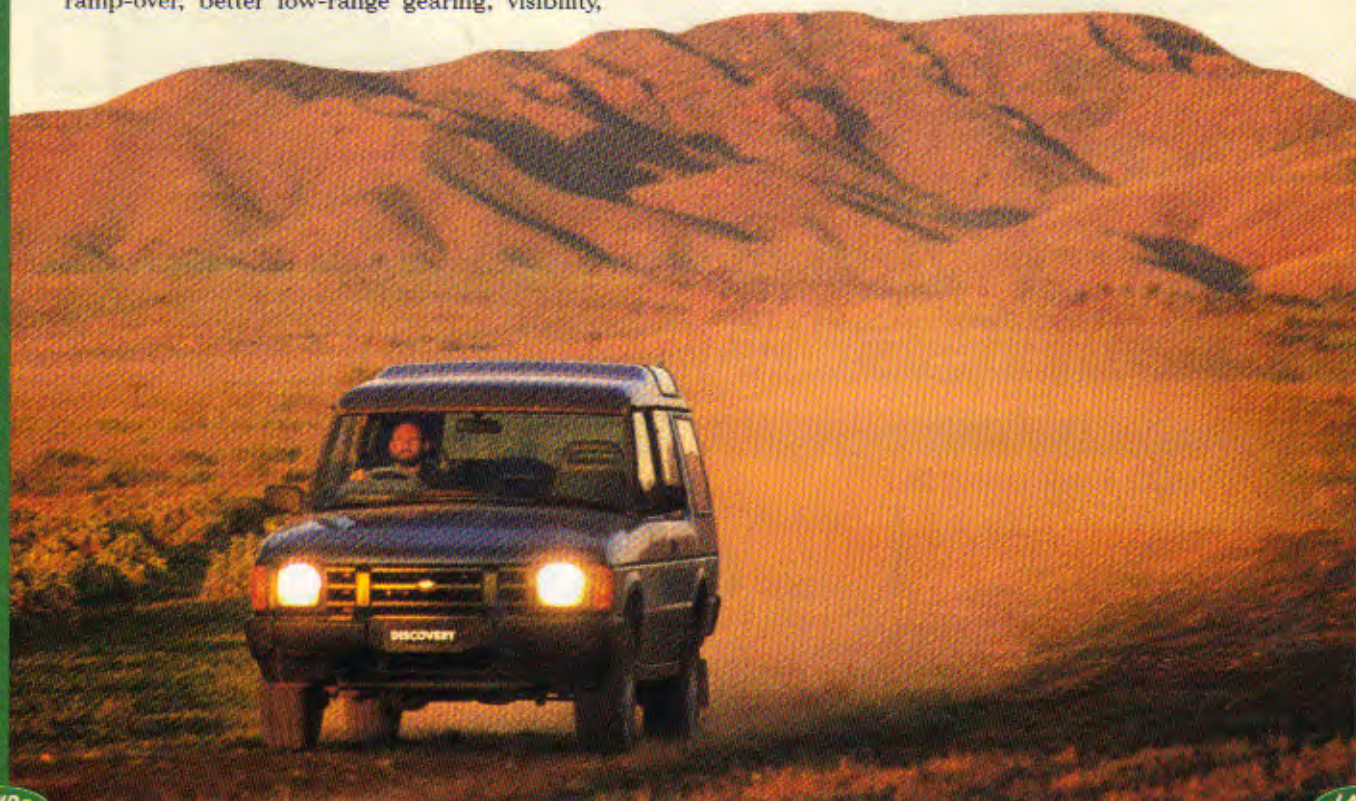
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