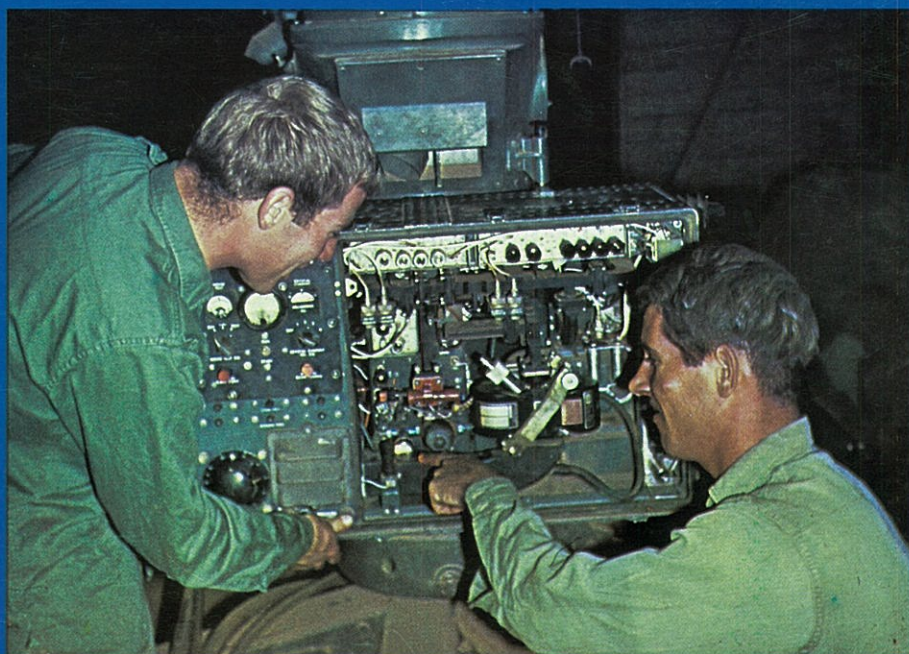


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VOL 1 NO 2  
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# THE RAEME CRAFTSMAN

THE MAGAZINE OF THE ROYAL AUSTRALIAN ELECTRICAL AND MECHANICAL ENGINEERS



No. 2, Vol. 1

May 1979

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## EDITORIAL

Whilst it may not be editorial policy to draw your attention to specific articles in your magazine, I feel justified in mentioning the article on 'Unit Magazines' (page ): a brief comment is offered on effective communication.

At all levels in our Corps today there is an increasing demand on the use of information. Accordingly, we have devised a complex system to supply, store, retrieve and act on massive amounts of complex data. An unfortunate side effect of this development is that, as individuals, we are communicating more and more with the system and less with each other.

Communication with the system is a necessity but we should not lose sight of the value of, and need for, personal contact in carrying out our role, be it individual, unit or Corps.

Personal contact will always remain a vital part of communication. I see unit magazines and this Corps magazine as one method of maintaining this contact with each other.

Following the issue of our first edition it was pleasing to see the number of letters to the editor; we encourage and welcome them.

Finally, the editorial board (past and present) wish to thank the many contributors and well wishers for their support and encouragement in the continuing production of your magazine.

### Cover:

The cover photographs were selected as being representative of the Corps' roles as both Electrical and Mechanical engineers in both a base and field environment. (Photographs by Lt Col M.J. Burgess.)

Ideas and photographic contributions for future front covers would be most welcome.

*The views expressed in the articles are the author's own and do not necessarily represent official policy or opinion.*

## Contents

	Page
Letters to the Editor .....	3
Army Office Jottings .....	7
The First 100 .....	11
FF Comd Jottings .....	13
Log Comd Jottings .....	21
RTC Jottings .....	25
2MD Jottings .....	31
3MD Jottings .....	35
4MD Jottings .....	39
7MD Jottings .....	41
Unit Magazines .....	42
R.A.E.M.E. Associations .....	45
Suva to Sydney on Anaconda 11 .....	47
300 Clicks Down the Murray .....	49
Automatic TEST EQUIPMENT .....	53
Computers (A Personal Lament) .....	55

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# LETTERS TO THE EDITOR

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## ADULT TRADESMEN SCHEME

Dear Sir,

I refer to your first edition of "The RAEME Craftsman" which, as an ex-RAEME member, I thoroughly enjoyed. However, I would point out an apparent error on page 25 in the article 'RTC Jottings' wherein it is stated that "The Adult Tradesman Scheme was introduced in 1965 . . .".

I was Education Officer at RTC from May '61 to January '65 and instructed the first classes in trade mathematics and trade science as part of the Adult Tradesman courses in 1964. As I recall, the Scheme had received recognition by Apprenticeship Commissions and Trade Organisations by the end of 1963.

MURRAY S. METHERRALL  
*Lt Col,  
Estabs Div, DOD Canberra*

*Editor's reply:* Efforts have been made to positively confirm the correct date to set the records straight. Unfortunately RTC are unable to provide that confirmation at this stage. However we shall endeavour to get the correct date confirmed by the next issue.

## A BIG BLOW

Dear Sir,

I would like to comment on an article in the first issue of our long-awaited and much-needed magazine.

The article 'The Big Blow' under '1 MD Jottings' would have been better named, '5 Base Ballyhoo'. The content of the article did not seem to be consistent with the title as the whole topic did not concern 1 MD at all, but more that workshop on the Downs.

I was disappointed by the one-sided reporting of the effort which went into the recovery and repair of the aircraft following the storm at Oakey. The following points should be noted:

- (a) Thirteen of the aircraft damaged belonged to 1 Avn Regt and 173 Gen Spt Sqn and therefore the main responsibility for recovering and repairing the equipment fell on these field force units.
- (b) Apart from the use of 5 Base Wksp's wrecker and some helpful personnel, most of the manpower was provided from 1 Avn Regt Wksp and 173 Gen Spt Sqn Wksp, during the recovery effort on the day following the storm.
- (c) Seven aircraft of the total damaged were repaired by the field force workshops within three weeks of the storm without seriously affecting the user units' normal flying commitments.
- (d) 5 Base Wksp repaired seven aircraft with the assistance of four engineers from GAF and some tradesmen from 173 Gen Spt Sqn Wksp.

(e) It is not quite true to say that a repair plan was 'devised' by CO 5 Base Wksp and the SO1 Aircraft Engineering because DI(AF) Tech 4/11 lays down the level at which repairs will be carried out following categorization of damage. Consequently those aircraft categorized as Cat 3 were repaired in the unit workshop, and Cat 4 were repaired by 5 Base Wksp or back at the contractor.

(f) Finally the quote from the Court of Inquiry by GOC 1st Division was not complete and if, as the article suggests, these are 1 MD Jottings, then the quote should have read:

"The actions of all personnel involved in the incident were commendable. In particular, the reaction of many off-duty soldiers in returning voluntarily to the base, or advising their immediate telephone contact number for recall if needed, was gratifying and indicative of the morale and esprit de corps of all units in the Oakey area. As an example some 50 per cent of 1 Avn Regt Wksp voluntarily reported for duty to assist in the cleaning-up phase.

"The immediate support and subsequent increased working hours introduced by 5 Base Wksp Bn are also highly commended. It is expected that these efforts will have achieved a very high recovery rate in the operational effectiveness of 1 Avn Regt by June this year."

It is very easy for this to sound like 'sour grapes', however I would appreciate an opportunity to have the facts broadcast, particularly on behalf of the many soldiers in 1 Avn Regt Wksp and 173 Gen Spt Sqn Wksp who gave so *freely* of their time to remedy in a very quick time, a disastrous situation.

R. L. G. GRANT  
*Major,  
HQ Log Comd*

*Editor's reply:* Major Grant, OC 1 Avn Regt Wksp at the time of 'The Big Blow', is understandably upset. However, both 5 Base Wksp and 1 Avn Regt Wksp were approached for articles on this topic for publication in our first issue. 5 Base Wksp responded, albeit late, and were printed. 1 Avn Regt Wksp promised but failed to respond. 5 Base Wksp, in their wisdom, reported events as they saw them and as the events affected them. With Major Grant's letter the record, hopefully, is now put right. No matter how the facts are revealed, however, there is no disputing that the subsequent actions of personnel from both sides of the tarmac were highly commendable. In regard to the title, '1 MD Jottings', there seems to be some confusion. The title is merely indicative of the area of command from which the 'jottings' originated. Had 1 Avn Regt Wksp submitted an article it would have appeared under 'FF Comd Jottings'.

## FIRST 100

Dear Sir,

I may be able to help you locate two of the "First 100 Apprentices".

The first, 5/454 J. A. McDonald, I met whilst with Resources Troop, 22 Const Sqn RAE. 'Dinky', as he was more often referred to, was the Elec Mech Supv with the Sqn and my Troop Commander. A hard but fair sincere man.

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An article appeared about 'Dinky' in a copy of 'SAPPER' magazine about 12-14 months ago. A reproduction of that article could be useful in our magazine to follow the career of one of the first apprentices.

I gave up being a Fitter Engr Equip in September 1977 and Corps transferred to RAEME. At arrival at RTC I elected to do an Adult Trades course as Fitter-Turner and my instructor for 1st and 3rd term was Sam Gibbs — I imagine your 3/1222 S. F. GIBBS, now a civvie, having retired a WO1. He gladly reminisces about his old days and was a good instructor — refreshing and constructive to me whilst under his supervision.

I hope these are at least two of the '100' for you and you can mention them in our magazine. Also may I say well done. I thoroughly enjoyed your publication and offer my support throughout.

D. S. MILBURN

*Cfn,*

*G.E. Sect, 1 Base Wksp Bn*

*Editor's reply:* Thank you for this timely detective work. Unfortunately you are only half right. The J. A. McDonald you knew was not our apprentice of the same initials and name. 5/454 J. A. McDONALD, we have discovered, retired as a Lt Col. You were bang on about Sam Gibbs and we are pleased to know he is still serving the Corps. Thank you, too, for your kind words about the magazine and taking the time to write. Your support in encouraging others to drop us a line from time to time would be appreciated.

## THE FIRST 100

Dear Sir,

Congratulations to you and to all who were associated with the inaugural issue of "The RAEME Craftsman". The production was of first class standard, it meets a very definite need and promises much for the future.

From all the interesting contributions in your first issue the articles on Major Jim Wylie and the first apprentices I found of personal interest. Jim, of course, was one of our more delightful characters and certainly one of those who contributed much to the Corps over the years. His influence and guidance to the younger members is not estimable but its value will be his legacy for many years to come.

It was with much nostalgia that I perused the names of the first apprentices. Likewise to Jim Wylie there were many names of those who had made considerable and valuable contributions to our Corps over the years. Of those who had the privilege of knowing him, who can forget that wonderful character — Leslie John Hilderbrandt — who passed to the big LAD above in 1967.

You asked — "Where are they all now?" I certainly don't know of them all but I believe that Major Ian Archer of 2 Base Wksp Bn, Major Tim McPartlan of DGEME Canberra and myself are the only remaining ex-workshop apprentices still serving. Bob Shedden, who received the last (one hundred and first) certificate and who left the army after serving in Korea as a machine gunner with 1 Bn, is now production manager for Coca Cola Bottlers in Townsville. It was good to renew Bob's acquaintance in recent years when I served with the 4th Field Regiment at Lavarack Barracks.

The first apprentice on a time basis was F. W. Millar. He was from Tasmania and intakes from there were enlisted a few weeks ahead of the mainland apprentices. Hence, Freddie was the "first". Tim McPartlan, also from Tasmania, was enlisted a few weeks prior to us mainlanders and is the first of our particular intake.

There were actually more than one hundred and one apprentices. For various reasons some did not complete their apprenticeship. Of those who joined the AIF on attaining AIF enlistment age some presumably decided it was too difficult to take up their training again as in those days the apprenticeship was for five years.

The apprentice rates of pay mentioned in your footnotes were for those "living out". Our intake, the last, were required to "live in" and appropriate deductions for board and lodging were made. I recall that after the deductions, including two shillings and four pence for superannuation (forerunner to DFRB), we received five shillings and one penny per week. Your comment "those were the days" were certainly correct for our second year — our pay in hand increased to the magnificent (or so we thought) sum of twelve shillings and sixpence which included two shillings and sixpence good behaviour bonus — which some of our peers believed was ill earned!

As seen by the first issue of "The RAEME Craftsman" a means has now been provided for entertaining Corps history together with all other matters that the 'Craftsman' has covered as a well balanced magazine. Amongst other Corps historical and valued tradition information which will undoubtedly be presented in issues to come I look forward to seeing, from more enlightened contributors than I, more about our apprentices, not only of the workshop apprentices to which I am proud to have belonged, but also of our kin that came afterwards through Balcombe.

A. J. BALSILLIE  
Major,  
Sydney Wksp Coy

*Editor's reply:* Thank you for your very kind remarks and for adding valuable information to our records on the first one hundred apprentices. Further research has confirmed that F. W. Millar was the first, enlisting on 10th July 1939, followed by B. R. Wollard on 24th July 1939 and F. R. Parker on 31st August 1939, from South Australia and Western Australia, respectively. Like you, we also hope to see contributions coming forward on Balcombe graduates and how they have fared since.

## SENIORITY AND POSTINGS

Dear Sir,


For inclusion in one of the editions of "The RAEME Craftsman" I would like to see, and I have spoken to many others who would, a list put out of all WOs and SNCOs in the Corps with their seniority and current posting. The same is done for Officers in the Corps and is published every six months.

This could be done on a yearly basis and would be of great interest to many people. It could be done by rank to lessen the workload, e.g. WO1s in one edition, WO2s in the next and Ssgt/Sgts in the next. I feel this would allow many people to know where their fellow workers are, which is of great interest to every SNCO I know. It would also allow people to know just how many different RAEME units there are and where they are, as they are certainly, rapidly changing names and many are being reorganised. The edition just released was full of very good information but I feel it was for the older soldier.

S. M. SUTHERLAND  
Ssgt,  
TQMS 4 Base Wksp Bn

*Editor's reply:* I see you have taken up the cudgels first brandished by WO2 Langridge in the first edition. It was considered then, as it is considered now, that such lists would be too out of date by the time we 'hit the streets'. However, to set the record straight, after conferring with a Personnel Branch representative — seniority is no longer one of the criteria for career advancement other than for, possibly, Craftsmen. In order of precedence one must have qualifications, the recommendation of one's CO and a higher points score than others of the same rank being considered for promotion. So, seniority lists would be pointless. It may be possible, however, to produce a 'postings list' for ranks from Sgt upward but will only include recent moves — not current positions held.

We are concerned that you consider our first edition was 'for the older soldier'. We are, after all, trying to interest the majority, including the younger soldier. If we are failing to do so we may as well revert back to the Liaison Letter format. What do our young soldiers think of our contents? We shall be pleased to hear any suggestions you may have on what you would like to see in your magazine.



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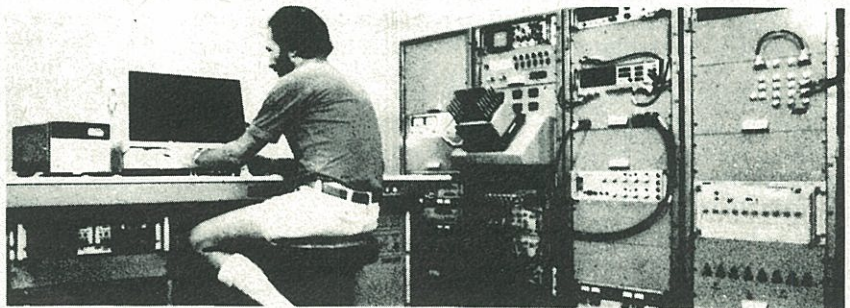
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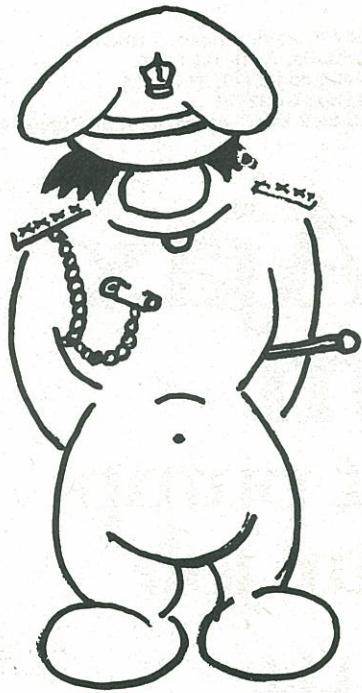
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# ARMY OFFICE JOTTINGS

## A FIT BODY — A FIT MIND

By Warrant Officer Derek R. Peachey

Any system devised by man which depends on man for its efficient operation can only be as efficient in its operation as the man is efficient in operating it.

It stands to reason, therefore, that if all stores, tools and facilities were immediately to hand and the system operator was only required to reach out a hand to select all he needed, a system, even the best, can fail — if the operator is functioning at less than maximum personal efficiency.

Great emphasis is placed in improving systems, techniques, tools, facilities and equipment performance. Emphasis is placed on training the operator in their use. Far less emphasis, however, is placed on improving the physical and mental performance of the operator.

During my recruit training I was most impressed with the wording of a sign hanging above the office door of the physical training staff. It read — “A FIT BODY A FIT MIND”.

Many have been the occasions I have had good reason to remember that sign. We read, or are told, of the stress of modern day living and the effects it has on managers and workers. Frequently, in recent years, we have been made aware of the lack of national fitness and the high percentage of workers taking ‘sickies’. Over eighty percent of the population, we are told, visit their doctors to complain of some ailment every week of the year and almost the same percentage resort to tranquilisers, pain-killers in the form of headache tablets or alcohol, as a habit.

The effects of the ‘national’ trend are well documented. Lassitude, loss of concentration, irritability, loss of physical co-ordination, moodiness and a lowering of achievement standards are a few of the symptoms. Symptoms RAEME cannot afford at any time.

We get them, though, and I defy anyone to deny the fact.

RAEME managers are continually looking for improved production, turn-round times and overall unit efficiency. Frequently, their solution is to cut ‘sporties’, investigate time lost during a normal working day and in many a case introduce an element of overtime. The effect on morale is suffered in the vain hope these solutions will provide the required improvement.

They rarely do with any long-term effect.

The real answer, and one I have proved to myself on more than one occasion, lies in the implementation of regular physical fitness training programmes.

One can almost hear the anguished cries of — “Production will suffer!” as harrassed workshop managers look the other way, dismissing the suggestion as the ravings of a lunatic. They would also be agreed with by many a subordinate, too — lassitude and apathy having already set in.

Nevertheless, convinced my reasoning was right, I embarked on physical training programmes for men in my sections. Also, as my status in the army improved I campaigned for the introduction of such programmes throughout units I have served with. On occasions I succeeded.

In more recent times I again experimented with an equipment servicing section of some thirty-five men. Most of them actively participated in major sports at weekends and some in midweek competitions.

Despite such regular sporting activity they were susceptible to injuries which, needless to say, necessitated absences from work whilst attending the RAP, days away from work and varying degrees of incapacity to carry out their normal duties.

I planned a programme of training to be carried out during the first hour of every work day, immediately after admin parade and obtained the permission of my CO to implement it. Permission was granted on the condition that, if there was any fall off in production, or servicing standards, the programme would cease.

The programme was varied to include runs of varying lengths, calisthenics of the 5BX form, team games of my choice and, on the last day of each week, team games selected by the men.

In true Digger spirit there was opposition to this compulsory fitness training. However, after the first week, opposition turned to support and the men suggested improvements to the programme — normally creating higher attainment standards for themselves.

Sporting injuries were fewer and less severe after two weeks, and after a month rare. Thus, fewer absences from their places of employment.

The programme continued for nine months until stopped on the change of COs. Maximum utilisation of available production time, once again, became paramount.

It was interesting and encouraging to note, however, that other units in the area eventually followed our example and, as far as I know, continue their fitness programmes to this day.

Nevertheless, my programme had continued long enough to show an improvement in every facet of life within that section.

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Production improved, as did servicing standards, dress standards — both working and ceremonial — and attendance at work. Efficiency increased as well as the number of men re-engaging and taking an interest in promotion opportunities and trade courses. Morale became high.

There was a marked drop in welfare and administrative problems; a more willing acceptance of responsibility by NCOs and tradesmen; greater co-operation between individuals and between servicing sections; a marked increase in social activity involving single and married members, with families included and, surprisingly, an upsurge of interest and participation in major sports at weekends by all ranks — including members who had never played any major sport since leaving school.

There is no documentary proof of my claims — how could there be! My word is all I can offer. The important thing is that I proved my point — to myself — and recommend such methods to anyone who will listen.

It is essential the fitness programme is planned and correctly controlled, allowing, at the same time, some latitude for the inclusion of ideas put forward by the men — other than cancelling it. It must also apply to all ranks. The men develop a greater respect for bosses who make the effort, too.

The continuing and future success of our Corps is in the hands of our managers. Good management systems can be improved by ensuring all contingencies are covered.

An operator of a system who is both physically and mentally fit to successfully operate that system is more important to the manager than any other management tool available to him.

The benefits of fit tradesmen to our Corps are numerous. A fit body leading to a fit mind will bring success in management — a traditional RAEME aim.

## AN ARTIFICER BADGE



Distinguishing the trade of one senior NCO from another is difficult at the best of times, but distinguishing a qualified Artificer from any other tradesman is a virtual impossibility in our Corps.

Unless you know an individual's background of training there is very little chance of detecting the trade expert from the non-expert and yet, to a tradesman, the Artificer grading is the top of the tree, tradewise. Years of experience and training, recommendation and selection have preceded achievement of the Artificer status — and for what?

Unless there is a suitable vacancy 'up the promotion ladder' for a newly trained Artificer, on return to his unit, life becomes somewhat of an anti-climax. No promotion. No recognition in your normal daily contacts. No pay rise — nothing but to wait until a position becomes vacant which, hopefully, will involve promotion, too. Am I right?

I know when I passed my Artificer training I wanted everyone to know and appreciate the fact that I had completed the final hurdle in my trade — with success. I didn't have to shout about it, mind you — and I didn't. Why didn't I shout? Because recognition sat plainly on my arm for all to see.

The coveted Hammer and Tongs sat firmly above my three stripes and below the crown of the Staff Sergeant rank that went with the title. I would never have to tell anyone I was an Artificer — they could see for themselves. I would, however, still have to identify my speciality but that became less important as time progressed. The recognition boosted my confidence, too.

In RAEME we no longer have any means of recognising our Artificers — never mind the other aspects mentioned previously. To many of us the attainment of the Artificer status is merely another inconvenience out of the way. Our superiors, frequently, barely acknowledge our achievement in any way at all.

Instead of added responsibility to match the status many of my contemporaries, I know, returned to their former role with hardly a congratulatory remark being passed. How deflating! How demoralising! Something should be done about it.

For some time now there has been talk of trying to re-introduce the 'traditional' Artificer badge. There have been opponents to this, as one would probably expect, because it is of British origin — or so it is believed. As an alternative many designs were submitted in recent years which, whilst having some relevance to individual trades, were complicated in design and, when reduced in size to fit on a sleeve, would have been almost indistinguishable in their meaning.

The favourite choice is still the 'traditional' Hammer and Tongs worn by Artificers in our sister Corps in Britain, New Zealand, Malaysia and Canada.

After contacting the Corps Secretariat REME in UK to determine how the Hammer and Tongs 'tradition' began we learned the following:

"... the hammer and tongs badge was one of several badges worn to denote tradesmen — the others known being the wheel (Wheelwrights) and the spur (Farrier). The hammer and tongs were used by Blacksmiths and Armourers, and these metal working trades were at some time in the past classed as Artificers. This word then had the same meaning as the word Artizan has now and it was only in the 19th century when machinery became more complex that the word Artificer was given the meaning to denote a higher class of metal working tradesman. In the Army, with the appearance of 80- to 100-ton Fortress guns operated by steam power, steps were taken to form a Corps of Artificers and in 1882 this new Corps was formed and comprised 1 Warrant Officer and 49 Sergeants.

In being before then was the Corps of Armourers, administered and trained by the Inspection Branch of the Small Arms Factory at Enfield and members of this Corps generally wore the uniform of the regiments to which they were posted for duty, with the hammer and tongs badge to symbolise their calling.

These two Corps (the Corps of Armourers and the Corps of Artificers) were amalgamated in 1894 — with

the Ordnance Store Corps (formed in 1865) to form The Army Ordnance Corps, the forerunner of the RAOC and, of course, the tradesmen brought their badges with them and retained them when REME was formed in 1942 . . .”

From the foregoing it is clearly seen that the Hammer and Tongs have been accepted as an Artificer symbol for nearly 100 years. Although primarily indicative of a higher class of metal working tradesman in the days before electricity and electronics, what is the point, really, in distinguishing between trades when what we really want is the recognition that we are higher class tradesmen, the Artificer, in whatever trade we specialise in.

The benefits of wearing the symbol include instant recognition of our status by superiors and subordinates alike with, hopefully, more respect being shown for our experience and ability, no matter who we work for.

A. N. Artificer

**Editor:** Comments to support, or oppose, the re-introduction of the Hammer and Tongs for Artificers are encouraged. Letters to The Editor, “The RAEME Craftsman”, DGEME (AO), Russell Offices, Canberra, ACT 2601, will be most welcome.

## PM

**It is difficult at times to make decisions — but NO decision is needed in regard to preventive maintenance. It is decidedly necessary for ALL equipment.**

★ ★ ★

The above gem of advice was gleaned from a recent discovery — “A.E.M.E. NOTES”, Vol 2, No 2, of April 1946. To be absolutely fair, though, “A.E.M.E. NOTES” do quote Maintenance Division, ASF, as the originator of the statement. In all, quite a coincidental find.

Coincidental for two reasons. The first is that “A.E.M.E. NOTES” were published and distributed by the Directorate of Mechanical Engineering as the official journal of the Corps of Electrical and Mechanical Engineers. Vol 1, No 1 was published in January 1945 — less than three years after the birth of our Corps. A forerunner to “The RAEME Craftsman”?

It published articles of a general interest nature, and equally as important, it published first class articles of a technical nature covering many engineering techniques, AEME organisation, equipment development, management, and leadership techniques and a variety of other very interesting topics.

“The RAEME Craftsman” is now attuned more to general interest articles and news about unit activities and the people involved in those activities. “The RAEME Journal”, which has yet to surface and will, later this year, is designed to cater for the more technical subjects covered successfully in “A.E.M.E. NOTES” — some thirty-four years ago.

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Isn't it strange how history repeats itself? Many of the topics published more than a generation ago are just as topical today. To prove our point we shall include extracts from “A.E.M.E. NOTES” in future issues.

The second coincidence is the subject of Preventive Maintenance (PM). Only this week I had the pleasure of reading Issue 1 of “MAINTENANCE NEWS”, with a dateline of January 1979. The main theme of this new publication is PM.

PM is not a new technique by any means, as our research bears out, but it is so easily and frequently overlooked. As “A.E.M.E. NOTES” quoted, once again from Maintenance Division, ASF — “Taking the easy way out” has a bad reputation, because it's usually associated with a person who is lazy or weak who takes the easy way instead of the BEST way. But there are times when the easy way IS the best way. A good example of that is in the performance of Preventive Maintenance service in the Army. For it's a lot easier to tighten a few nuts than it is to replace a whole assembly that's been damaged because the nuts weren't tightened. It's a lot easier to keep a battery filled with electrolyte than it is to put in a new battery. It's a lot easier to keep a rifle clean than it is to fix it when it jams — especially if you're under fire when it jams! So here's your chance to do something you've always been told not to do — take the EASY way out. Use PREVENTIVE Maintenance.”

The message carried by “MAINTENANCE NEWS”, Issue 1, Jan 79, is no different and no less important.

In these times of economic restraint the correct care and maintenance of the Australian Army's equipment are vital in the fight to minimise repair and replacement costs and to increase equipment availability.

PM is the first round of the continuing fight to contain rising costs in maintaining our equipment. A successful first round will save the Australian taxpayer money. You're a taxpayer! PM is your weapon — and the EASY way out.

## A & T GRADUATES

Eleven of the forty-five graduates from the 1/78 Admin and Tech Officer Qualifying Course were members of the Corps of Royal Australian Electrical and Mechanical Engineers.

At a graduation parade before the Commander, 1st Division, Major General P.H. Bennett, the following RAEME graduates received their commissions as Lieutenants:

A. Naduvary, E. G. Craig, E. Emery, J. A. Heron, B. C. Jones, D. E. Martin, T. M. Martin, D. B. Melandri, F. E. G. O'Brian, T. L. Swan, R. R. Thompson.

Our congratulations to the graduates. We wish them a long and successful career in the Corps.

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# THE FIRST 100

Following our plea for information of the "First 100" Workshop Apprentices, formed from intakes in 1939, 1941 and 1945, initial response has been encouraging.

Letters from Maj Balsillie, OC Sydney Wksp Coy, and Cfn Millburn, 1 Base Wksp Bn, containing separate tidbits of information appear in the 'Letters to the Editor' columns. In the meantime, Maj McPartlan, SO2 Systems, DGEME, has carried on his own private research to provide the following memory joggers for those who are not too sure if they did know any of them:

- |                          |  |                        |   |
|--------------------------|--|------------------------|---|
| <b>F. R. Parker</b>      | Retired as Lt Col and now resides, in retirement, in Western Australia.  | <b>M. Dunstan</b>      | Discharged at end of apprenticeship. "Mocha" played football for Collingwood during his apprenticeship and eventually coached Fish Creek where he had the pub and a garage. |
| <b>J. W. Wylie</b>       | See Issue 1 of "The RAEME Craftsman".  | <b>F. R. Towers</b>    | Discharged at end of apprenticeship. Last heard of as a serviceman with RACV.   |
| <b>K. H. Blanton</b>     | Last remembered as a WO1 in Melbourne — probably EIS.  | <b>T. P. McPartlan</b> | Still serving. SO2 Systems, DGEME, Army Office, Canberra.   |
| <b>N. P. McNevin</b>     | Retired as a Maj in 2 MD.  | <b>H. A. Johnston</b>  | Discharged as a WO.   |
| <b>H. J. Nicholas</b>    | Retired as a Maj — last appointment as OC Melbourne Wksp Coy.  | <b>V. L. Hale</b>      | Discharged as a WO — last known to be a Service Station Proprietor in Hobart.   |
| <b>R. J. Hammond</b>     | Retired as a Maj in Melbourne.   | <b>D. V. Cupit</b>     | Discharged as a Sgt. Last heard of driving a taxi in Hobart.  |
| <b>A. G. Higgins</b>     | Retired as a Lt Col to the Sunshine Coast. Keeps in practice on decision-making by walking to the beach each morning and deciding whether to go left or right. | <b>R. R. Felstead</b>  | Discharged as a WO.   |
| <b>F. W. Millar</b>      | Retired as a Maj — designer of the MILLAR Bridge. First apprentice to enlist.  | <b>J. A. McDonald</b>  | Discharged as a Lt Col — last appointment was SO1 Mech, DEME, Melbourne.  |
| <b>M. F. Sutcliffe</b>   | Retired as a Capt in Melbourne.  | <b>R. L. Slocum</b>    | Discharged as a WO1 in Brisbane.  |
| <b>V. B. Kimber</b>      | Retired as a WO2. Started, in conjunction with R. M McCALL, the "Wodonga Express". Currently employed in 1 Base Wksp Bn as an Instrument Fitter.               | <b>K. C. Boase</b>     | Discharged as a Maj — last appointment was as EME 11 Sup Bn.  |
| <b>A. C. Bishop</b>      | Retired as a Lt Col in Queensland.   | <b>E. Aide</b>         | Discharged as WO1 in Brisbane.  |
| <b>P. V. Solly</b>       | Retired as a Maj in Brisbane — living in Aspley.   | <b>R. Barrett</b>      | Discharged as Lt Col.   |
| <b>J. R. Richardson</b>  | Retired as a WO1 — now a Patents Assessor in Canberra.   | <b>B. S. Laughlan</b>  | Discharged as a WO1. Currently Technical Officer at HQ 1 EME Gp, Brisbane.  |
| <b>L. J. Hildebrandt</b> | Deceased. "Guns" Hildebrandt died in RGH Heidelberg, 1966.   | <b>D. K. Doig</b>      | Discharged as a WO, RAE(TN). Currently working in PNG.  |
| <b>D. Watson</b>         | Discharged at end of apprenticeship. Commenced work at SEC Victoria as a Draughtsman.  | <b>A. F. Beecham</b>   | Discharged as a Capt in Sydney.   |
| <b>W. C. Calder</b>      | Discharged at end of apprenticeship. Worked as a Fitter in Wonthaggi (Vic) mines. Played VFA football for Coburg firsts while an apprentice.                   | <b>R. D. Kippen</b>    | Discharged as a Maj in Sydney.  |
| <b>I. R. Archer</b>      | Still serving. Now Major EME at 2 Base Wksp Bn.  | <b>D. R. Condren</b>   | Discharged as a Maj. Currently employed in the Training Section, Defence Centre, Melbourne.   |
| <b>S. F. Gibbs</b>       | Retired as a WO1 — currently an instructor at RTC.   | <b>P. E. Choquenot</b> | Discharged in 1952. Joined the RAAF. Was a pilot until 1964. Now Senior Investigator (Air), Department of Transport, Melbourne.   |
| <b>P. L. Seppings</b>    | Discharged at end of apprenticeship.   | <b>R. A. Metham</b>    | Discharged as a WO1. Runs a manufacturing business in Wodonga. Been known to visit the RAEME Sgts Mess on a hot day.  |
|                          |  | <b>P. C. Musto</b>     | Discharged as a Maj — last appointment was SO2 Scales, Sup Div, Melbourne.  |
|                          |  | <b>A. J. Balsillie</b> | Still serving. OC Sydney Wksp Coy.  |
|                          |  | <b>R. B. Shedden</b>   | Discharged at end of apprenticeship. Currently Manager of Coca-Cola Bottlers, Townsville.   |

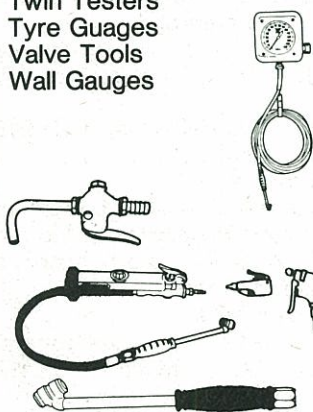
As previously stated these tidbits are merely memory joggers. If you have any more information to add to this, and to the original list, please drop a line — or two — to The Editor, "The RAEME Craftsman", DGEME (AO), Russell Offices, Canberra, ACT 2600.

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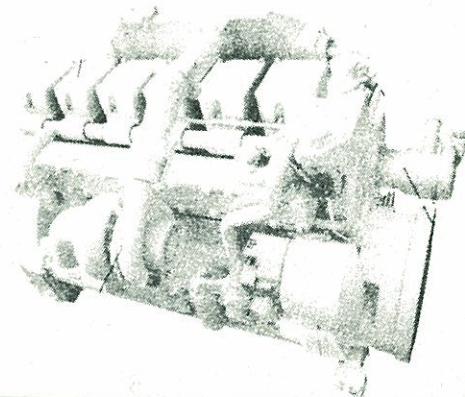
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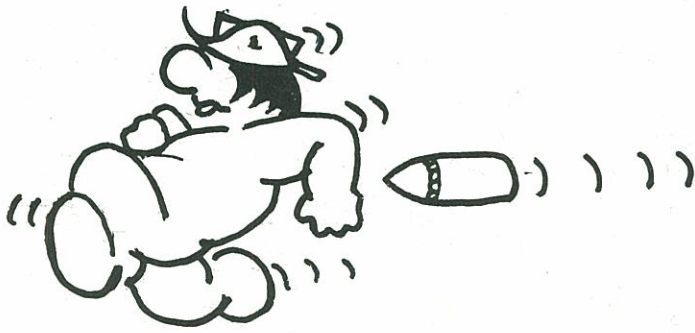


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# FF COMD JOTTINGS

## THAT SINKING FEELING

The day started magnificently. Sharp rays of sunlight accentuated in the dusty haze of the Katherine area in the Northern Territory, gave no hint of the events which would unfold that day.

As the sun rose higher, illuminating the day's activities, few members of the 1st Aviation Regiment, if any, realised the worms of disaster were already undermining the tranquility of the scene.

The first phase of the exercise had been completed the previous day. Rotary winged aircraft had conducted a successful reconnaissance of the Victoria Highway down to the Timber Creek area and today, under perfect weather conditions, now accentuated by a perfectly clear blue sky, a fixed wing troop of aircraft was to insert some 'SAS patrols' on to North Peron Island — a low, sandy, desolate patch of brown grass and sand in the Timor Sea, ten miles from the western coast of the Northern Territory and approximately seventy miles north-west of Katherine.

A tricky task, requiring sound navigation over remote and rugged country to arrive at Peron Island just on dusk and return to Base Camp at Tindal Airfield, on a dark, moonless night.

The 'patrol' was to be placed on the beach at low tide. Once there it was to establish HF communications and to operate from the island for three days. Supplies would be dropped by subsequent fixed wing sorties, at night. A task that could be described as being right up the alley of the Porter 'Jocks'.

Preparation continued all day. The aircraft were prepared, rations issued, weapons distributed. The patrols, consisting of an assortment of RAEME, Ordnance and Aviation Corps personnel, received their final brief and the troop commander asked if his aircraft required the fitting of the large 'balloon' type wheels because of the conditions of the landing strip. The reply was negative. The workshop finalised preparations of the aircraft and the worms moved closer to the surface.

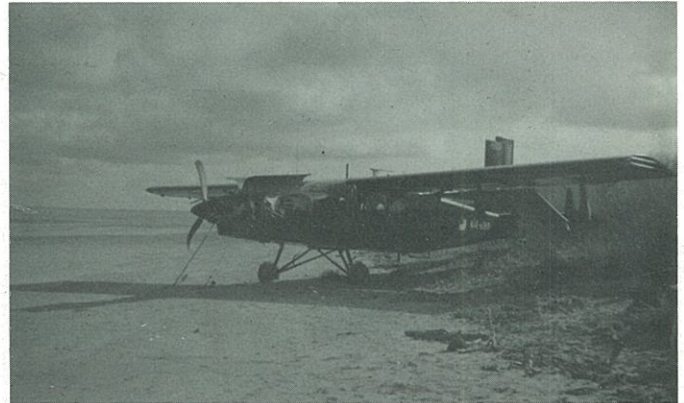
At about 1815 hours the stage was set.

Porter A14-690 turned onto finals at Peron Island. The pilot finalised his checks and pointed out a good spot for a camp, to the patrol leader.

The pale, glistening beach rose out of the blackness. The landing light cast flickering patterns on the sand. The smooth, rushing sound of air changed to a roar as reverse thrust was applied and the aircraft slowed shakily to a halt.

At the moment the aircraft's movement and noise should have been dying the insidious troublemaker, the worm, surfaced.

A soft patch of sand, a reverberating roar, a searing flash — and Porter 690 came to rest, nose down on Peron Island Beach.



*Momentarily rescued from the incoming tide and as far as we could take her.*



*The repairs completed the aircraft is put through ground run checks.*

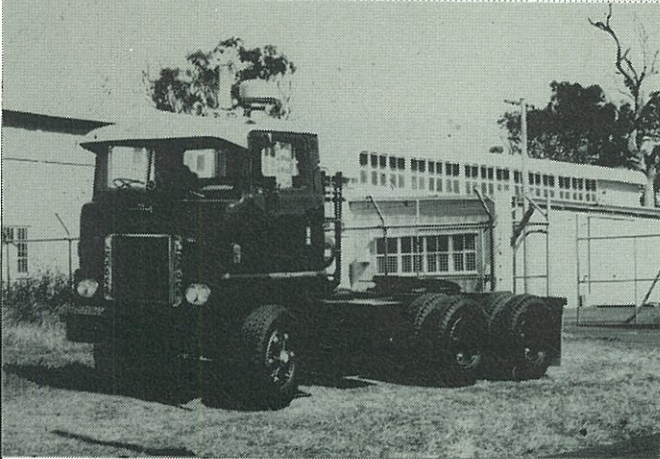


*As the tide rushes in — the aircraft finally commences take off*



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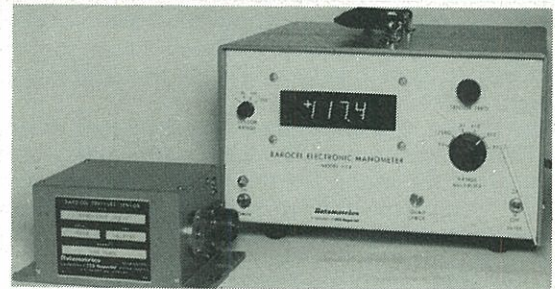
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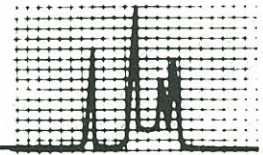
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As the tail settled back to its proper position the occupants scrambled expeditiously into the cool of the tropical night. Shaken, the former occupants of 690 surveyed the damage and, whilst doing so, quickly recognised the sound of the second aircraft descending, out of the blackness, onto the beach.

Frantic attempts to contact the aircraft, or attract the pilot's attention, proved fruitless. Within seconds it landed beside them — safely.

Together the crews surveyed the cause of the incident and the resulting damage. The aircraft's wheels had sunk into a soft patch of sand, right at the end of its landing run. Apart from a small indentation in the mainplane, most of the damage was confined to the engine and propellor. A new engine and propellor were required if the aircraft was to fly again.

Communications were established with Exercise Control Tindal and, after some exasperating minutes the situation made clear to the directing staff. Whilst Tindal was ordering an engine and propellor from Oakey the worms struck again.

With some dismay the crew became aware of a more pressing problem — a fast rising tide was now approaching with the speed of a heavily laden goods train struggling up a slope. Every spare hand was turned to moving the aircraft above the high water mark.

Five hours hard labour, accompanied by much sweating and cursing, was all the seven members at the site needed to shift the aircraft as far up the beach as possible. Exhausted from their exertions the crews collapsed onto the beach beside the aircraft, caring not a whit for the tranquil beauty of a tropical night on this desolate island.

With the dawn came the worms and yet another tide. This time, to the consternation of everyone, it came right up to the aeroplane.

Whilst every effort was made to move the aircraft further up the beach a five foot embankment prevented any further retreat. A small dam of sand bags was hurriedly constructed before the technical business of removing the damaged engine and prop was commenced.

By radio the crew was advised a Nomad had departed Oakey at 0700 hours with the parts. Hopefully, it would be in location by late afternoon. A request was then passed to the control staff for other items of tooling and spares as well as a forty-four gallon drum of fresh water to wash out the sand, which had been scooped onto the Porter's Pelican-like snout.

Before anything of a helpful nature could arrive the tide returned — this time with a vengeance, swirling right up and over the hastily constructed dam to immerse the lower third of the mag alloy of the undercarriage wheels in its salty solution. Within twenty-four hours the tell tale white puffs of corrosion appeared and a new set of wheels was required. The worms had struck again.

Removal of the engine continued, despite the discomfort and inconvenience of tides and tropical heat. It was fortunate that the 'SAS patrols' had consisted of a combination of RAEME, Ordnance and Aviation Corps personnel. Despite their lack of expertise they worked as a team.

Those who were not involved in the engine removal quickly learned how to operate the F1 to keep communications open, whilst others fished and cooked.

By now aircraft had flown in extra tradesmen, spares, tools and fresh water and taken the slightly injured tradesmen out.

The worms, however, had not been laid to rest.

On the second night the crews awoke to find themselves and their gear about to be washed out to sea. Another



larger than normal tide had caught everyone napping and a sleepless night ensued as gear was retrieved and sorted out and rations dried.

The replacement engine and propellor were delivered on the second day. Work commenced immediately to install it.

Heat, sand, saltwater, foul tasting fresh water, tides, heat rash and poor communications were now combining to make this recovery something of an ordeal.

Owing to the interrelationship between propellor and engine, rigging a Porter engine is a frustrating task in the best workshop conditions. In these conditions the task was fast becoming intolerable.

The teamwork which had developed spontaneously was still there but tempers were becoming frayed. The job, however, couldn't be rushed. It had to be right on the first press of the starter. Nevertheless, another day in this sun wasn't going to do anybody any good. That night the task was completed and everyone tried to sleep, hoping this would be the last night.

Dawn heralded a brilliantly clear sky which boded well for the enterprise about to be undertaken. The aircraft was rolled onto the beach and the finishing touches and before flight checks carried out. Optimistically, the remainder of the party retrieved equipment and tools and commenced packing.

The aircraft was chocked with sand bags and the starter pressed to commence the ground run checks.

Familiar and reassuring sounds of the Pratt and Whitney engine winding up gave everyone heart. The engine lit off and ground run checks commenced. Within half an hour they were completed with only minor problems apparent.

These were quickly adjusted.

Eager to capitalise on the favourable situation and even more eager to be well rid of this island in the sun (Harry Belafonte could have it!), the aircraft was rapidly loaded. The pilot taxied the aircraft to the end of the 'strip' and applied full power, shattering the stillness of the day on that desolate beach as the engine roared to full power.

With a surge and a jerk the aircraft bolted along the beach, bouncing shakily over the ripples in the sand. The tail came up and, with a final lurch, Porter A14-690 became airborne once again, heading for home.

The watchers relaxed to await another aircraft. The aircraft that would evacuate them from their 'tropical paradise', back to Tindal for a long overdue shower and a decent meal — away from those accursed tropical worms!

*Footnote:* Owing to the distances involved and the conditions encountered, the unscheduled recovery had been a test of logistics, giving all concerned a firm understanding of the aviation support required when operating in very remote parts of Australia — thousands of miles from base facilities. It had also been a good test for a variety of personnel suddenly thrust into an unfamiliar situation. The end result, achieved with a minimum amount of confusion and a lot of personal effort on the part of the participants, was most gratifying.

# AN UNPRECEDENTED PRESENTATION

Major L. H. R. Patrick



*The RAEME pipe banner is presented to a Piper of the Pipes and Drums of 5/7 RAR by the OC Tech Spt P1, Capt L.H.R. Patrick*

The last act of the mechanised infantry battalion trial was the presentation of a RAEME pipe banner to the Pipes and Drums of the 5th/7th Battalion of the Royal Australian Regiment.

Unprecedented in the history of the Royal Australian Regiment the banner was presented as a token of the high esteem held by the Battalion's RAEME personnel for the 5th/7th Battalion, RAR, as a result of the trial.

For the purpose of the trial, held during 1977 and 1978, 5/7 RAR were joined by support elements from 8/12 Mdm Regt and 1 FER to provide a combined M113 A1 family of ninety-eight vehicles.

The aim was to look at the feasibility of mechanised infantry with supporting elements; to develop a doctrine in respect of mechanised infantry/armoured operations and to produce a set of SOPs and planning data to enhance the possibility of future mechanised formations.

To provide suitable RAEME support for the period 5/7 RAR's normal technical element of seven other ranks was increased to include one officer and thirty-five extra other ranks.

The arrival of the OIC of the proposed Tech Spt P1 in March 1977 signalled the start of RAEME planning whilst the arrival of the remaining thirty-five other ranks was signalled in June of that year.

They were to arrive four days after the signal to commence a three month detachment from units as far away as 2 FER in Queensland and 1 Armd Regt in Victoria. The 'team', it was advised, was to be functional, complete with tools, vehicles and spare parts, to support a mechanised infantry battalion exercise at Puckapunyal, within six weeks.

Six weeks? Wow!! Suddenly everything had to move into top gear and here tribute must be paid to all those involved — they made it.

After a quick brief following their march in, on what they were there for and what was expected of them, the 'team' moved into top gear. It was a sight to behold.

Recovery Mechanics typed inventories, Vehicle Mechanics interpreted CES, Radio Mechanics unpacked repair parts. They also assisted B2 personnel to warehouse the parts in binpacks in readiness for fitting into trucks. Almost 2,000 indents were raised for repair parts and 300 more for equipment table items and associated expense stores for the B1 area.

When vehicles were ready for issue from the supporting supply battalion future inventory holders were rounded up by the B1 representative who supervised a one time transaction for issue and receipt at the supply battalion. Other equipment, such as generator sets, were checked upon their arrival, tested and issued all in one transaction, too. Such were the demands of a short time frame.

Whilst this was taking place an EME Ops element assembled the technical data package required to operate the system in the field; established a FEME1/EMEFIX system, previously unknown in the Battalion, and carried out numerous repairs to the Battalion's equipment in readiness for the move. SOPs were written, published, promulgated and issued to both RAEME and Infantry personnel so that operations could begin as soon as the remaining vehicles were received.

With the exception of 700 outstanding repair part demands the six week deadline was met. Apart from the outstanding items the only other thing missing was, probably, a little confidence, bearing in mind the expectations of the Battalion and outside agencies.

On arrival at Puckapunyal the Battalion received the remaining fifty-five M113 A1s and re-possessed another twenty-five previously used by the Battalion for company training, which had been maintained by 1 Armd Regt Tech Spt Sqn.

All the vehicles were issued from supply battalion to infantry battalion within four days. A credit to the Battalion's organisation.

From that point on the RAEME team became functional and, apart from the "Night of the Fuel Tanks (or Kristalnach)", the exercise went off with very few hitches. Soldiers who had not operated in the field before performed with amazing efficiency.

The "Night of the Fuel Tanks" deserves a particular mention because it consolidated relationships between RAEME and Infanteers for the rest of the trial and because it was the night when the RAEME team were well and truly "blooded" in what could be expected of them. From that point they never looked back.

The events that brought about this night of nights started when some of the M113 A1s travelled a few kilometres and then stopped — for no apparent reason. An inspection of fuel lines revealed granules of a brown sugar like substance were blocking the lines.

On further investigation it was discovered that the most recently received vehicles, those from the supply battalion, were all suffering, to varying degrees, the same symptoms. The solution, it was decided, was to remove all fifty-five fuel tanks, less those that were integral, steam clean them, wash the water out with a water dispersant and refit them.

It would be difficult, probably, to envisage Critical Path Analysis being used in the field — but it was.

The infantry crews, with a RAEME tradesman supervising three vehicles at one time, removed the tanks. Trucks moved the tanks to Pucka Wksp Coy where one crew steam cleaned, another applied the water dispersant and a third loaded the tanks back on to the trucks. Back at location the vehicle crews refitted the tanks under RAEME supervision.

Of the fifty-five vehicles only two suffered re-connection problems and the whole task was completed, with all vehicles ready for field operations next day, within sixteen hours.

A tremendous example of RAEME/Infantry co-operation which, having been achieved on a Battalion maintenance day, involved a minimum of cost.

On their return to Holsworthy the Tech Spt P1 was accorded sub-unit status by the CO and removed from the Log Coy command structure. The sight of the RAEME flag flying on the Battalion flag pole was a boost to morale and an inspiration to all.

Facilities at this time were a problem. Buildings were occupied on a loan basis. As a result stores and personnel were spread over a wide area precluding any real form of control, with repairs being carried out from workshop vehicles.

1 FER and 17 Const Sqn came to our rescue and within four months had erected two Lysaght huts and six cadet 'Q' stores. A compound was also provided which was fenced by the Infanteers. Altogether heavenly facilities compared to the former makeshift arrangements.

The 'team' had eight hours notice for the next exercise — at Bowral. The Battalion were required to patrol a

stretch of road in the area and committed sixty-five vehicles to the task. Despite a fifty mile run in the early hours of the morning to reach the area only one vehicle broke down — the CO's. A quick application of a paper clip and it was back on the road.

Exercise "Novice Claw" was a sub-unit exercise, at Singleton, designed to provide mechanised training for rifle companies with selected support company elements.

A detachment of the RAEME team went along in support with backing from Holsworthy. As each company used the same vehicles technical support became complicated. By the end of the exercise the vehicles had been through the mill, so to speak, having been operated under conditions very akin to those experienced in wartime.

At this stage the Battalion were advised the trial would conclude in December '78 and preparations were made to return the vehicles. The sight of vehicles, destined for return, standing clean and still, like tombstones in a graveyard, generated a certain sadness among all and sundry.

The team's final commitment was in support of a mechanised battalion who, in turn, were supporting a reconnaissance and anti-armour platoon exercise at Cobar.

Two VMs were assigned the task of caring for ten vehicles, a task they carried out with terrific ability, providing stitch in time repairs to retain the team's untarnished record.

In the beginning life in an Infantry Battalion appeared hard to handle. The physical exertions required of Infanteers were also required of the RAEME team. Rather than shy from the fact they entered into the spirit of things, honouring the PT quota of forty minutes per day and provided representation in all Battalion first grade teams with the exception of Soccer. They also won the TF Summer Volley Ball competition and came third in the winter competition.

Two physical commitments new to the members were the forty mile route march and the Battalion Military Skills competition. Despite the 'newness' of these activities, however, they acquitted themselves well in the forty mile route march due, probably, to the CO's 'incentive plan' — do it right or do it again and again until you do do it right.

Seventeen platoons participated in the military skills competition, with the RAEME team recording quite astounding results. Third in the obstacle course event, fifth in the five mile march and shoot, seventh in the drill event and an overall seventh in the Battalion, proved they were no slouches. The Infanteers weren't allowed to forget this either.

The 'team' still lives with 5/7 RAR, even though the halcyon days of the mechanised infantry battalion are over — for a short time only, we hope.

The success of the Mechanised Infantry Battalion trial, from the RAEME point of view, was directly attributable to the efforts of the infantry crewmen in looking after their vehicles and the efforts of the RAEME soldier who, when faced with a challenge, responded magnificently. The subsequent esprit de corps and the respect held by the 'team' for Infanteers was reflected in the unprecedented presentation of the pipe banner, with the badge of the Royal Australian Regiment on the maroon and gold colours of the Battalion on the obverse and the RAEME badge on the reverse, mounted on the RAEME tricolour.

A historical banner to mark a historical period of RAEME/Infantry co-operation.

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# 17 CONSTRUCTION SQUADRON WORKSHOP

## HECTIC PREPARATIONS

Since our last letter SEVENTEEN has fully recovered from the Christmas hangover and are again back on the job.

Several changes have occurred in the Workshop and we welcome our new OC, Capt K. J. O'Leary; our new ASM, WO1 Daniel Tucker; a rebuild from Darwin, Cpl Bill Taylor, Cfn Danos Archer, Spr (soon to be Cfn) Cottrell, and our RAAOC section, Ssgt Nev Fennis and Pte Roy Moulds. The newest addition, however, is a son to Cfn Mick Smith. Young Alan Michael marched in on 7th December last and has duly received a baby bottle — full of coke.

Our best wishes go to Major Tony Wallace. Congratulations on the promotion and posting — we're glad it's you down there. Also to WO2 Gus Frazer, now languishing in sunny, selubrious Brisbane, and to WO2 George Paschkow down at the oldies' home at 21 Sup Bn. We also lost two to civvy street — Cpl Bill Allom, teaching all he forgot up in New Guinea, and Cfn 'Dutchy' Weistra. Good luck to you both.

The Yogi Bear Christmas social was a blazing success due to the raw efforts of Cfn Max Smart. Everybody certainly enjoyed the evening. The YBSC also has a car rally organised but we'll probably have to postpone that due to our present commitment.

Since our Christmas break things have been a bit hectic as a result of that word UNTAG. One good thing that has come out of it, anyway — is that we can boast the greatest satisfaction of stores demands. Besides our Workshop tasks, of course, there have been numerous other activities enjoyed by all.

There have been mine detection, booby traps (no, not bras) and such enjoyable pastimes as contact drills and ambushes and numerous lectures concerning crocodiles, lions, mossies and diamonds, supplemented by several

dozen needles, endless queues and piles upon piles of boxes, pallets and paint.

We've been documented, indoctrinated and processed and assumed that we can go anywhere without fear of contracting any known disease or sickness. At the time of writing we're still packing and waiting for something called YELLOW.

Everyone's keen to go, especially Cfn John Bail, who, after eleven years' service and "never north of Magnetic Island" (he should complain). Sgt Tony (Antarctic) O'Mara has demonstrated his fitness with a few impromptu par-rolls of "D-Fors" kennel.

The Workshop has performed well in the field of sports with an unbeaten inter-troop volleyball team, most capably led by Cpl Kev Francis. Cfn Scotty McIver and Cfn Dano Archer have represented the Squadron at rugby and Cfn Kelly Knott is the unit's resident soccer goalie.

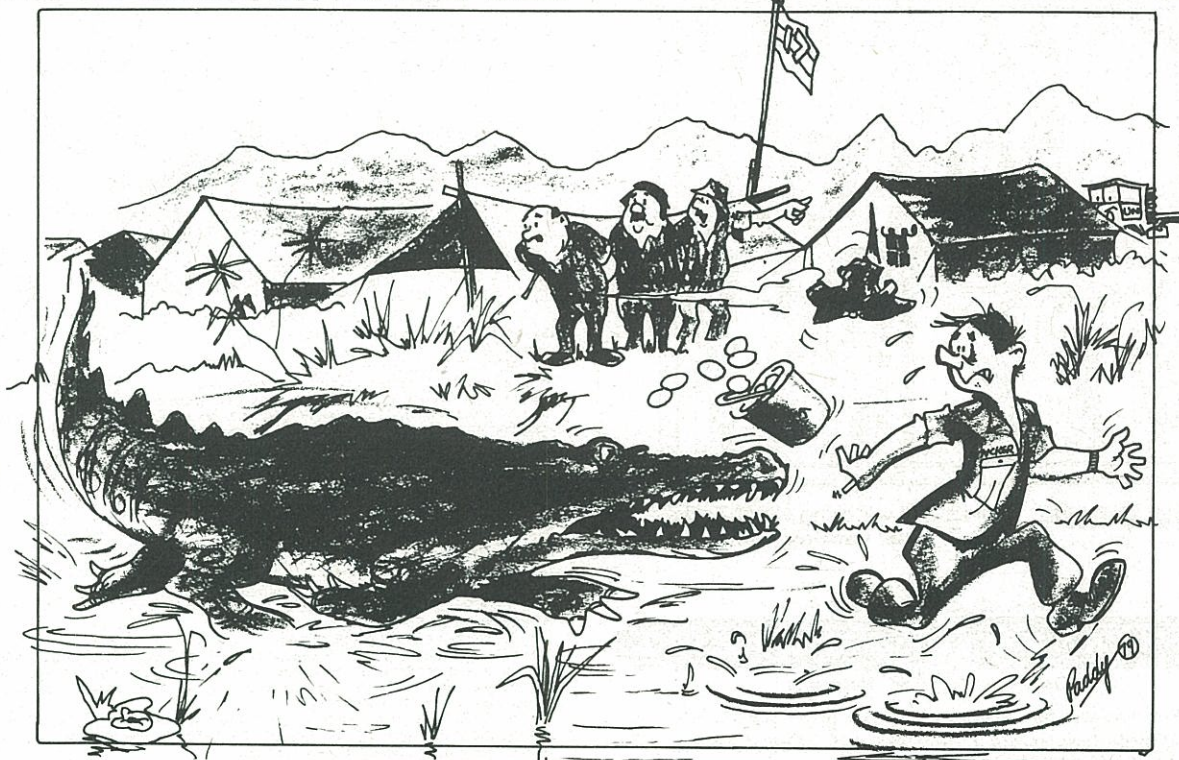
Canoeing has become a popular pastime with Cfn Roger McCarthy rounding up the members of the Workshop at weekends and relishing the terrified screams and cries as they submerge through grade four rapids. The record so far stands at two broken kayaks and one lost paddle.

Our missive wouldn't be complete without some mention of the ASM's two hats (count 'em, two).

Unconfirmed rumour has it that the National Institute is urgently seeking at least one of them to display in its, about to be established, Museum of indescribable militaria. The other one, alas, has recently succumbed as a result of an over-indulgence in a gallon of methylated spirits. Both hats sport every known grease, oil and liquid propellant. Smoking is only permitted upwind of them.

Well, that's about it for this time. We hope our next report will be written from distant shores. (Or jungles? Ed.)

YOGI



"— and over to our left... Oh! good morning ASM... our "B" vehicle section!"

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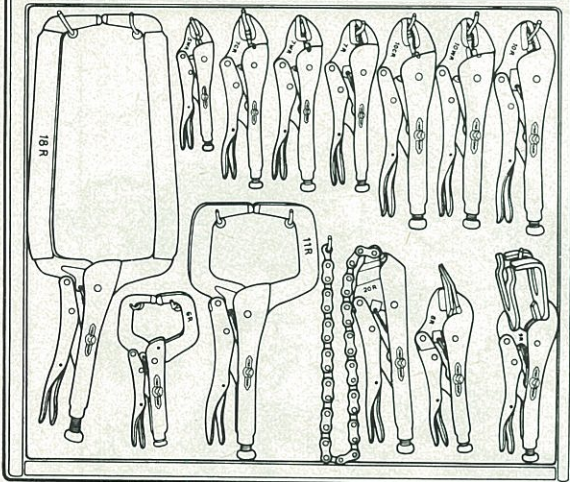
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# LOG COMD JOTTINGS

## THE SPORTING BASE

Fast becoming a recognised training ground for touring and army inter-service teams alike, 1st Base Workshop RAEME, Bulimba Barracks, Brisbane, is also rapidly earning the title of 'The Sporting Base'.

For the second year running the ASRU team found Bulimba the ideal environment for pre-match preparation and the Queensland Inter-Service Soccer squad made Bulimba their new home, too.

As if inspired by these recent developments our unit sporting teams and personalities have also enjoyed a more successful year.

Both the unit's Rugby Union and Soccer sides improved immensely to find themselves fifth in their respective leagues. Similarly, Ten Pin Bowling and Squash teams had a season of success, too. Not, maybe, a year of 'cup winners' but certainly a year for pride in participation and endeavour.

No less than ten sports are played competitively by teams from 1st Base Workshop Battalion, supported by a strong Unit Sports and Social Club.

Individual successes can be seen in Cfn Brooks and Cfn Thickett being selected for the Queensland Inter-Service Soccer team, with Cfn Brooks finally being selected as Queensland Combined Services goalkeeper.

Our Commanding Officer, Lt Col J. G. Demetrovics, himself a representative Soccer player, and our Quartermaster, Lt A. W. C. Fraser, Queensland's Army Soccer

Coach, prepared the Army team which successfully halted the RAAF onslaught of previous years with a two-all draw. All South Queensland Soccer semi-finals and finals were conducted at Bulimba.

Not content with tackling only military opponents our Sports and Social Club challenged the might of the Brisbane Armada by entering a combined civilian/military crew in the annual 4BC Raft Race. This raft race was held over a four mile stretch of the Brisbane River and was sponsored by radio station 4BC in aid of the Queensland Surf Life Savers Club charity appeal.

Thirteen mariners, brave and strong, took to the water — the only military entry out of the many determined to reach the finishing line. Unlike many others, finish they did. However, owing to their concentrated effort in sinking all other entrants, they were not the winners — even though they were first across the line.

Suffering buoyancy problems the Corps coloured raft was only recognised as RAEME by the flags and pennants flying in the wind as they paddled across the finishing line, jubilant but exhausted. Paddling a submarine was not easy!

Using valuable information gained from this prototype the design of next year's raft is already in hand, concentrating on buoyancy, speed and updated armament and munitions.

The final verdict — a good year for 'Good Sports' of The Sporting Base.

## TO EUROPE AND BACK — OLAE!

**Captain J. Walker, Captain B. Whiting and  
Captain D. Pascoe**

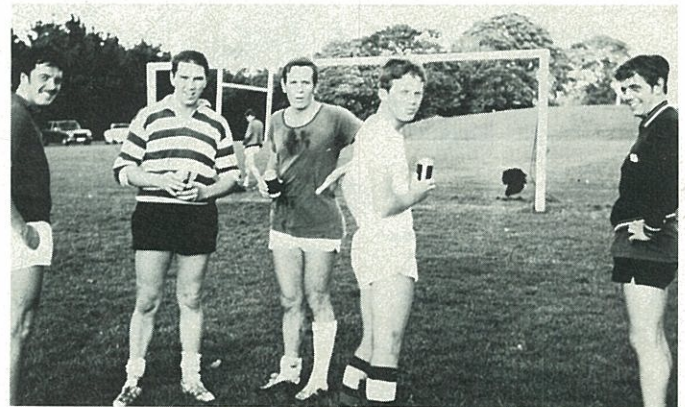
The non-existent English summer was in full swing when we gathered in London before travelling to Middle Wallop to join the Officers Long Aeronautical Course (OLAE). It was early June of 1977, when the standard defence for the weather was. "You should have been here last year!" It lasted through autumn, too, and only stopped being uttered when winter arrived.

Lt Dave Pascoe, formerly of NQ Wksp Coy, was not altogether impressed as he vainly anticipated the arrival of clothing from Australia. His repeated assurances that wearing polyester shorts during the late English autumn was comfortable, left the Poms more astonished than impressed. Nevertheless the welcomes from the locals were always warm, which counted for a lot.

Three of us from RAEME attended the course. Lt Pascoe has already rated a mention. Completing the trio

were Capt Jack Walker, formerly OC 2 Sig Regt LAD, and Capt Bruce Whiting, formerly OC 22 Const Sqn Wksp.

Held periodically at the Aircraft Engineering Training Wing of the British Army Air Corps Centre, near Middle Wallop, the course is designed to train graduate engineer-



*Capt Whiting and Lt Pascoe drinking "Fosters Larger" tubes after a hard game of soccer*



*Capt Walker pointing out how things are done in Australia. Note the tilt on Lt Pascoe's Pint taken in the offrs mess at Middle Wallop*

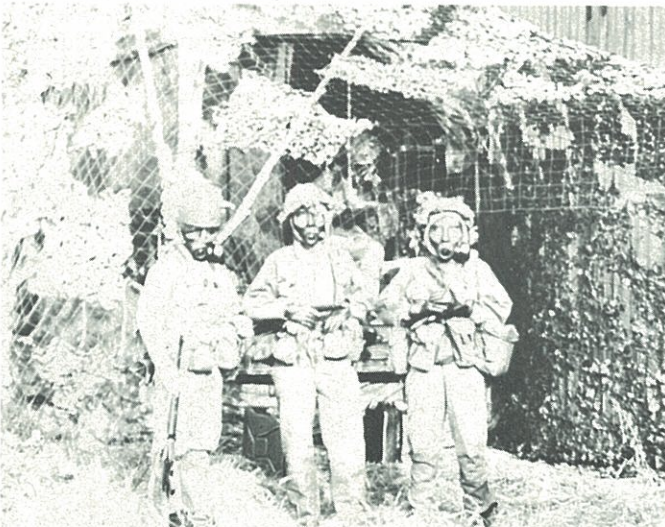
ing officers in aeronautical engineering. It is attended, primarily, by British Army graduate engineers prior to taking up appointments at aircraft workshops.

The first phase of the course was undertaken at the Royal Naval Engineering College in Plymouth.

There we undertook a crash course in aerodynamics, aircraft structures and gas turbine theory, bringing us up to a level of knowledge that would enable us to study on equal terms with aeronautical engineers who would soon join us after graduating from the Royal Military College of Science, Shrivenham. At that stage studies were impaired by the drastically poor form of the touring Australian cricketers. It goes without saying that the locals took great pleasure in reminding us of the fact.

A summer leave break after four weeks in Plymouth gave us the chance to 'do' Europe and we did. At times the three of us were spread from the north of Scotland, to Moscow in the east and to Rome in the south. A most enjoyable time for each of us as we joined an estimated 80,000 Australians also 'doing' Europe. However, all good things must end sometime and back to Plymouth we went, to continue our training.

On our return we were joined by the members from Shrivenham, and to our surprise, we learned that three of the newcomers — Lts Graeme Keene, Peter Smart and Alistair McPherson — had completed a trip, by Landrover, through much of the Australian outback in mid-1976.



*Capt Walker (on the left) on exercise in West Germany. He is dressed in a N.B.C. suit and gas mask.*

They had, apparently, travelled the old telegraph route from Adelaide to Darwin, then through Mt Isa to Melbourne before returning to Adelaide. After renewing their acquaintance with Capt Walker it was inevitable that many a "warry" was spun over some warm English ale.

It was also embarrassing, however. The Pommie trio had seen more of the Australian outback than we had.

The time remaining at RNEC was spent on more practical aspects of aeronautical engineering, including flying training in Chipmunk training aircraft, turbine engine testing and wind tunnel experiments.

Despite the work the social aspects were not neglected. A very successful Australian beer and film night was held, with many favourable comments passed about our cool brew and code of football. We also took part in Trafalgar Day festivities (a celebration of Nelson's victory over the French), which gave us a rare insight into the sometimes strange customs of the Senior Service.

Returning to Middle Wallop we discovered traditional olde English villages, which included Nether Wallop and Over Wallop (with the old Roman city of Winchester to the south and Salisbury to the west). All in all an area steeped in history, dating back to the Druids of nearby



*Capt Walker just having returned from a flight in a U.S. Army Huey Cobra Gunship Helicopter based in Schweinfurt, northern Bavaria.*

Stonehenge. (Danebury Hill, on the far side of the airfield at Middle Wallop, was the site of a tribal village established by Ancient Britons, is excavated and well worth a visit — Ed.)

An attractive feature of this area was the large number of quaint olde English pubs, with their low ceilings, centuries-old decor and quiet, friendly atmosphere.

A nightfighter base during World War II the Middle Wallop airfield passed into army hands in the late 1950's, following the formation of the Army Air Corps. Containing Headquarters Army Air Corps, Flying Training Wing, 70 Aircraft Workshop (similar to 5th Base Workshop Battalion at Oakey) and the Aircraft Engineering Training Wing the base is the hub of the British Army Air Corps — much as Oakey is to the Australian Army Aviation Corps, but maybe moreso.

The 'Wallop' phase of the course provided an introduction to the British Army aircraft repair system, equipment training on Scout, Gazelle and Lynx helicopters, seven hours of introductory flying training on Sioux helicopters and various paperwork and field exercises. There were also

industrial visits to the Rolls-Royce Small Aircraft Engine Division, Westland Helicopters in Yeovil and various Royal Navy aircraft organisations near Portsmouth. All proved very informative.

Again, an attempt was made to introduce a little couth and culture to the British by means of an "Introduction to Australia Night". This included quality Australian wine, standard Australian beer and films of beaches, birds and Aussie Rules.

We also spent a sporting weekend in Paris in support of the All Blacks in a foray against the French. The All Blacks, spurred on by five bus-loads of vocal expatriate Australians imported from England, won handsomely.

Formal aero engineering training concluded at Easter 1978 and attachments to Army Air Corps units of the British Army of the Rhine (part of Britain's contribution to NATO) followed. The purpose of the attachments was to consolidate our formal training with on-the-job experience.

Capt Whiting and Capt Walker headed to Soest and Detmold, respectively, for attachments with aircraft regiment LAD's whilst Lt Pascoe, also in Detmold, was attached to 71 Aircraft Workshop.

Whilst in Germany we participated in a number of interesting unit, task force, divisional and eventually corps level exercises. A particularly interesting one was a battle group exercise at the British Army Training Unit, Suffield, in southern Canada. We certainly got around!

An impressive feature was the emphasis placed on adventure training. This was very well organised and financed and included such activities as off-shore and dinghy sailing, rock-climbing and snow-skiing. All proved successful in promoting a strong team spirit and sense of adventure in the participants.

Unfortunately, as previously stated, all good things must end and, in early August 1978, we returned to Australia and appointments at 5th Base Workshop Battalion RAEME, Oakey.

In conclusion we believe the course was invaluable in more than just aero engineering terms, for it enabled us to broaden our military knowledge under a wide variety of conditions in various countries. The opportunity to travel extensively in Europe was a very much appreciated bonus, too. OLAE!!

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# RTC JOTTINGS

## RTC WIN BIRTHDAY SPORTS

RAEME members of 3MD celebrated the 36th birthday of the Corps at RAEME Training Centre on 30th November 1978.

The celebrations comprised a ceremonial parade in the morning and an athletic carnival in the afternoon after buffet luncheon in the respective messes.

Co-hosted by Lt Col R. R. Tremain, CO/CI RAEME Training Centre, and Lt Col R. W. Bade, CO 4th Base Workshop Battalion, the day's activities concluded the celebrations marking the twenty-fifth anniversary of RAEME Training Centre's arrival at Bandiana.

Commanded by Lt Col Bade, the parade was reviewed by the Representative Colonel Commandant of RAEME, Brig J. C. Dean, OBE, RL, who presented RAEME Corps badges and lanyards to forty-five graduating Army Apprentices on completion of their four year apprenticeship. This training consisted of two years at the Army Apprentice School, Balcombe, and two years at various RAEME units within Victoria. All forty-five are now qualified tradesmen and members of RAEME.

Both track and field events were featured in the athletics carnival and spectators were treated to an afternoon of intense competition between RAEME units from the Melbourne metropolitan, Puckapunyal and Bandiana areas. The teams competed for the Southern Command Cup as well as other perpetual trophies presented by former members of the Corps for individual event competition.

Winner of the Southern Command Cup, presented to the overall winner of the athletic carnival, was Bandiana area.

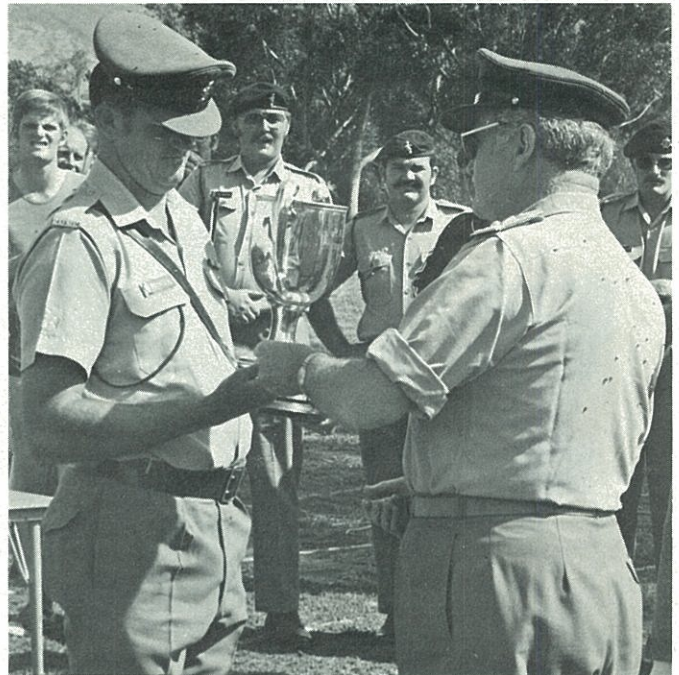
Individual winners were: Melbourne Metropolitan — Southern Command Area Champions and MLC Trophy (Tug-O-War); 100 metres (Geyton Cup), App A. Fox (Bandiana), 11.8 seconds; 200m (Bendall Trophy), Lcpl D. Light (Bandiana), 24.8; 400m (Moran Cup), Lt M. Willis (Melbourne), 50.0; 800m (Sidney and Nancy Cole Trophy), Cfn R. McAllister (Bandiana), 2:14.0; 1500m (Beast Trophy), Cfn D. Martin (Puckapunyal), 4:53.8; 4x100m relay (Henry Room Trophy), Crn P. Cruise, Cfn J. McCarthy, Cfn G. Holmes and App A. Fox (Bandiana), 46.4; 4x1500m relay (Field Cup), Lt M. Willis, Cpl N. Mills, Cfn G. Shields and 2Lt G. Munn (Melbourne), 3:28.4; 5000m team event (Southern Command Plate), Lt G. Ratcliffe, WO1 M. Kusternig, Lcpl G. Chapman, Cfn B. Bloc (Bandiana), 17:57.0; high jump (Summers Trophy), Cfn G. Holmes (Bandiana), 1.72m; long jump (Wiley Trophy), App. A. Fox (Bandiana), 6.16m; hop, step and jump, Cfn R. Moon (Bandiana), 12.57m; javelin, App. J. Bowen (Bandiana), 58.1m; discus, Cfn N. Siddall (Puckapunyal), 35.6m; shot put, WO2 V. Reading (Bandiana), 35.1 ft.

As one can imagine at the turn of any year we have experienced a heavy turnover of personnel. Our farewells

have been made to: our RSM, WO1 M. Pearson, WO2 K. Robertson, WO2 N. Wells and Cpl T. Hurst — all on discharge; WO1 D. Gablonski to 131 Div Loc Bty Wksp; WO1s D. Omond and P. Shanahan and Cpl M. Angus to 4 Base Wksp Bn; WO1 R. Lymburn to HQ Log Comd; WO1 W. Brewer to TSU; WO1 C. Payne to 1 Base Wksp; WO1 N. Cathray to 3 Base Wksp; WO1 I. Roberts to HQ 2 EME Gp; WO2 R. Bailey to 101 Fd Wksp; WO2 K. Burek to ADCG PNG (A); WO2 R. Turner to 1 Sig Regt Wksp; WO2 R. Reid to HQ Log Comd; Sgt P. Pernarowski to 2 Base Wksp; Sgt B. Shedden to 1 RTB; Sgt A. Gorski to 1 Mdm Wksp; Sgt P. McBow to DGEME; Sgt H. Bohlman to Armd Centre; Cpl D. Knight to 2 Cav Regt; Cpl P. Pinkerton to 1 Mdm Wksp, and Cfn M. Suffolk to 101 Fd Wksp.

We wish to thank all of them for the service they have given to RAEME Training Centre and wish them and their families every success in their new environment.

Welcomed to our ranks at RAEME Training Centre are: WO1 W. Holmes, WO2s P. Davis, G. Field, D. Pimm and H. Gooch, Ssgt C. Elefsen, Sgts B. Fletcher, I. Gough, I. Moffat, R. Davey, M. Worley, P. Sandilands, K. Pearce and A. Gascoyne, Cpls E. Price, K. Dwyer, L. White, M. Evans, J. Gosch and D. Duff, and Cfn P. Farrell, D. Kern, J. Smith and Cpl A. Reece. We hope they and their families will enjoy their stay with us.



*Bandiana Area athletic team captain, WO1 (RSM) Milton Pearson, accepts the Southern Command Cup from the Representative Colonel Commandment of RAEME, Brig J.C. Dean, OBE, RL.*

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## QMs RECEIVES ORDER OF AUSTRALIA



WO1 C.J. Williamson, OAM, is congratulated on behalf of all members of the RAEME Training Centre by his Commanding Officer, Lt Col P.R. Tremain.

Warrant Officer Class One Colin James Williamson, RAEME, was awarded the Medal of the Order of Australia in the New Year/Australia Day Honours list for 1979. The award of the medal entitles WO1 Williamson to append the distinction after his name, generally in the abbreviated form of OAM.

WO1 Williamson joined the ARA on 1st October 1956 and has served continuously since then. His early service was as a Technical Storeman. Promotion to Warrant Officer came in 1968 and service as a Quartermaster Sergeant followed in several units, two years of which was spent as an Assistant Instructor on stores accounting at 1st Base Workshop Battalion. From April 1970 he served twelve months with 106 Field Workshop in Vietnam.

He was posted, as a WO1, to the Quartermaster Sergeant position at RAEME Training Centre on 4th March 1975 where the Technical Stores Officer position was vacant and remained so for eighteen months.

WO1 Williamson accepted the full responsibilities of the officer position and, by constant diligence and long hours, maintained accountancy in the Centre at the very highest standard.

His dedication and determination, together with a pleasant personality, earned him the respect of his superior and peers. His courteous and tactful manner in dealings with service members and civilians from outside the Centre enhanced his standing both within the Army and the local civil community.

During the whole of his service WO1 Williamson has demonstrated outstanding ability, loyalty and devotion to duty. In recent times he has continued to display these qualities whilst competently performing the duties normally appropriate to Commissioned Officer rank.

DGEME-A, Brigadier A. D. Powell, acknowledged WO1 Williamson's award with the following message:

"It was with great pleasure that I received formal notification of the approval of your award by Her Majesty the Queen.

Your individual efforts have been in keeping with the very highest traditions of our Corps and will certainly be an inspiration to all members to keep pressing forward to achieve higher personal standards and work oriented objectives.

On behalf of all members of the Corps of the Royal Australian Electrical and Mechanical Engineers please accept my heartiest congratulations on your award of the Medal, Order of Australia in the Military Division."

RAEME Training Centre are proud to be associated with the honour bestowed on Warrant Officer Class One Colin James, Williamstown, OAM.

## 'COMMUNING WITH NATURE'

The photograph shows members of a 'Wireless and Line Course' conducted at the RAEME Training Centre, Bandiana, in the late 1950s (possibly 1957). Pictured with the course instructor, WO 'BIG JOHN' CUMMIN, are (left to right), Cfn Mick Ross, Andy Andrews, Don Kemp, obscured/unknown, Noel Simmonds and Wal . . . ? Absent from the photograph are Cfn Peter Abbott, now a civilian with Technical Services Unit, Broadmeadows, and the photographer, Cfn Bob Thoady. Perhaps some reader may be able to 'fill in the gaps' and say where the members are now.

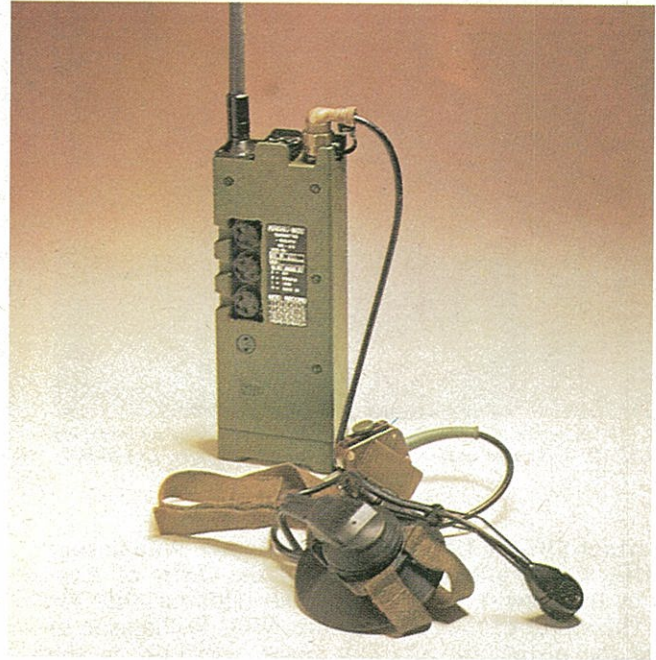
The course instruction did not include carrier pigeon maintenance, heliograph alignment or signal flagmanship. Transistors were rare and of the future while vacuum tubes and selenium diodes were still the rage.



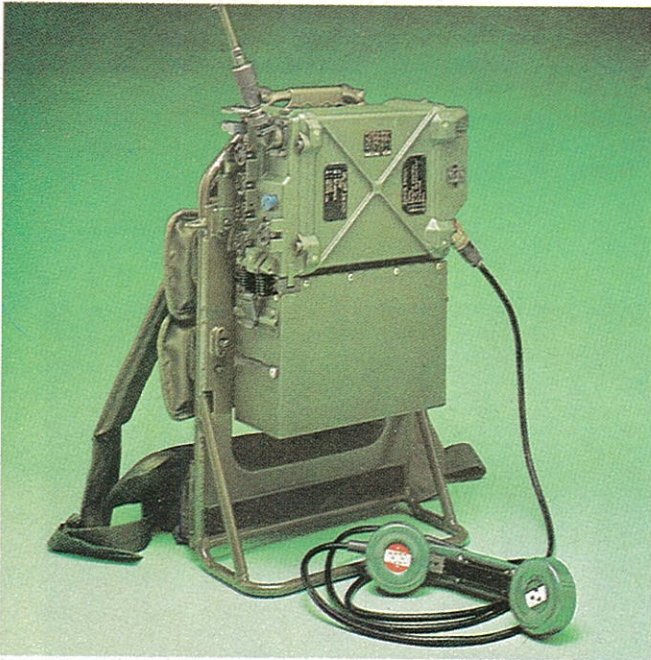
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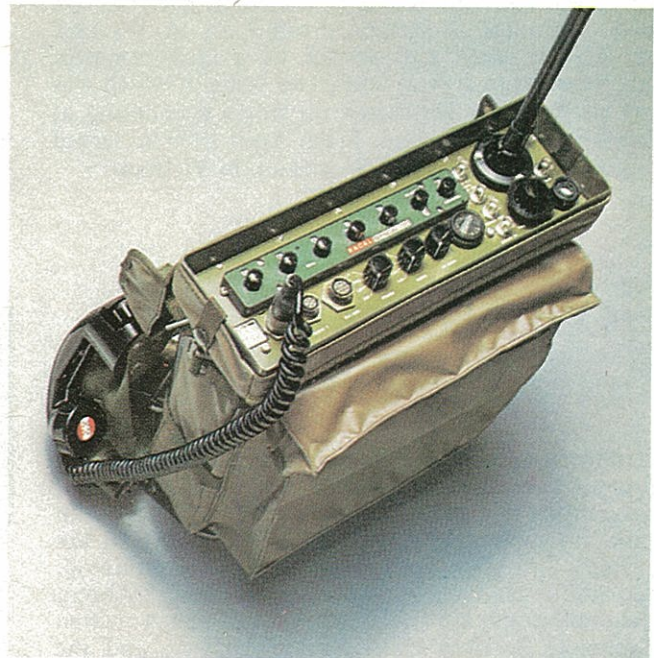
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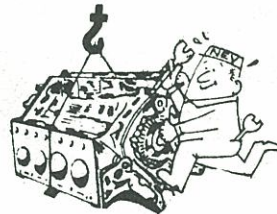
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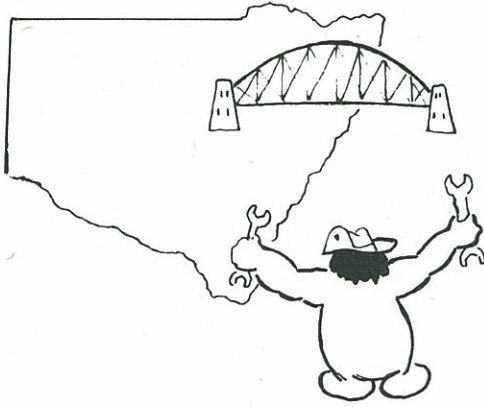
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# 2MD JOTTINGS

## NEW BLOOD FOR 2 BASE WORKSHOP

The Old Folks Home image has gone. 'New blood' from the CO down is ringing the changes on what was a languishing backwater of old parts and spare people. A vigorous, resourceful and productive organisation is being created in its place.

So much for the officers' tea room!

Other notable major activities include the recycling of the goldfish and a flexitime analysis of the output of civilian employees working to the flexitime system. The analysis is being conducted during off-peak periods. SOPs for the night picquet are currently being re-written, whilst continued opposition by the Q Store personnel to the introduction of a water cooler near their soft-drink machine continues to continue at a time when a V2 engine with OHC is being designed for the COs Scott Bonner mower.

Following a tour of the workshop's departments to see how the 'new blood' was making out I have pleasure in presenting the ensuing snippets of newsy gossip for the delectation of our readers.

Capt John Hunter and WO1 Brian Peterson, both recent arrivals to the General Engineering Platoon, where no foreign orders are done, have so far managed to dispose of some twenty tons (their claim) of unwanted items, accumulated over the years. It is now rumoured that 2 Base is discreetly searching for some missing personnel.

Capt Sydes, OC Repair Parts Supply Platoon, claims that, during 1978, his staff processed 12,000 F EME 61s, issued 46,000 scaled items, raised 27,000 demands and processed 24,000 receipts. No wonder he has been posted, on promotion, to Material Branch, Canberra! I wonder what they do when they work!!

Our OC Trade Repair, Capt Jack Maber, spent \$2.3M last financial year — mostly on 'B' vehicles. Despite recent cutbacks in defence spending and vehicle holdings he plans to continue with the current rate of spending. His retirement home is coming along nicely, too.

Lt Roger Garside, recently appointed QM, was during 1978 OC Automotive Engineering Platoon. As such he was also president of a rather dubious society called the 'Greasers Club'. With stalwarts like Cfn Nick Bray, Cpl Greg Finster, Lcpl Tony Suto and Cpl 'Fat Albert' Stansfield, it was impossible to return from a 'Greasers' convention in a pseudo sober state. Bar-B-Qs, car rallies, wine tasting and camping were the order of the year. They even managed to enjoy themselves despite taking their wives and families along with them. An equally inebriated year is forecast for '79.

Production Control has seen a gathering of some 'old' Corps identities over the past year, some of whom have left the service and returned as civilian employees. Included among the 'old' Corps identities, still serving, are Capt Ron Major, PCO and 'Buck Passer' extraordinaire, ably assisted by ASM WO1 John Lehn, who compiles stacks of statistics which are, he assures us, of some value to someone, somewhere — of similar intelligence. We also have the Birdman of Moorebank, Mr Keith Bancroft, who feeds bread to parrots around the workshop grounds. When the parrots migrate he wanders over to 161 Recce Sqn to feed bread to the helicopters.

Over in the EIR Engineering Platoon, Lt Ian Hughes advised that Lt Peter King, Lt Nick Dugley, Cpl Len Rodgers and Cfn 'Turtle' Ryan have all migrated to England for an undefined period. It's only a rumour that they do so at Her Majesty's pleasure!

Meanwhile the Calibration Section continues to be referred to as Bear Park by the technicians (koala bears) therein. Like the koala they suffer the fears of an endangered species and search of an ideal environment in which to survive.

Our sympathy is extended to the Cpl currently recovering from a nervous breakdown after attempting to clean the Tels Section floor. What started as simple concrete grew, over the years, to an anomalous conglomeration of yellow, green and non-skid grey paint. After watching the oil, dust and coffee stains mating for several years the decision was taken to strip the floor for Xmas '78. A caustic solution, strong enough to turn any litmus paper within miles a deep RAEME blue, failed miserably. Then followed a combination of solvent range fuel (Lt Hughes was absent on leave and disclaims responsibility for any breach of safety standards), brake fluid and elbow grease. This also failed to clean the floor but, when washed down the drain, did manage to turn DSU's artificial lake across the road a nice shade of lime green. DSU responded by blocking off our stormwater drain. Not to be outdone, our resident fishermen are enthusiastically searching for a freshwater shark.

Unit Training and Sports Officer Lt Gilbey reports that 4th year apprentices did graduate at the end of 1978, although some tried hard not to. Also, he claims the annual APFA programme achieved an extraordinarily high pass rate and congratulates the unit on its fine level of physical fitness. It seems quite inappropriate to mention that no benches could be found for the five minute step-up stamina test.

During last year, many apprentices were detached for periods to civilian firms. Arriving unexpectedly for inspections/liason visits, as is the custom, WO2 Ian 'Up The . . .' McPherson, Lt Gilbey's offside, reported he actually found one clean shaven and not in need of a haircut.

On the sporting field 2 Base won a hotly contested area hockey grand final, beating 1 Sig Regt. Brian Regent scored the only goal with a short corner in the second period of extra time. The squash team was beaten in the grand final of the 'C' Grade competition by 8/12 Mdm Regt. Capt Sydes, Lt Gilbey, App Collins and App Hepplewhite are to be congratulated on their fine performance during the year.

The 2 EME Gp annual camp training was conducted at Gan Gan. Directed by the iron fist of Major Jim Spence, looking vaguely like a Toohey's draught can, field training consisted of vigorous activities like surf-fishing, sailing and sunbaking.

Whilst on the subject of sports we mustn't forget our Production Manager's sport. Major Ian Archer races pigeons. Recently he spent four days trying to catch a white pigeon which frequently visited the pigeons in his coop. Traps, lures, tempting bait and thirty-three years of army guile proved futile. He finally caught it one night on his return from a party. The culprit was asleep on the top of the coop. The Major is sure the pigeon must have been to the same party.

Among our unusual projects in '78 was a request from the National Parks and Wildlife Service to manufacture a carriage for an historic gun, situated in the fort on Bare Island in Sydney Harbour. The weight of the carriage and the vehicle required to carry it totalled 26,000 lbs. Load limit of the access bridge — 11,200 lbs. We wish the National Parks and Wildlife Service the very best of luck.

We were also given the task of developing an adjustable radar mount for the RAN. Several months and numerous attempts later a solution had been developed, much to the

delight of the RAN who brought along the PR men to record the triumph. When Mr Killen sat down to breakfast and 'The Australian' to read about the 'pop-up target', questions were asked. Lt Col Kingston's thoughts were not available for print.

Among those to leave us recently were Capt Gwylt Shaw, Lt Gilbey and Sgt Fred Sayer. Capt Shaw retired and looked like taking on the job of OC RAEME at a local high school; Lt Gilbey commenced a four year full-time course at Newcastle University, whilst Sgt Sayer, who spent fifteen years at 2 Base conducting tours of New South Wales for his apprentices, was finally cornered and posted to 1 FER. We wish them all the very best for the future.

Tom Hannelly, soft drink machine operator, Credit Union director and part-time 'Q' Store WO, also runs the 2 Base Social Fund. Skimming the odd 20 cents from members' pay packets eventually proved uneconomical and Tom moved into the realm of guessing competitions. The CO's golf score and "How many civilians hide behind the trees waiting for the knock-off siren" are both proving very popular. Which reminds me of the tale about the Irishman who saw a milk crate on the side of the road and thought he'd found a cow's nest. Sorry, Al!!

In conclusion I would like to leave you with the firm impression that life at 2 Base is not all play and no work. Indeed, the ASM insists we report the following completed equipments for the year of '78:

Gen Engr P1 27,226 (includes 8,651 various weapons)  
Auto Engr P1 7,609 (includes 2,120 vehicles)  
EIR Emgr P1 5,657 (includes 3,400 tels equipments)

Ample proof that we're not all old parts and spare people in this vigorous, resourceful and productive organisation that is 2 Base Workshop Battalion RAEME.

*Editor's comments:* Our congratulations to your scribe for this humorous account of 2 Base's activities. We look forward to the next and knowing who the scribe is!

## ROME REVISITED

Corporal Bob Waring

Located behind a barbed wire fence in down-town Mascot, Sydney Workshop Company noted with great interest the article entitled "A Potted Corps History or How Bluebells Are Grown" in the first issue of "The RAEME Craftsman". The theme of our end of '78 celebrations was, would you believe, a "Roman Night" — in the tradition of our ancient and noble Corps history.



*The Cast of Thousands*

Most of the gentlemen revellers came attired in what was no doubt reminiscent of the soldiers of our apparent origin — togas, tunics, thongs, etc. — whilst the noble ladies donned flowing gowns of the same era.

The highlight of the evening was a short play depicting the downfall of Brutus who, as it is well known, masterminded the murder of Big Julie (Julius Caesar). The unit was treated to a historical documentary showing how the Private Eye, Flavius Maximus, was hired by the same Brutus to track down the murderer of Big J. A typical political PR job really, because by super sleuthing, cunning detection and the fact that Brutus was just plain stupid, Flavius concluded the evil deed was in fact perpetrated by the very same fiend that had hired him.

It may be pointed out at this stage that the principal members of the cast, listed at the end of this article, were not necessarily chosen because of any resemblance to the characters they portrayed. Or were they?

During the research for this epic, some amazing facts, not generally known, were brought to light. One such story concerned a scribe of the times who was very discontented with his 'lot' in the Corps. It seems he had the task of keeping a tally of the hours worked by the soldier/tradesmen, as they removed wheels and such like things.

However, the figures never seemed to satisfy his master, Logus Comodus.

In an attempt to overcome this, and keep the work more orderly, he invented marble tablets on which the soldier/tradesmen were required to record the time spent on each task performed. In keeping with the practice of the day, his invention was duly named after him. As the invention has been handed down through the ages its name has gradually altered from his name, Femus Forum Rex, to the present derivation — Feme Four.

Another gem discovered was that, at one stage, the Corps spread across Europe. When the mighty Roman Empire began to fall the soldier/tradesmen were recalled to protect their homeland. Warrior/tradesmen returning from Spain had been required to maintain a lot of bull and, as a result, were stronger and fitter than their homeland counterparts, and greatly feared by the enemy. Whenever they encountered feeble-minded opposition the enemy would flee in terror, crying — “Spaniards! Spaniards!”

Once again, this too has changed with the march of time to the term now applied to members of our Corps, by today’s equally feeble-minded opposition — “Spanner-heads!”

However, back to our celebrations. In keeping with the flavour of the night, many of our members contributed to the success of the evening by consuming vast quantities of lasagna, cannelloni, spaghetti and other terrifically tantalising and tasty italiano dishes, washed down with mucho vino.

In conclusion, it is considered by all who attended, that the banquet and festivities were truly in keeping with the form that our Corps has always shown for such occasions and, possibly, reflective of the orgies conducted by our master of old — Logus Comodus!

**THE CAST** *Flavius Maximus*.. WO1 Steve MacFarlane  
*Brutus*.....Sgt Brian Murray  
*Big Julie*.....Cpl Bob Waring  
*Mrs Caesar*.....Mrs Pene Chitty  
*Senators*.....Ssgt Maurie McIntosh  
Cfn Ossie Osborn  
Cfn Otto Vehlow  
Mr Marc Piekainen

## IT PROMISED SO MUCH

Screened by the bushes, he waited. It was hot. The sun burned down and the gorgeous blonde lay not more than ten yards away. Her golden skin glistened with perspiration. The open crochetwork of the bikini excited, rather than concealed.

He watched, fascinated, as the perspiration trickled over well-formed curves — gaining momentum on the more pronounced before meeting to form a little rivulet and disappearing beneath the crochet.

Now, now is the time, he thought.

Suddenly two men stepped into view. Cursing, he withdrew further behind the bushes. The men paused, admired the beautiful body but, seeing her asleep, moved on and were soon out of sight.

Cautiously he moved toward her, careful not to make a sound. Closer, ever closer, he moved. His breathing became heavy as he anticipated his next move.

A blinding crash to the side of the head — and he went spinning, reeling back, in a world of unbelievable agony.

“Bloody mosquitoes!” said the girl, as she settled back again.



*Flavius Maximus in action, questioning big Julie's wife over the untimely demise of her husband.*

*Flavius' Secretary* .Lcpl Rosemary Garside  
*Roman Soldier* ...Sgt Col Harley  
*Cool Pipe Player* ..Pte Leon Howden  
*Bar Keep* .....Cpl Tom Sonners  
*Mark Antony*.....Cpl Phil Edwards

*Editor:* We like your humour, please write again!



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# 3MD JOTTINGS

## PUCKAPUNYAL WORKSHOP COMPANY

### 'RAEMUS ROVER' TAKES TO THE TRACKS

Valuable practical experience gained in preparing for and driving in the BF Goodrich All Terrain Enduro has provided Puckapunyal Workshop Company with an enthusiastic team of off-road rallyists with ambitions to enter their vehicle, "RAEMUS Rover" in future events of this nature.

The Workshop's team, comprising of Apprentices and ARA members of RAEME, were formed when, quite by chance, word was received that the Off-Road Competition Association (ORCA) was organising and conducting such an event on the Puckapunyal Range in February '79. Knowing also, quite by chance of course, there was a series two quarter ton Landrover in the workshop awaiting confirmation of a UR sentence, hasty consultations were entered into with interested parties, approval to compete obtained and the preparation of 'RAEMUS Rover' commenced.

Now, bouncing around in a Landrover over any type of terrain is an accepted feature of an Army driver's role. To do the same thing for fun could, therefore, be considered slightly eccentric, which, of course, it is.

But there is a growing band of eccentric Australian enthusiasts competing regularly in off-road rally events in machines ranging from 1200cc powered overgrown go-karts to V8-powered utilities. The addition of a few more eccentrics with a background of all-terrain driving seemed the natural extension of their profession. Besides, the opportunity for apprentices to exercise their technical knowledge, to develop their repair skills and witness the fruits of their labour being put through an extremely rigorous test was too good to be missed.



Sgt Ian Gough (left) supervises Apprentices Gary White, Brian 'Libel' Droscher and Jim McCarthy preparing 'RAEMUS Rover' for the BF Goodrich All Terrain Enduro.

The task of preparing 'RAEMUS Rover' was assigned to third and fourth year apprentices as a training activity under the supervision of WO2 Peter Leslie and Sgts Ian Gough, Vic Seedwell and Ken Harris. These members of the clean overall brigade developed a sudden urge to get their hands dirty but, with some firm, gentle persuasion they accepted their role in directing "apprentices only". Technical advice was provided by Capt J. A. Lowe, himself a rallying enthusiast.

Off-road rallies appear to have evolved as a result of frustrated farmers giving their children old cars to drive as an alternative to them doing wheelies in the strawberry patches. This form of 'paddock-bashing' became so popular that its enthusiasts formed a controlling body, ORCA, which is a subsidiary of CAMS, the Confederation of Australian Motor Sport, the controlling body for all motor sport in Australia.

The aims of the sport have not changed, however, and still remain "to complete a course of impossible terrain in a wheeled vehicle, as fast as possible, without causing bodily harm to the driver". It should be noted that damage to the vehicle is not considered.

CAMS regulations for off-road rallies are stringent and strictly enforced. To conform to these rules RAEMUS was fitted with a roll cage, four point harness and other safety accessories. The terrain to be encountered dictated the need for other modifications if RAEMUS was ever to finish the event.

The UR Landrover had previously been modified by 4/19 PWLH and entered in the BP Off-Road Rally at Hattah in Victoria. After some enquiries the roll cage, sump guard and other safety accessories which had been removed were located and re-fitted.

In only ten days this very tired quarter-tonner was transformed into a robust, sweet sounding vehicle and was duly baptised — 'RAEMUS', King of the Wheel Removers.

Another set of shockies were fitted to the front suspension to improve stability, reduce the chance of suspension damage and to lessen the load on the driver. Bucket seats with head restraints were installed, to give added security and comfort; the head of the engine machined, ported, polished and double valve springs fitted; the engine itself balanced and dynamometer tested and the sump guard and a tool box fitted.

All the modifications were completed, creditably, by Apprentices Gary White, Gary McConnell, Brett Cox, Mick Callahan, Ray Black, Brian Droscher, Peter Norman and Jim McCarthy and their supervisors, who gave up much of their 'own' time to complete the task. Their obvious enthusiasm prompted the OC to comment that he'd "never seen apprentices work until 2.00 a.m. and on weekends before, without grumbling".

Despite passing the eagle eyes of the CAMS' safety scrutineers the day before the event, the driver, Sgt Vic



'RAEMUS Rover' being put through its paces on a test drive prior to the rally.

Seedwell, was not altogether happy with the performance of RAEMUS' gearbox.

Subsequent examination of the gearbox and transfer case revealed some errors in reassembly after overhaul had been made and a complete rebuild was necessary. Libel laws prevent reproduction of the comments offered the apprentice responsible for the reassembly by his team mates.

Work on the gearbox commenced at 1400 hours on the Saturday and by 0100 hours on the Sunday, the day of the event, the assembly had been removed, overhauled and replaced.

At 0200 hours every nut, bolt and screw on the vehicle was tightened and torqued; the toolbox checked for completeness and the engine tuned to perfection in a final pre-race examination.

The 'RAEMUS' team had their first view of their competitors when they arrived at the venue next morning — all one hundred and fifty-seven of them, ranging from 1200cc dune buggies to \$18,000 V8 Range Rovers. The mechanical preparation and care taken with the external appearance of these vehicles gave some indication of the strength and enthusiasm of the competition. The 'RAEMUS' team, however, had some grave doubts as to the ability of some of the competitors to successfully complete the course.



The one hundred and fifty seven competitors' vehicles ranged from 1200 cc dune buggies to . . . Above, one well prepared competitor gets under way.

Our aim was to complete the three laps of the 110 km course without incident. Winning, or winning a prize would be a bonus.

Believing 'RAEMUS' would have a strong advantage over rough terrain in softer ground, the team prayed for rain to create a course better suited to cross country strength and agility rather than speed. It rained — as only Puckapunyal residents know it can, by the tanker load.

The complete pit area and starting grid were laced with torrents of water and subsequent puddles. The three thousand spectators already at the scene returned to their cars or discarded their shoes and waded around regardless.

At 100 hours it was announced the event had been postponed until an examination of the course had been made. At 1130 hours the decision was given that the race would proceed but, owing to the conditions of the track and the possibility of damage to the range, only one lap would be completed. Not expecting anyone to complete the course, competitors were given the chance to withdraw and have their fees refunded. Few, if any, accepted the offer.

At 1155 hours the first vehicle departed in a spray of mud and water and others followed at one minute intervals.



'RAEMUS Rover' sets off to battle the 110 Kilometre course.

'RAEMUS' was not scheduled to leave until 1420 hours which gave the crew the chance to conduct a final check. Sgt Seedwell had complained that the accelerator was heavy and slow to respond. Hand throttle linkages, it was found, had been damaged during preparations and were fouling on the engine compartment. The offending linkages were removed and Vic Seedwell was satisfied.

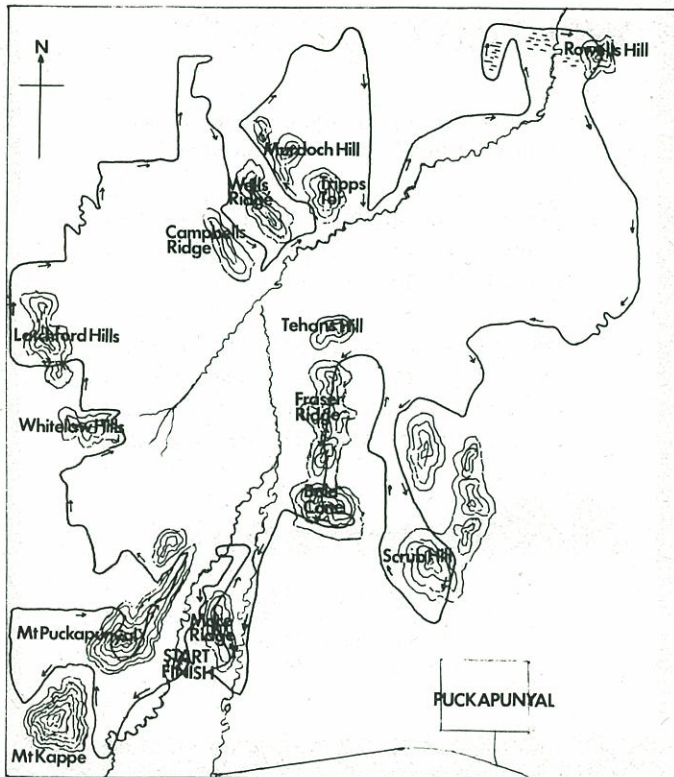
'RAEMUS' finally faced the starting flag at 1430 hours with driver and navigator both showing signs of anxiety. The flag dropped and 'RAEMUS' roared off, down the straight, to loud cheers from a hardy band of spectators.

By this time the first competitor had completed his lap, his immaculate machine now unrecognisable. Equally unrecognisable were the occupants who expressed their delight at the course claiming it to be the most challenging rally course they had ever seen.

Of the 110 km course, only 25 km could be described as third class tracks.

From the start line, one kilometre east of Mt Puckapunyal, near Gardiners Creek, the course headed south, crossed the creek then turned north, running parallel to Mt Kappe and along the Range/State Forest boundary. It then veered east through medium scrub then south again to merge into the east side of Mt Puckapunyal. After climbing Mt Puckapunyal the course followed the

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ALL TERRAIN ENDURO  
DISTANCE : 110 KMS.**



ridge then descended along the northern spur and around Boase Hill before rejoining the range boundary and continuing past Whitelaw and Latchford Hills. The track then headed east to Twin Tree Hill, winding in and out of The Campbells, Wells and Whitelaw Ridge features before turning north-east along Gardiners Creek, over Rowells Hill, south across Lyons Hill around Scrub Hill and bounced over the Tank Training Razor Backs.

From Tehans Hill the course turned south over Frazer Ridge and Bald Cone and then followed Bylands Creek south to Warfe Hill, north along Mace Ridge, crossing Gardiners Creek and returning to the start/finish line.

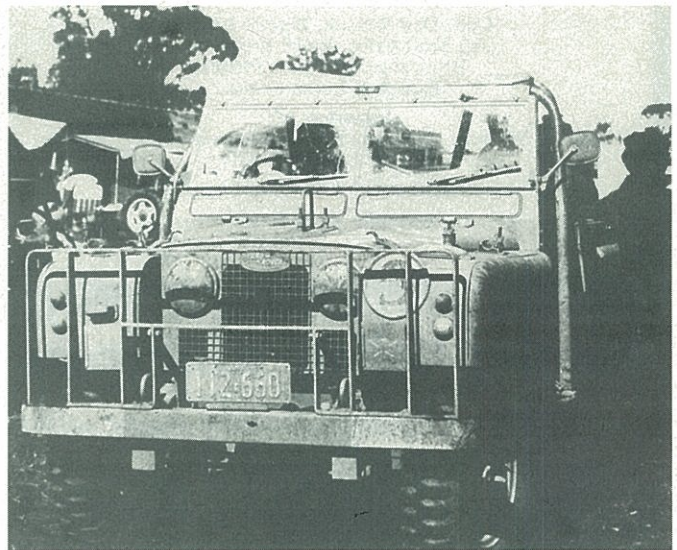
Those readers who know Puckapunyal will appreciate the variation and ruggedness of terrain of the course which also included anything from sand hills to muddy fords and shale rock.

Competitors finishing the course whilst 'RAEMUS' battled on looked as though they had well earned a rest. Cars appeared with smashed suspension arms. Complete wheels were missing or the cars ran on their wheel rims after the crew had used their spare tyres. The course certainly took its toll.

One driver who completed the course told of numerous cars bogged or broken down and one or two that had rolled. 'RAEMUS' by comparison was clean when it finally crossed the line.

The rain had passed and many spectators were getting slightly sunburned. As Capt Lowe commented, "Puckapunyal is one place where you can be up to your neck in mud and still get dust blown in your eyes."

'RAEMUS' had sustained no damage and driver and navigator, although tired, were quite happy. According to Ken Harris they had stopped twice. The first time to dry the distributor after going through a creek and the second to lend their spare tyre to a stranded competitor.



*'RAEMUS' Rover' finished in a fairly clean condition.*

From start to finish 'RAEMUS' had generated a great deal of spectator support. Its pit crew spent their time starting, making minor repairs or helping to unditch other vehicles. The other entrants were treated to a display, by practical example, of the technical ability and resourcefulness of our tradesmen.



*Sgt Ken Harris, navigator and Sgt Vic Seedwell, driver after the event. Slightly tired but non the worse for wear.*

The apprentices had worked extremely hard, had made mistakes they will not repeat, we hope, and, after a very nervous wait, seen 'RAEMUS Rover' finish in far better condition than other competitors. The object of Exercise 'RAEMUS Rover' had been achieved.

We hope to enter more rally competitions in the future with the same aim — to finish with the crew unharmed and the vehicle in good condition.

**Stop Press: 'RAEMUS' came 5th in its class and 25th overall.**

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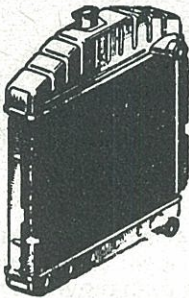
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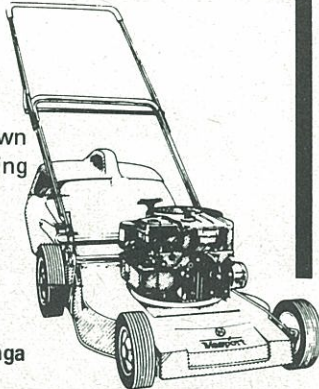
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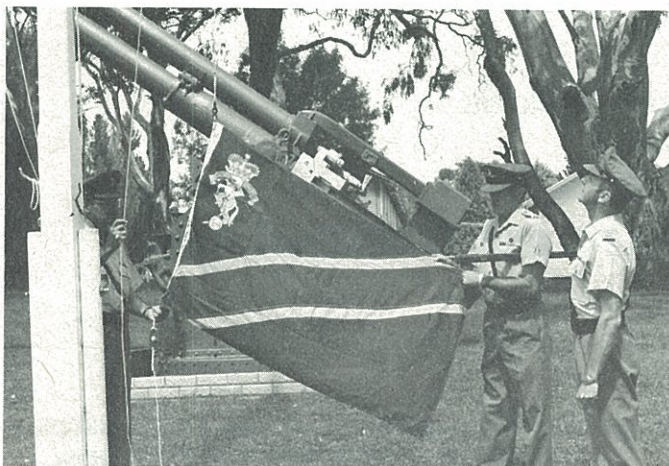
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# 4MD JOTTINGS

## FLAG FOR NEW UNIT



Maj C. Johnston (left) and the RSM of the regiment, WO1 G.I. Hodgson raise the Workshop's flag, watched by regiment's CO, Lt Col W. Hamilton.



Maj C. Johnston (centre), OC 16 Air Defence Regiment Workshop and his ASM, WO1 D. Bailey (left) receive the workshop's flag from the regiment's CO, Lt Col W. Hamilton. The stern faced onlooker is the regiment's RSM, WO1 G.I. Hodgson.

The raising of 16 Air Defence Regiment Workshop RAEME was commemorated recently, at Woodside, with a simple flag raising ceremony performed as an adjunct to a CO's parade.

The workshop is unique in that it has been created to cater for the Redeye and Rapier air defence missile systems operated by 16 Air Defence Regiment.

## COMMANDER OPENS AWC'S 'BILDABI' CLUB



Adelaide Workshop Company's Workshop Manager, Capt A.G. "Andy" Turner enjoys the good stuff at the bar.

'Bildabi', we are told, is an aboriginal word for 'watering place'. It seemed apt, therefore, to name Adelaide Workshop Company's new social centre the 'Bildabi' Club.

After being welcomed to the unit by the OC, Major Bob Law, the Commander 4th Military District, Brigadier P. J. Greville, CBE, officially opened the premises. An auspicious occasion to mark the culmination of months of planning, building and the addition of finishing touches.

Joining the Commander was another welcome guest to the unit, past OC and now Colonel Commandant for the Corps, Lieutenant Colonel C. V. L. (Verne) Claxton, RL.

It was pleasing to see both guests take time out from their hectic schedules to attend the ceremony, enjoy the refreshments provided and talk to unit members about Army and Corps matters in general.

The venue will now be available to all unit members, their families and friends when social functions are organised. Additionally, the club's facilities will be opened for the AEME Association of South Australia when meetings and reunions are announced, as both organisations work in close co-operation with each other.

It is sincerely hoped also that Corps visitors to the State will stop off to enjoy a good beer for a change, as well as meet old friends at the unit.

WO2 Brian Langridge



Brigadier P.J. Greville, CBE., Commander 4th Military District, talks with the OC Adelaide Workshop Company, Maj R. Law (left) and Lt Col C.V. Claxton, RL., Colonel Commandant RAEME, at the official opening of the 'Bildabi' Club.

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# 7MD JOTTINGS

## THE TOP END



As a result of "Cyclone Tracy" RAEME establishment in the Northern Territory has been substantially reduced. From one officer and twenty-five other ranks we have shrunk to one Warrant Officer and eight other ranks.

Filling the posts at the moment are WO2 C. A. 'Spike' Leayr as OC, Sgt R. J. 'Roger' Clarke, Cpl J. P. 'Jay Jay' Jones, Cpl 'Con' Mihailou, and Cfn Dennis Dowling, 'Macka' McLindin, 'Mac' McAlister, Les Hyde and Greg Lowe.

We are all relatively 'short-timers' with approximately eighteen months service time in 7MD. The two most recent changes, late in '78, had 'Spike' Leayr replacing WO1 Danny Tucker and Dennis Dowling replacing Cpl Bob Joseph.

Whilst with 7MD Bob Joseph excelled in Rugby Union, playing for the 'Larrakeyah Buffaloes' and selected for every Northern Territory representative side he was available for.

Also with the workshop are Lucille Mucha, E. 'Zorro' Nardecchia, Merv Broome and Doug Eagan, all civilians, and a small naval detachment of CPO Charlie Finch, L/SM Danny Carew and AB Percy Percival. The navy trio carry out minor repairs to RAN vehicles using one repair bay and the workshop's facilities.

Final repairs of "Cyclone Tracy" damage were completed in December with emphasis being placed on restoring the accommodation to a cyclone resistant standard, particularly the radio/instrument section building.



The workshop cat is a cyclone veteran. For three days she resisted all attempts to get her down from the workshop's rafters. Now she will not leave the building. Hence our workshop motif.

A well-known "Bluebell" identity who retired from the Army in 7MD was Peter Drescher. He remains in the Northern Territory and will feature in further submissions from "The Top End".

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# UNIT MAGAZINES

During World War II, in the days when RAEME was still AEME, and even earlier, Unit Magazines were, it appears, quite commonplace. Magazine names such as BANDICOG, ACTION, CIRCLE, BLOWTORCH, WALOCORP, NABS and EXHAUST became well known by our predecessors. Unfortunately, there is very little information available at this stage as to which unit published which magazine.

Communicating between fellow-members of any organisation is a problem that continually raises its ugly head. Effective communication is a greater problem. A lack of it produces hiccup after hiccup in any organisation, no matter how efficient an organisation's management systems may be.

Reading through "A.E.M.E. NOTES", an official journal of the Corps of Electrical and Mechanical Engineers first produced in 1945, one cannot help but realise the important part played by such publications.

A well-presented Unit Magazine, containing light-hearted and serious comment on unit activities, policies and personalities, is invaluable in boosting the morale of the readers for whom it is intended. Not necessarily because it is a medium through which the reader can be kept in touch with the Commanding Officer's most recent and future policies, but because it is about the reader — the world in which he or she works, things that affect them and personalities they can identify.

A Unit Magazine is a personal communication to which, if so inclined, the reader can contribute with little fear of editorial rejection if their manuscript is not presented with style. The reader identifies with it more easily than with any other official publication and even more easily if the title of the magazine is unique to them.

In an effort to determine which was the earliest Unit Magazine to be published, "A.E.M.E. NOTES" posed the question — "... is there an older Unit Magazine than 'EXHAUST' published by 2/1 Army Field Workshop at Tripoli on 5 May 1942?"

By the next issue the Editor of "A.E.M.E. NOTES" was advised, thrice over, that Issue No. 1 of "THE TIFFY" made its appearance in August 1940, published by 2/2 Army Field Workshop while at Williamstown, Vic. A copy of the first issue accompanied the claim.

Who knows, "THE TIFFY" may have been instrumental in raising the morale of 2/2 AFW to the point where the skill and courage of Sgt Allison, Pte Dunning and Pte Smith at Bardia, and subsequently during the attack on Tobruk, were purely second nature to them! Each were awarded the Military Medal. (See "Tanks, Shellfire and a Dazzling Torch" by Lt Col R. D. Manley — "The RAEME Craftsman", Vol 1, No 1, December 1978.)

Apart from providing a useful medium for promoting and publicising unit policies and activities Unit Magazines can have a return benefit of conveying to management some, if not all, of the problems likely to lower the overall morale of the unit. Such a benefit can only be achieved, however, if the readers are certain that stating their views will neither jeopardise their career or standing within his unit or Corps, nor encourage irate repercussions from their superiors.

If a Unit Magazine becomes merely a platform for official doctrine it will eventually lose its appeal. If it encourages open discussion, too, it cannot fail to be a success and the most effective means of communication available.

Open discussion is an important management tool. No manager can always be one hundred percent correct in all his policies and systems. There is always the possibility he may have overlooked a simple, but vital truth, when making his decisions. Open discussion, without fear of retribution, will encourage others to come forward who may have identified the 'ills' in a system. More importantly, it will encourage others to put on their thinking caps and, hopefully, come forward with constructive suggestions to perfect a system.

Obviously there are limits to the amount of criticism and advice acceptable but, without the facility of open discussion, a bad system will remain bad resulting in ineffective systems and inefficiency.

There are, too, many occasions when unpopular decisions have to be taken which, in an open discussion situation, will attract more criticism than any other. A short, straight to the point, authoritative reply will suffice if there is no room for discussion. However, wherever possible, a short official explanation quells fears and rumours, putting everyone in the picture and on the right track. A case of prevention being better than the cure — or, obviating the tendency for molehills to grow to mountains.

An unfortunate trait in many Unit Magazines is to permit a degree of character assassination, in a humourous way — well, invariably. Such a policy is inadvisable at any time. No matter how often a person may laugh at themselves the realisation that others are, too, does not go down very well.

If, on the other hand, a person submits an article which allows others to laugh at the author of the article, that is a personal choice and acceptable. Editors cannot be too careful in what they print.

Copyright infringement is a favourite trap many erudite editors work hard at avoiding. The onus for ensuring there is no infringement is usually placed on the publisher or the author or the person submitting the article. The general practice these days is for publishers to insert a 'disclaimer' in the pages of their publication, laying the responsibility for ensuring there is no copyright infringement squarely on the authors, or persons submitting the article — particularly if it has appeared in other publications.

Many publications also insert a paragraph advising that nothing can be reprinted without their authority. If this is so, and the article is so important to you, drop the publishers a line — and ask for permission. Better a 20c stamp now, than an expensive law suit later.

My experience is that if your Unit Magazine is given freely, or for charity fund-raising, most publications will give permission provided full acknowledgements to the source of the article are given. Cartoons, usually, can be re-printed, with permission, in limited numbers in any one issue.

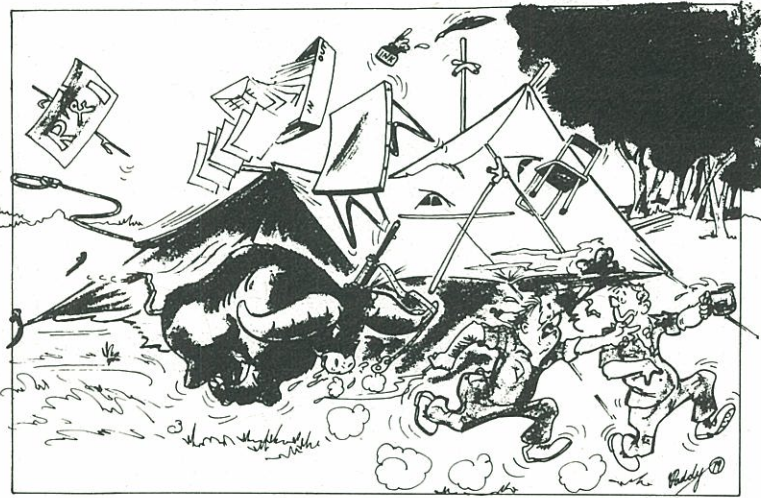
Generally, the main concern is that you are not directly benefitting financially from someone else's original ideas.

When I started putting this article together I had no intention of expanding it to include, what may be termed, 'Hints for Aspiring Editors of Unit Magazines'. However, firmly believing in the value, to management and employees, of effective communication I couldn't resist passing on a few lessons learned during ten years of producing Unit Magazines. If it appears that I am teaching, or preaching, I apologise.

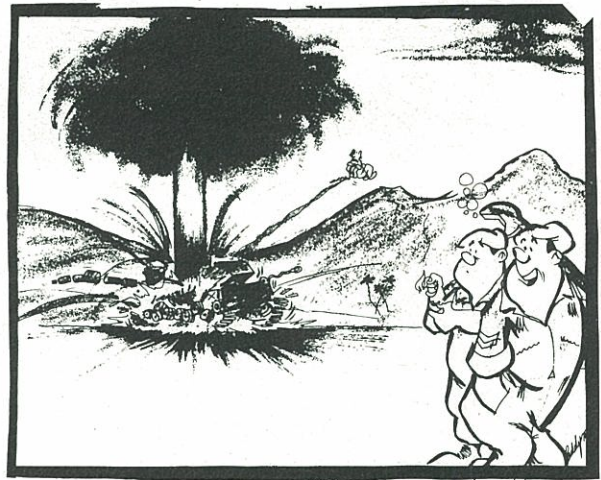
It is well known that Unit Magazines live. Frequently they contain information that should, in all honesty, be relayed throughout any organisation resembling that for

which any particular Unit Magazine is published. Also, they provide a historical insight to such units. To do them full credit, one or two copies should, and we would welcome them, be sent to higher formation headquarters for retention as historical documents.

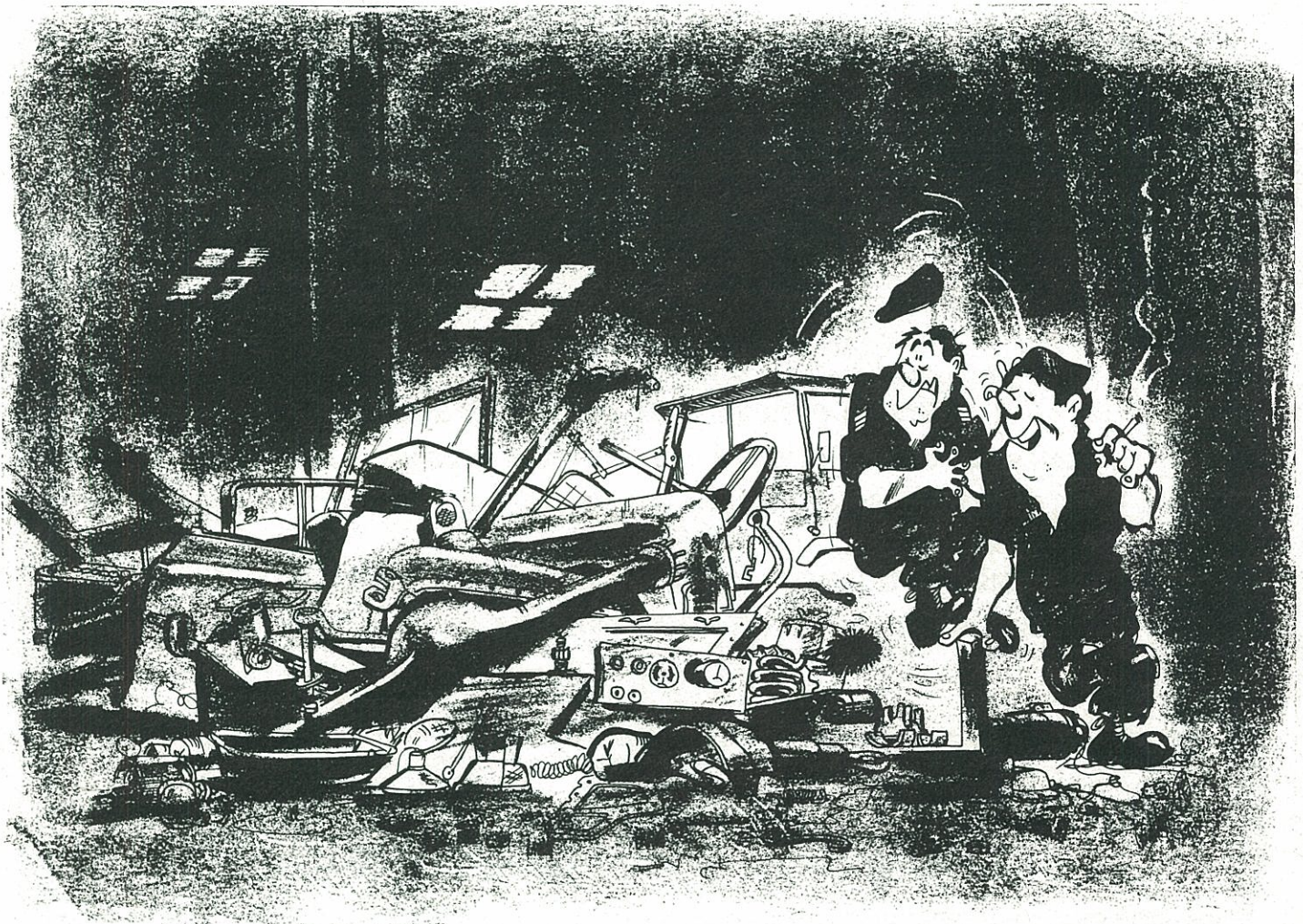
The Editor of "The RAEME Craftsman" will always welcome the opportunity of being placed on the mailing list of any Unit Magazine, originated by and published for, a RAEME unit.



*"Dammit, ASM!! That bloody cap of yours doesn't serve to cement relations with the local wildlife!!"*



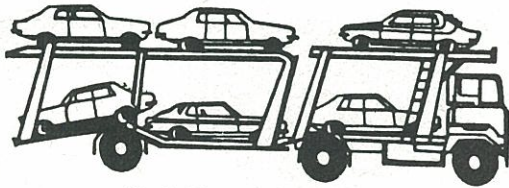
*"Looks like th' boss finally located that short, Fred!"*



*"No sweat, Sarge! I've located the fault... Mucky plugs!"*

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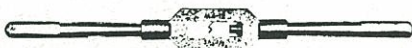
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# R.A.E.M.E. ASSOCIATIONS

## 1939-1940 A BACKWARD GLANCE

By 'BULLPUP'

*(The reminiscences of an old soldier who prefers to remain anonymous but, nevertheless, was proud to have served.)*

### NAME TO FACES

In recalling those early days of World War II, when R.A.E.M.E. wasn't and A.A.O.C. had it all, the names and faces of past associates keep flitting through the mind, clouding all other memories.

So, first things first, let's clear the mind a little for some names come more readily to mind than others, even though the persons themselves will never be forgotten. Maybe some readers could help to complete the memories for me.

Starting at Victoria Barracks Workshop there were: Capt Russell, Bob Carlisle, Sgt Ellis, Frank Batten, Noel Hayes, George Bardsley, Snow Birks, Freddy Skenes, Gil Elliott (Giliott), Charley Mason, Lou Mackay, Lionel Baxter, Trevor Rowland, Ben 'the helper' . . .?, Aub . . .?, the Hall brothers, Jimmy and his brother Fred (make me a copper kettle) — he was a coppersmith. There were the apprentices — Kettlewell, Lowe, McNiven; the blacksmiths — Hales and Morrissey and Wally Scutts (P6). Lionel Cunningham (the crafty one!) together with Len Hunt (consulting engineer), Jack Scott, Alec Barber, Ern Green, Ted Lennard, Merv Doorhouse, Fred Wheatley (tool storeman) and — er — er — ? Sylvester.

Two other faces stand tall in my memory. One an apprentice machinist and the other, of dark complexion. The latter was sent to Timor where, soon after his arrival, he was killed by enemy action.

Many other images of electricians, machinists, instrument mechanics and carpenters appear and disappear, as do those in transport, including McCann — a real hard case. However, we in workshops had little contact with them, which probably accounts for the mental block on names.

Those easily remembered were those who assembled each morning for Roll Call, Inspection and a 'run up the road' under the supervision of Ray something-or-other, a young Sergeant Major. Ray was highly skilled and experimenting privately, as I recall, with a substitute motor fuel known as propane gas.

Hold it! The memory is flooding again — with names like Jacky Stathers, Shanghai Joe (Capt) and also one who lost half an arm — McInnery, and the Orderly Room Sergeant — Alec Cummins, Sergeant Major Thomson and Jimmy Wendon. Also, the two Frazers, MacAlpine, Capt Phillips, Maj Field, Cpl Gillett, Cascara Wright, Rebecca, Walton, Martindale, Botting, Flack and — er — the names fade again!

### BANDMASTER TRADESMAN

One day that stands clear in my mind was the day when, on returning to the workshop from a tour of an 'out-station' I perceived a quite unusual sight.

There, among the blue working gear of the usuals, was an object of glory clad in blue trousers, red striped and gold chevrons three, working a lathe — the old long lathe, doing a trade test.

Inquiry elicited the fact that this apparition was, in truth, the Bandmaster, Garrison Artillery, North Head — and there he was doing a trade test. A test, incidentally, he passed with ease.

His name was, and at the time of writing still is, Frederick Matthew Bartlett, Sergeant Major. I think, next to old Ted Hobby, he was the oldest serving member of the Australian Military Forces. Ted was working as District Staff with Nore Battery, 9.2, at the time.

Whilst on the subject of Nore, Gil Elliott and Lionel Cunningham were entrenched as the 'Tiffies' 9.2, working under Bob Carlisle and Capt Russell, in those days. I think Slim Summerville was the Master Gunner and Reg (?), a former trombonist under Ted Bartlett, the Master Gunner's Clerk.

Many years later Slim became Fred's son-in-law and a great help to Fred in his old age.

Anyway, to continue. Fred Bartlett took over the Nore Battery, succeeding Giliott and Ted Lennard who, incidentally, finished up as chief electrician at Moruya Quarries until he retired. Fred was a real soldier. Keen, ever busy and studious to a degree. He could relate, from memory, the page, chapter, paragraph and sentence from the Ordnance Handbook covering any subject you sought. He could also identify any part of the gun itself without effort.

Closer contact with Fred Bartlett some years later taught me how real a man he was. But that must wait until later.

Lionel Cunningham returned to Victoria Barracks Workshop whilst Gil moved to Moorebank where he found Jack Cartwright, Alan Campling, Hec Smith, Max Gay and, of course, many others who participated in the great drama of World War II.

### PREMATURE DISCHARGE

In the early days Charley Mason was the 'Tiffie' at Cape Banks. A more highly skilled machinist I never met, but there was no scope for his skills at Banks.

Nevertheless, he was a stickler for rules and precepts and more than determined to keep those great guns in constant readiness. He was alert, day and night, and living as he did, at Botany, had little trouble travelling to and fro in his motor vehicle. It was, however, his keen sense of duty which led to an unfortunate accident that affected Charley for the rest of his life.

A faulty valve in the 9.2 recuperative system led to the accident. However, to understand how it happened requires an explanation of the system of replenishing the make-up air supply.

Make-up air supply was stored in immense cylinders mounted on the 'laying' side of the guns at an initial pressure of 6000 p.s.i. At the time, deterioration had reduced the acceptable pressure to 4500 p.s.i. Each morning, following 'Dawn Preparation for Action' drill the 'Tiffie's' task was to inspect the pressures and replenish the cylinders, where necessary.

This required that the Engine Room staff of RAE man the pumps in the engine room, fifty feet underground and adjacent to the magazines. On a given signal from the 'Tiffie' above ground, the RAE opened the valves to the 'make-up' storage cylinders below to 'balance' the bottles before starting the pumps to replenish both banks of cylinders on each gun separately.

Replenishment of the cylinders could, it was thought, also be required whilst the guns were in action, moving around a 360° circle. It was necessary, therefore, to attach the gun cylinders to the engine room via a pipe system that was capable of considerable movement.

A stop valve was mounted on the stationary gun pedestal and a gyroscopic pipe system attached to the upper gun floor. The knuckled pipes were closed up to occupy the smallest space possible and suspended, in brackets, from the ceiling of the lower gun floor — the underfloor of the upper gun floor.

The procedure for replenishing the cylinders was, to lay the gun by hand, to a determined angle, ensure all the air valves were closed, retire to the lower gun floor, check the valve on the pedestal, return to the upper gun floor, open the inlet valve in the panel — SLOWLY — to permit the air from the engine room 'make-up' cylinders to balance with the gun's cylinders — and then notify the engine room to start the pumps.

One man could carry out the operation. The valves on the panel on the upper gun floor included a one way 'CHECK' valve to enable the 'Tiffie' to open the panel valve on the upper gun floor *before* he went down to the pedestal valve to join up the gyroscopic pipe. The purpose of the one-way 'Check' valve was to prevent air leaving the upper cylinders.

On the day of the accident Charley approached the gun to carry out the replenishment drill accompanied by an Artillery Sergeant. The Sergeant offered to help, whereupon Charley suggested he go to the upper gun floor and operate the 'Check' valve when told to.

At the pedestal Charley reached for his spanner just as the query came from the Sergeant above, "Which valve am I to open?"

"The one on the left," replied Charley.

The valve was opened and a discharge of air ripped the pipe from the pedestal. The pipe smashed into Charley's face and became a thrashing monster — whipping around the lower gun floor at a speed resembling a bullwhip being thrashed around by an expert.

The only obstacle met by the thrashing pipe was Charley's body.

With hands and arms protecting his head he emerged from the gun floor to drop, in a heap, just outside the door. He had been whipped by the flying gyro pipe over most of his body and yet, miraculously, no bones were broken.

The accident occurred, it was later discovered, because the check valve had been serviced by others. Following the servicing the plate bearing the word 'CHECK' had been placed behind the wrong valve.

Under normal conditions the premature opening of the 'Check' valve would have had no effect. Without it and a 4000 p.s.i. plus discharge of air, it had an effect. One that Charley Mason remembered for the rest of his life.

## OLD BOB TAKES THE CAKE

On 5th December 1978, Lt Col (R) Robert Henry Carlisle, MBE, was a guest of honour again at the RAEME Birthday celebrations at 5th Base Workshop Battalion, Oakey, where he was invited to take on the huge birthday cake — with sword in hand.

If Bob had never drawn his sword before with any 'intent' to pierce anything he surely did on that day.

However, it was more than the celebrations that brought Bob to Oakey that day for he was a 'guest of honour' with a special mission to perform on behalf of RAEME.

A very beautiful hand-worked tapestry had occupied Bob's mind and hands for a great many days. A task many a qualified needle-worker would have shied away from.

Although he has produced many fine tapestries over recent years, this was, to him, his most important task — a true to scale tapestry of the RAEME Corps Insignia, just as you see it on the cover of the first issue of "The RAEME Craftsman". What an assignment you say? You can say that again, because Bob is heading toward his 94th birthday.

Not content with this fine effort and gift, Bob decided to present his personal sword to his Corps as well, which he did so splendidly in front of his large audience.

Colonel Bill Bauert, one of Bob's Corporal Artisans pre-World War II, was on the spot to receive both gifts and to present Bob with an inscribed RAEME Plaque in appreciation.

Loyalty such as that shown by 'Old' Bob strikes deep at the heart of any man and sets an example to us all. An example, we hope, that will never be erased whilst this Corps produces Craftsmen like 'Old' Bob.

Dick Wearne  
Hon Sec RAEME Asscn NSW

## 93RD BIRTHDAY FOR 'COLONEL'

"The Colonel", as one of Toowoomba Nursing Centre's favourite residents is affectionately called, celebrated his 93rd birthday yesterday.

Bright and active, Colonel Robert Henry Carlisle has been living at the centre since it opened in 1972.

A daughter from Sydney was on hand yesterday for birthday celebrations, which included cutting of a cake, and another daughter was expected to visit from Brisbane.

During his military career he was involved with the formation of the Army's Royal Australian Electrical and Mechanical Engineers and establishment of the Army's first apprenticeship school.

With pride he describes himself as "the grandfather of the RAEME" and often visits the unit's 5th Base Workshop at the Army Aviation Centre, Oakey, where he receives V.I.P. treatment.

His service was recognised with an MBE (military division).

Colonel Carlisle retired from the Army while at Wallangarra and, since his wife was living in Toowoomba, he settled here. His wife died in 1958.

Colonel Carlisle's tapestry work is well known and one of his works decorates the baptismal font at St Luke's Church of England, where he was church warden for about 10 years.

He still works on tapetry though his eyes are not what they used to be and he takes rest breaks more frequently.

Colonel Carlisle was born in County Durham and migrated from Britain to Australia in 1912, settling in Victoria. He joined the Army on August 1, 1914, just before the outbreak of war. He retired in 1945.

from "The Chronicle", Toowoomba

# ADVENTURE



## SUVA TO SYDNEY ON ANACONDA 11

Capt W. I. Chalmers

In June 1978 an Army crew sailed the maxi-yacht 'Anaconda II' to line honours and a race second in the Sydney to Suva Race. After a short stay in Fiji the yacht was to be cruised back to Australia via Vila in the New Hebrides and Noumea in New Caledonia.

As part of the training and selection of crew members for the 1979 Parmelia Race from Plymouth, England, to Perth, Western Australia, a second Army crew of eight was selected to help bring 'Anaconda II' back to Australia from Fiji. Those fortunate members took leave, or furlough, for the purpose and were duly flown by RAAF Caribou aircraft to join owner-skipper Josko Grubic, three civilian crew and two of the original Army crew to form the new fourteen-man crew.

The new members were Major General John Whitelaw (RL), Brigadier Ken Taylor, Lieutenant Colonel Tim Holt and Major Jim Briers of Army Office, Capt Bill Chalmers of HQ Log Comd, Capt Ray Harvey of HQ 1 MD, 2Lt Bob Minoham of 4 Cavalry Regiment and Spr Grant Walker of the School of Military Engineering. With stopovers at Lord Howe Island, due to a sixty knot gale, and Noumea, we had ample opportunity to get acquainted or renew old friendships on the flight from RAAF Richmond to Suva.

Arriving in Suva on the afternoon of Sunday, 18th June, after a very tiring flight, we were driven to the Tradewinds Hotel on the Bay of Islands, some eight kilometres north-west of Suva. At the hotel we were welcomed by members of 'Anaconda's' race crew who, after arranging suitable light refreshments, gave us a conducted tour of the yacht.

She was an impressive sight for those seeing her for the first time. Her 33 metre main mast towered over the masts of the many yachts from all over the world, also moored at the Tradewinds. Most of them were quite large by usual standards, being up to 18 metres in length.

For the sailors among us, some details of 'Anaconda II' may be worth noting. She is a 25.5 metre, two masted ketch of foam sandwich, glass-fibre construction, with the shorter mast behind the rudder. She has a beam of 5.5 metres, a draft (depth from waterline to keel) of 3 metres and a displacement of 36 tonnes. The keel carries 16 tonnes of lead.

Josko Grubic built the yacht himself, to a design by Buchanan (UK), at Birkenhead in South Australia and launched her in 1975. She is said to be the largest glass-fibre yacht in the world and is certainly Australia's largest ocean-racing yacht.

Facilities include fifteen berths, two of which are in the owner's cabin and one in the navigator's, four shower/head compartments and a well-equipped galley. The galley is equipped with a four-burner gas stove, with grill and oven, a micro-wave oven and one of three deep-freezers. The navigator's station is equipped with Omega navigation equipment and a Gemini computer, plus the usual range of aids and instruments. A 120 watt Single Sideband radio takes care of ship-to-ship and ship-to-shore communication. Large fresh-water tanks are backed up by a de-salination plant.

Twenty-eight sails, ranging from a 465 square metre reaching spinnaker down to a tiny spitfire jib, are stored in the sail-locker. As an example of size, the largest headsail

— the No. 1 light genoa — measures about 15 metres along the foot and is stowed in a bag the size of a wool-bale. It seemed as heavy, too!

We had the opportunity of getting to know all this and much more about 'Anaconda II' during our six-day stay in Suva. Most of each morning was spent scrubbing decks, carrying out maintenance tasks and training in setting up the sails, rigging and so on. The rest of each day was spent in individual pursuits such as sightseeing or shopping, when we found the traditional friendliness of the Fijians was greatly enhanced by the publicity accorded 'Anaconda 11' by the local press. We usually wore the red crew shirts during the day which led to our being stopped in the streets to answer questions about the boat.

Friday, 23rd June, was Race Presentation Night at the Royal Suva Yacht Club, for the skippers and crew of the race yachts and their friends and relatives. Dancing and a lovo feast, together with a floor show that included Fijian, Samoan and Tongan dancing and a fire-dance, made for an entertaining night. A lovo feast, incidentally, is similar to a Hawaiian luau. The food is wrapped in banana leaves, placed in a pit full of hot stones and covered with earth. The result is mouth-watering! I found myself arriving back on board 'Anaconda' at around 0430 the next morning, only to be called on deck at 0700 for breakfast and to help prepare the boat for sailing at 1200. Strange as it may seem the crew moved about rather carefully!

#### WE SET SAIL

A large crowd of well-wishers gathered along the front of the Tradewinds Hotel to watch our departure for Vila, on the first leg of a 2,200 nautical mile cruise to Sydney. We motored out through the reef off Suva before hoisting sail in the mid-afternoon but, finding little wind, continued motoring and sailing along at about 6 knots on 1500 rpm from the 120hp Sabre six-cylinder marine diesel. When the south-west trade wind came up during Sunday we were able to stop the motor and make good progress under sail.

We soon found ourselves settling into the shipboard watchkeeping routine of three hours on — three hours off, whilst varying wind strengths gave the skipper and his watchkeepers the chance to exercise the crew in sail changes. This included setting the huge spinnaker, carried from a pole which needed four men to lift into position. There is certainly no lack of hard physical effort in yachting!

As the days passed we began to appreciate the sheer vastness and emptiness of the Pacific Ocean. In sixteen days at sea, between Suva and Sydney, we sighted only three ships, an occasional dolphin, a few flying fish and various seabirds. The birds became more prevalent as we progressed southwards with terns and albatross among the most common. Fishing was hopeless — despite two lines with lures trailed for the whole voyage — not a thing was caught.

At night, phosphorescence was an interesting feature. Glowing from the wake and from breaking waves, it was a colourful sight and meant we were never in complete darkness — even on overcast nights.

During the first couple of days seasickness caught up with several crew members. For some it remained a problem throughout the trip to Sydney. Nevertheless, on board, it is not considered an illness and the victim is required to continue normal duties. Indeed, it is far better to do so.

We berthed at Port Vila on the afternoon of Wednesday, 28th June. The town of Vila was about five kilometres away on the other side of the harbour so, after completing

Customs and Immigration formalities, we hitched a ride into town with several friendly locals, including a couple of gendarmes.

The New Hebrides is a condominium under joint British/French administration. To the casual observer the French influence appeared quite strong and French is the more commonly spoken language.

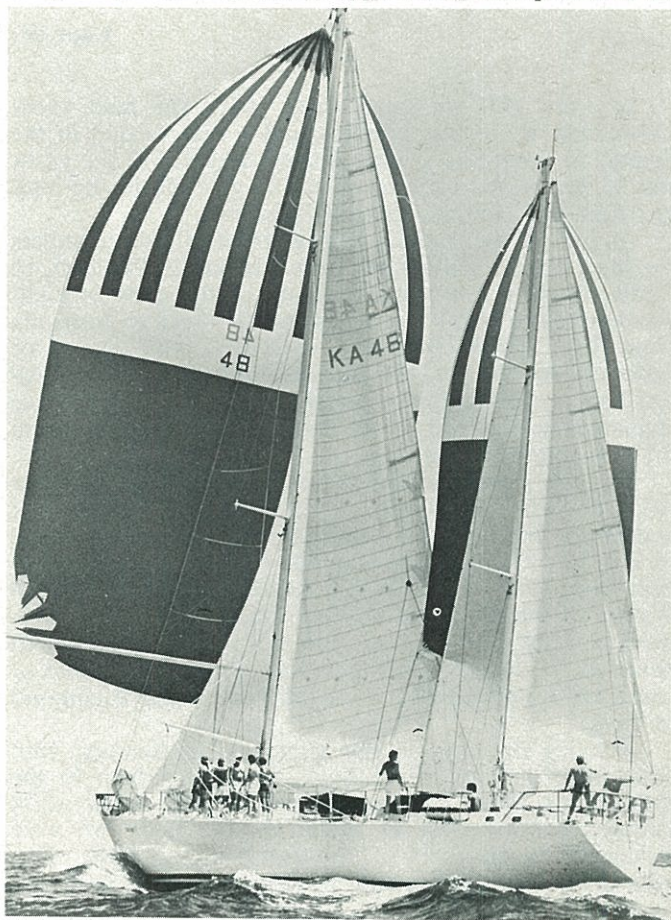
The Australian managed Hotel Rossi, with its French atmosphere, afforded a pleasant two night stay during which some intensive sightseeing and shopping was again the rule, before setting sail for Noumea on Friday, 30th June.

Our course was to take us through the Loyalties Group and around the Isle du Pin, at the south-east tip of New Caledonia. The area between the New Hebrides and New Caledonia is studded with reefs and coral islands, many of which are barely awash at low tide, and dangerous. Lookouts were posted throughout the three nights of this passage.

We arrived in Noumea at 1300 hours on Monday, 3rd July, after a ninety minute cruise across the lagoon from the reef entrance. Here the siesta tradition prevails and, as a consequence, no Customs or Immigration officials were to be available until 1500 hours. We settled for an impromptu party in the saloon!

Our berth at the Club Nautique Caledien, the Yacht Club, amid some two or three hundred yachts and luxury motor-cruisers in sheltered marina-type berths, reminded us of French Riviera scenes.

Whilst in Noumea we were entertained by the Australian Consul and his wife at their home where they held a cocktail party for the crews of 'Anaconda II' and the brigantine 'Golden Plover', from Melbourne. Their hospitality was very much appreciated and provided an



excellent opportunity to meet many interesting people. Our stopover also included a visit to Noumea's 'IN' night-spot, the Club du Paris Disco. Plenty of French atmosphere there — if one can stand paying 350 FNC (\$A3.90) for a glass of beer!

Wednesday, 5th July, dawned with heavy rain and a fall in temperature from the high twenties to 18°C. This was to be the end of the fine, warm weather we had enjoyed since leaving Australia.

Customs and Immigration formalities proved slow and tedious, delaying our departure from the Club Nautique until 1600 hours and leaving us with a tricky passage through the dog-leg reef channel in rain and darkness. This we did under motor and sail and, with some feeling of relief, safely cleared the reef at about 1800 hours.

From then on, for the eight days passage to Sydney, heavy warm clothes and oil-skins appeared, especially at night. The weather grew colder each day as the southern winter started to bite. The last four days were cold and

rough, except for the afternoon of Tuesday, 11th July, when, in fine sunny weather, we sighted the Australian coast near Port Stephens.

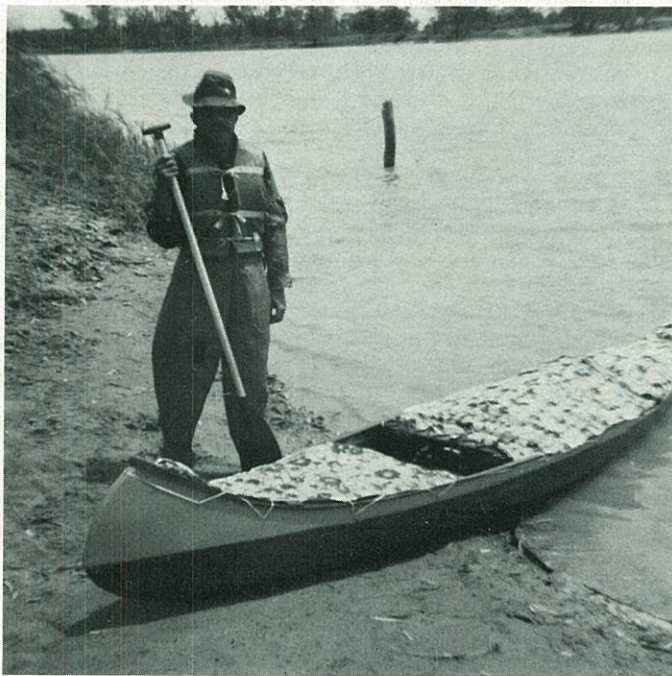
We then encountered head winds of strong to gale-force levels and rough seas. During the night of 11th/12th July the wind strength increased to a fifty knot west-south-west gale creating short steep waves of about 15-20 feet and a rather bumpy ride.

The lights of Sydney were seen about 40-50 miles to our west in the early hours of 12th July. Twenty-four hours later, at 0500 hours, we passed through the Heads to enter Port Jackson and sight the still sleeping city of Sydney. We cruised up the harbour and under the Sydney Harbour Bridge before returning to Watsons Bay to drop anchor and wait for the Customs people to come on board.

As the sun rose over Sydney we celebrated our safe return with a warming glass, or two, from the ship's stores. To a man we agreed it had been a great experience — and when is the next race?!

## 300 CLICKS DOWN THE MURRAY

Warrant Officer C. P. J. "Barney" Bahnerth



*A well dressed canoeist-adventurer*



*Setting off on the first of the 300.*

An anguished cry of — "Oh no! Not again!!" rent the air of the peaceful household when my wife discovered me, immersed in a stack of maps, reading the Murray River Pilot.

Memories flooded back, of Easter '77, when a two hundred kilometre canoe trip was preceded by similar symptoms. Mumbled remarks such as — "Hmmm, three hundred kilometres in twenty odd days . . .", and, ". . . should be interesting", were sufficient indication to the family that, for some time to come, the main topic of conversation would centre around long distance canoeing.

All sorts of difficult questions required answering. Such as, "How much sugar does a person need per day?" and, "How long will bacon keep?" and so on. Estimates were made, a daily schedule planned, supplies supplied and equipment prepared.

I arrived in WAIKERIE, South Australia, complete with "Duyfken" my pet canoe, to start the journey down river. After a quick farewell to wife and daughters, who had provided transport and company on the journey to the start point, I embarked to paddle my own canoe three hundred clicks (kilometres) down the great Murray River.

Only a short distance was planned for the first day, just in case I had over-estimated my fitness. However, with conditions in my favour I surprised myself by completing the first day's distance and part of the next day's, before setting up camp for the night. The rain that fell soon after was a blessing in disguise. Waikerie's town water had an unpleasant taste compared to the rainwater caught in the tent fly.

Breakfast was prepared at daybreak, by which time some perishables had lived up to their description. Unruly



*An ideal campsite after 203 clicks*



*An attractive old distillery passed at the 228 clicks point*

bowels for the rest of the day drove home the point that perishable foods are not suitable tucker for a trip of this nature. My first lesson. More were to follow.

Despite the gastric discomfort, good progress was made again on the second day. Passing an interesting old distillery, some sixteen kilometres from Waikerie, and two of the planned campsites early in the day, I headed for a third. As it turned out the third was too crowded, so I continued down river before deciding to call it a day at HOGWASH SANDBAR.

After paddling thirty-four kilometres in a day and a half HOGWASH SANDBAR was paradise.

Deteriorating conditions on the third day and an increasing wind strength made paddling more difficult and the cooking of meals increasingly unsafe. That night the tent had to be stormset and the cooking of a meal postponed. I endeavoured to settle down to sleep but worsening weather made this as difficult as cooking the meal. After an uncomfortable night I welcomed the daybreak, even though conditions were still against me.

The next leg of the journey got off to a slow start and became even slower as the time passed. The wind increased in strength to the point where my muscles rebelled and the waves, whipped up by the wind, were too big for the canoe to negotiate. Twice the canoe was almost swamped.

Despite all the paddling effort applied only three kilometres were covered. Even paddle steamers experienced difficulty negotiating the bend of the river near MORGAN.

I waited for two hours in the faint hope that conditions would improve, without luck. A recce made on foot, further down the river bank, only served to prove that conditions ahead were worse, rather than better. As a consequence camp was set up for the night, opposite the pumping station on the Whyalla pipeline. Only a slope was available but the best was made of it.

I awoke the following day to the pleasing realisation that river conditions had completely reversed. The Murray was as calm as a millpond and an early start was made. Breakfast was taken at Morgan soon after sunrise as a prelude to the best day's canoeing so far, even though some headwinds sprung up again in the afternoon.

The paddle steamer 'COONAWARRA' passed me twice that day, testing my canoeing skills on both occasions. The head-on wash on the first pass was rather difficult but the backwash on its return pass was even more

so. With a lesser load in the canoe I might have surfed instead.

As the journey progressed, both river and weather conditions continued windy and variable with mainly headwinds. South of BLANCHETOWN there was a marked increase in water-skiers with, of course, their tow-boats. Buzzing my canoe became a dangerous diversion for an inconsiderate few. Dangerous for me that was, as they worked hard at trying to create waves much higher than the fifteen centimetre freeboard of my canoe.

More than once spectators were heard to shout, "Swamp the \*#\*#\*#!!", or words to that effect. Real charmers! Later I was to learn that threatening to throw a beer bottle or two, in, or in front of, a skiiboat had a very sobering effect on their actions.

When I got swamped for the second time — at a mooring — the offender made the mistake of mooring there, too. I offered — with axe in hand — to reduce his freeboard to the level of mine. Needless to say he declined and apologised. He could see I was serious — and furious.

I decided then that, discretion being the better part of valour, the best action to take was to leave BOWHILL — posthaste, and did, after removing most of the water from the canoe.

A good campsite was soon found and the process of make and mend given first priority, starting with a complete unpack and inspection of all items. Only three items, packed in sealed plastic containers, had escaped the excess moisture. The remainder had to be laid out on the groundsheet and dried — to the delight of the local ant population, a couple of whom volunteered to accompany me for the rest of the trip.

Lesson No. 2, perhaps. Carry all food items in re-sealable containers if they are required for more than one meal.

After a near textbook camp, the canoe was repacked and an early start made. I had realised, by this time, that morning breezes were easier to cope with than afternoon winds. The weather forecast predicted that for the first time I might even experience tailwinds. In anticipation of this I rigged the mast and kept the touring sail in readiness. My luck was in. Later in the day I managed to sail before the wind for about ten minutes before meeting up with two other canoeists.

That night, attracted by the promise of a pub and a shower, I settled for the luxury of a caravan park at

MANNUM. The SOUTHWARK sandwich tasted better than ever.

Favourable winds next day allowed the use of the touring sail again for a brief spell. "Duyfken" performed well, even whilst towing another canoe. However, increasing wind made sailing unsafe whilst soaring temperatures turned paddling from a fun thing to hard work.

Work ceased about lunchtime, near WAL FLAT, and camp set up in the shadiest spot available. That day the mercury steadied at 44°C — much too hot for my motor! Complete rest and plenty of fluids became the order for the rest of that day.

At sunrise on day eight the Murray was once again as calm as a millpond. Unfortunately, though, it didn't stay that way. A sudden wind sprung up — a headwind again — causing the two canoes to raft up and seek shelter.

When the wind abated a little, more progress was made, but the combined action of wind direction and river flow again made conditions dangerous. An unscheduled stop was made on a low lying island.

After an improvised meal it was realised that the size of the island was decreasing — rapidly. Discretion once again being the better part of valour, we elected to sit in the canoes to await the abatement of the wind.

It seemed hours before crossing the river to higher ground could be risked.

Along the bank on the other side were a group of holiday shacks, one of which was owned by a Bruce and Judy Harris. They had watched our struggle against wind and rising water and when they saw how fatigued we were — hospitality plus was offered.

Their children offered us their air mattresses and we slept the night away in the garage of a three-storey holiday shack after, that is, we had been royally entertained by our hosts. For example, we were offered the choice of six varieties of port. They couldn't, it seemed, do enough for us. Sleep came very easy that night!

Keen to take advantage of the early morning calm we graciously declined breakfast and, after saying our farewells, made an early start, completely refreshed from a good night's sleep.

At AVOCA DELL, just before MURRAY BRIDGE, I took my leave of the two canoeists whose company I had enjoyed for the previous few days and set off for places further downriver.

A private campsite near a bird sanctuary at MASON ROCK proved too inviting and permission was obtained to stay the night. By this time my stomach realised it had not experienced food since the day before. To compensate a king size meal was prepared from the full day's rations and demolished in record time.

The natural bathing and washing facilities at Mason Rock were utilised to the best advantage and an extremely good night's rest saw me fit for an early start again next day. Heavy rain also had an early start and didn't cease until approximately 1100 hours when the winds dropped to a dead calm.

TAILEM BEND was reached half an hour later, at which point the winds increased yet again. I make no apologies for the repeated reference to the wind strengths for, as any canoeist will verify, winds are one of the biggest problems. Again, with this increase in wind no progress could be made for several hours and, after finally crossing the river, conditions became too difficult to continue.

Camp was set up and the canoe examined in readiness for the final leg to WELLINGTON. Some repairs were found to be necessary and the repair kit justified, at last, as a necessary inclusion on the equipment list — Lesson No. 3.

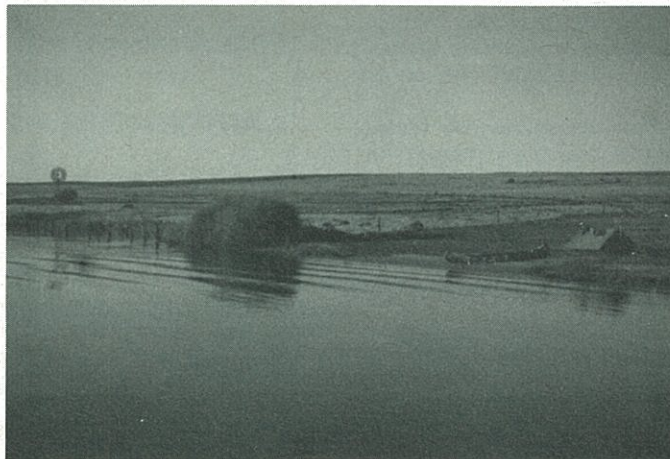
The father of one of a group of rafters I met that day offered to ring my pick-up party in Adelaide, an offer I accepted gladly.

A leisurely final leg was paddled with very mixed feelings. A very enjoyable, though at times hard, journey was nearing its end, as I reflected on the lessons I'd learned.

Some minor modifications to the canoe, such as improved spray sheets, would have made the journey easier and the effect of skiiboats less dangerous. Food needs careful planning if full rations are to be carried, preferably in resealable plastic containers. Last, but by no means least, never attempt any journey with only one canoe unless you have had the advantage of several journeys in the company of at least two other boats and five to ten years of canoeing experience with some, preferably, as a canoeing instructor.

A life jacket is a MUST on any canoe journey and definitely VITAL on a solo. Coveralls, or long sleeved garments reduce the risk of sunburn, whilst unattended wet feet reek highly at first — and cause great discomfort later.

*Footnote:* The pet canoe "DUYFKEN", meaning Little Dove, was named after the ship of Captain (later Admiral) Willem Janz who's landing at Cape Keerweer (Queensland) in 1606 was the earliest recorded landing of a European on Terris Australis (Van Diemens Land or New Holland).



*Peace at Mason Rock.*

## HOW THE BREN GOT ITS NAME

*(First extracted from "Facts and Fancies" 1942 by "AEME NOTES", Vol 2, No 2, June 1946)*

"Many people wonder how the Bren gun got its name and the general answer to the question is that it is named after its inventor. Actually, the name is a composite word, made up from the initial letters of the Czech town in which it was invented and the English town in which it was perfected and manufactured. The Bren came from BRNO, in what used to be Czecho-Slovakia. It was called the Z.B. when it was first produced in 1930.

"The British authorities, who were then interested in finding a really efficient light machine-gun, took it up and made improvements at the Royal Small Arms Works at Enfield. BR and EN gave BREN, which the gun was duly christened in 1934."

## TEN POINTS OF LEADERSHIP

*(First extracted from "Military Review" May 1945 to appear in "AEME NOTES", Vol 2, No 3, June 1946)*

1. Be a vigilant leader. Know your men. Use good judgement and common sense.
2. Be a competent leader. Know your "stuff". Make quick sound, definite decisions. Use simple plans. Issue clear, complete, and concise orders.
3. Be an efficient leader. Maintain unity of command, co-operation and teamwork. Develop mutual trust, confidence, cohesion and initiative in your unit. Follow up your decisions, plans and orders with clear-cut, vigorous action.
4. Be a loyal leader. Keep the "soldier's faith", in service, fidelity and duty. Take a vital, sincere interest in the welfare of your men and officers. Build esprit de corps.
5. Be a trustworthy, dependable leader. Never let your men or your officers down. Deserve their trust. Drive hard to accomplish your missions on time.
6. Be a firm, friendly leader. Cultivate character, respect, courtesy, good will, good manners, tolerance, dignity and tact. Treat your men as you would wish to be treated.
7. Be a resolute leader. Set the examples of force, courage, valour, esprit, honour and high morale for your command.
8. Be a disciplined leader. Remember, hard work and iron discipline doubles victories and halves losses.
9. Be an alert leader. Always be on guard. Protect and care for your men. No man is fit to command who neglects his "all-round securities".
10. Be an aggressive leader. Pay strict, prompt attention to duty, justice and responsibility. Practice what you preach. Set the high example in the cardinal virtues of command. At all times, teach your officers and your men battlefield leadership.

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# AUTOMATIC TEST EQUIPMENT

Major H. N. Percival, MIE(Aust)



In industry there is a trend toward introducing Automatic Test Equipment (ATE) for the purpose of detecting and isolating failures in, and the specification testing of, complex printed circuit boards, or cards, especially where substantial quantities of such items are prevalent in equipments.

As a consequence of this trend, Automatic Test Equipment (ATE) is being introduced into military service in many countries in support of weapon and communication systems such as Rapier, Surface to Air Guided Weapons, the Clansman communication system and Electronic Warfare (EW) systems.

ATE is essentially a *set* of electronic test equipment, similar to that used by a technician in any electronic or telecommunication repair facility, rack mounted and arranged such that each piece of test equipment is connected, through sets of 'electronic switches', to a central console. Usually the console is centrally located on the ATE to provide a central facility into which the PEC under test can be fitted to facilitate testing.

Fault diagnosis with ATE saves time and manpower. It also offers, with the aid of appropriate software packages, a multi-system support facility thereby implying further time and manpower savings.

The implications of employing ATE in a military environment can be better realised by understanding the characteristics of the equipment. To achieve this it is necessary to first consider current forms of electronic test equipment, their purpose and the manner in which they are used.

All electronic test equipment can be divided into two broad categories.

In the first category there are test equipments which provide an input, or source, stimulus to, say, a Printed Electronic Circuit (PEC) under test. Such input sources include power supplies, squarewave generators, signal generators and the like. Their purpose is to stimulate an output or response from the PEC under test.

The second category encompasses those test equipments which monitor or measure the output response of the PEC once it has been stimulated. Power meters, voltmeters and ammeters are included in this category.

A technician engaged in a fault diagnosis follows a prescribed set of instructions, applies an appropriate input stimulus and looks for an output response that is within

pre-determined tolerances. If the response is within those tolerances the equipment is serviceable. If not, it is repaired, realigned and retested — or rejected altogether. In carrying out this procedure a technician will have used equipments from both test equipment categories. The same procedures and the same test equipments are used to diagnose faults in the same type of equipment throughout the Army by numerous technicians.

The automatic application of such test equipment in a fault diagnosis situation also follows a prescribed set of instructions, applies an appropriate input stimulus and 'looks' for the same indications of serviceability status as the technician. However, to do this, a pre-determined sequence of electronic switching is involved which, to ensure consistency, is pre-programmed.

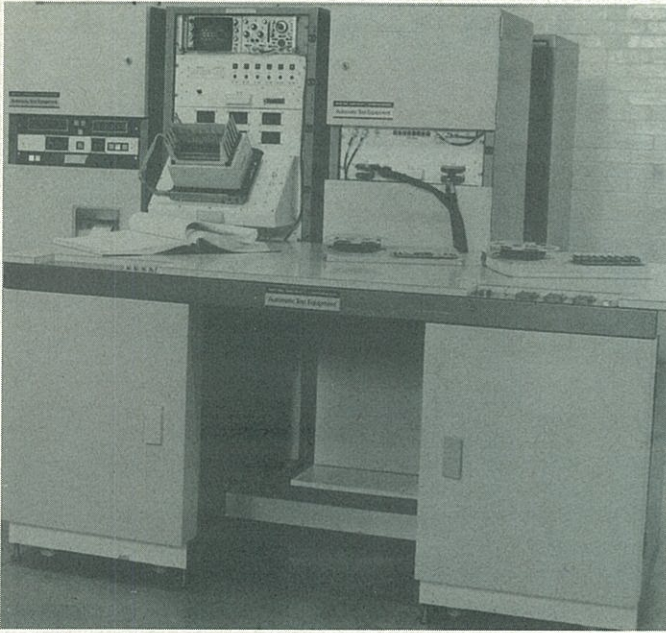
Typically, pre-programming takes the form of a 'punched' paper, or magnetic, tape. The tape is prepared to provide a complete set of instructions to diagnose all possible faults that could reasonably be expected to occur on one particular PEC. Further tapes can also be prepared to cater for PECs in any electronic equipment and a library of such tapes established.

It is evident that weapon and communication systems introduced into the service could each have their own customised ATE complete with tape library and other software items such as patch and extender boards to cater for any size or shape differences in PECs; interconnecting cables to suit special PEC inputs or outputs; an instruction manual for the ATE operator; circuit and component location diagrams for each PEC in the related equipment, test specifications, parts lists of components, samples of correct ATE printouts and any other related data.

ATE facilities, by virtue of their pre-programming tapes are adaptable and could, therefore, be utilised for a wide range of electronic equipments and sited at field or base repair agencies, or, in some cases, both.

So far, ATE have been discussed in terms of time and manpower saving and their adaptability. There are, however, disadvantages.

They are, by nature, very expensive and could cause a tendency for repairs to be conducted at a centralised location. Also, as modifications to related equipments are incorporated, appropriate amendments will be required to the relevant 'software packages'. To achieve such amendments an additional requirement emerges to provide trained personnel to carry out this task.



The maintenance effort for the software package, to keep abreast of the modification state of its related equipment, will necessitate the acquisition of new skills in relation to updating and amending programmed instructions. It is envisaged that, once acquired by a core of engineers and technicians, such skills would facilitate the production of software packages suitable for interfacing PECs from a wide range of equipment to ATE already in existence.

The Rapier SAGW is supported by ATE. However, the quantity of Rapiers being purchased for the Australian Army suggest that the Rapier ATE will be under-utilised.

In UK, 35 Central Workshop, the base repair facility for Rapier, has a significantly greater equipment dependency than we have. There the ATE facility is operated for two eight-hour shifts on a five day a week basis; is utilised by the manufacturer, British Aircraft Corporation (UK) for the testing of future Test Package software and by the staff of the workshop who have developed a number of software packages for the fault diagnosing and specification testing of FACE. This may have application for Australian FACE support and we are taking advantage of this fact.

Further consideration could be also given to providing software packages for other equipment systems such as the PECs in, say, the Leopard Tank Fire Control system and other systems likely to be introduced into the service.

However, it would be quite wrong to continually load the Rapier ATE in support of an ever-increasing number of weapon and communication systems. Another solution, in time, is desirable.

The expense of purchasing ATE for the support of complex systems can be justified from many points of view.

If ATEs are available proposed electronic equipments of the future could be specified in such a manner that software packages could be developed and delivered with the new equipment. Rationalisation and standardisation of equipments with a view to full utilisation of ATEs could be extended to achieve improved tri-service economic goals, whilst still providing the user with the same desired availability of their equipment.

Needless to say, skills to ensure the efficient use of ATE would have to be developed and maintained; consideration given to the number of personnel to be taught

the skills and the system so designed that the skills could be mastered by "ordinary" technicians in as short a time as possible.

On the other hand, care would have to be taken to avoid any situation whereby the employment of ATE ultimately causes a loss of expertise throughout associated technical trades. Such a loss would, with the passage of time and the associated wastage rate, create a shortage of top rate senior NCOs and Artificers in those trades.

In summarising it can be said that the implications of employing Automatic Test Equipments in a military environment, in terms of time, manpower and economy, are many. Most would be of advantage to the service and, with rationalisation and standardisation of equipments throughout all three services, of even greater advantage.

It is hoped this article will have provided a basis from which a better understanding of Automotive Test Equipments can be gained, particularly for those of us who are not intimately involved with such systems.

In a nutshell, ATE is a set of test equipment, pre-programmed with appropriate instructions to initiate a sequence of events to diagnose and test a range of PECs.

Supplied with a suitable library of software packages to provide the interface between items under test and the ATE, it need not be purchased as a customised support system for a single equipment but more appropriately for a range of equipments.

From time to time you may be asked your opinion on the use of the Automatic Test Equipment. I hope this article helps you form one.

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# COMPUTERS (A Personal Lament) by Anonymous (?)

It is well known to me, but a fact I find hard to convince others, it's true. Computers HATE ME!

My relationship with computers follows, exactly, Murphy's well-known law. If money is owed to me and is to be paid by computer programme, one, or all, of the following will occur:

1. The wrong information will be punched;
2. The money will be debited instead of credited;
3. The record will be wiped clean and everything will have to be manually researched and re-input;
4. The computer will have a nervous breakdown at the thought of paying anyone; or,
5. The money will be paid to my wife.

Needless to say, if I owe money, the computer prints five extra copies of the debit and includes my wife in the distribution.

As far as work goes, if I need a report to prove a point, either it won't be available or the computer will deliberately leave off half the information, just to make it appear I'm wrong. On the other hand, if I make a hasty judgement or statement, unasked, the computer will produce a beautifully accurate report, also to make me look a fool.

Not content with perpetuating such things during the year it accompanied me on leave, too.

Whilst visiting a country town in New South Wales I received the "good oil" on a horse. I rushed to the TAB (computerized) office, to place a bet, but the machine saw me coming.

With the speed of light it asked its compatriot at my place of work (they do talk to each other, you know) about me and, on discovering that I was top of the black list, immediately shut down the whole of the NSW TAB network.

I am in sympathy with, but not really surprised at, the plight of the chap who kept receiving a computerized overdue account for \$0.00. As the computer was getting nastier by the month he went to the firm who told him the only way to placate the monster was to write a cheque for that amount.

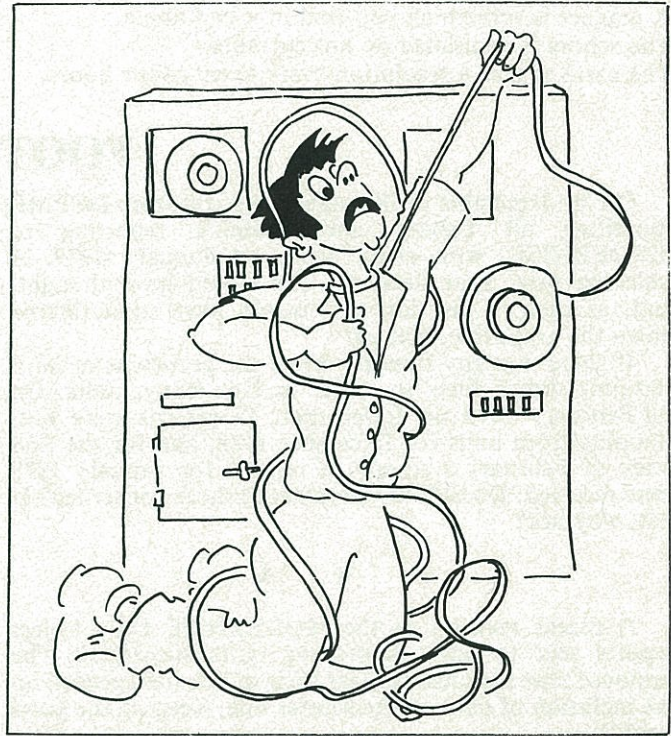
Wonder of wonders! It worked!!

He didn't get a nasty note from the firm's computer again.

He did, however, get one from his bank's machine informing him that he couldn't write a cheque for \$0.00 and ordering him to cancel it.

For the uninitiated a few definitions follow. These may help you understand the nature of the brute.

- COMPUTER** — A device which allows man to make mistakes at 186,000 miles per second.
- FRED** — Nickname for a computer. Stands for "Flaming Ridiculous Electronic Device".
- HARDWARE** — The quality needed by non-indoctrinated persons when dealing with computers or indoctrinated persons.
- SOFTWARE** — That which sits on the shoulders of indoctrinated persons.
- PERIPHERALS** — Tentacles by which computers grab unsuspecting lone operators while they brainwash them.
- DPO** — Diabolical Plots Office where indoctrinated persons and computers confer to hatch plots to plague others.



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# REASONS FOR UNEMPLOYMENT?

Owing to the recent emphasis placed on scientific and mathematical skills required by school-leavers aspiring to employment in industry an evaluation of their skills was carried out. The following list of answers are compiled from those tests:

Charles Darwin was a naturalist who wrote the Organ of the Species.  
Benjamin Franklin produced electricity by rubbing two cats backwards.  
The theory of Evolution was greatly objected to because it made men think.  
Three kinds of blood vessels are arteris, venis and caterpillars.  
A thermometer is an instrument for raising temperance.  
To remove air from a flask, fill the flask with water, tip the water out and put the cork in quick.  
A litre is a nest of young baby animals.  
U-Thant is a missile.  
A magnet is something you find in a bad apple.  
The school is ventilated by hot currants.  
The earth makes a resolution every twenty-four hours.

To collect fumes of sulphur, hold a deacon over a flame in a test tube.  
Typhoid fever may be prevented by fascination.  
Parallel lines never meet unless you bend one or both of them.  
Algebra was the wife of Euclid.  
Geometry teaches us to bisex angels.  
An axiom is a thing that is so visible that it is not necessary to see it.  
Algebraical symbols are used when you do not know what you are talking about.  
A circle is a line which meets its other end without ending.  
The moon is a planet like the earth only deader.  
The pistol of a flower is its only protection against insects.  
An example of an animal breeding is the farmer who mated a bull of good meat to a bull that gave a great deal of milk.  
We believe reptiles came from the amphibians by spontaneous generation and the study of rocks.  
If conditions are not favourable, bacteria may go into a period of adolescence.

Provided by WO2 Brian Langridge

## FOOTNOTES

On 5th December 1978 a signal was sent from DGEME cancelling all Labour and Training reporting to MODERNISE, with effect from 1st January 1979. A welcome New Year decision, one would have thought, and, as such, a decision that would have soon filtered down the grapevine. Not so!

If there was any filtering down the grapevine at all it certainly didn't filter to some, in fact many, units. On 1st February 1979 no fewer than 17 reports were outstanding from units for December 1978, and for the first week of February a stream of reports for January 1979 were received. Doesn't the word get to those concerned? If not, why not?

★ ★ ★

A recent revision of the MODERNISE Data Reject reports sent to units is proving quite successful. The response time for units to clear their rejects has speeded up the inclusion of data on the Master File. Keep up the good work!!

★ ★ ★

A Warrant Officer in DGEME, suffering crippling backache, reported to the Medical Centre for treatment

and the Medical Officer prescribed a week's bed rest at home.

Returning to the office to report the decision, before leaving for home, he bemoaned the fact that he wouldn't be able to watch Test cricket as it was a rest day. What was he going to do all day?

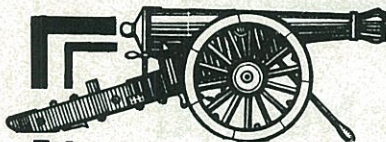
"Don't take it so hard," said his boss, "you'll be able to watch 'The Young and The Restless' having 'The Days of Their Lives' at the 'General Hospital' in 'Peyton Place'."

For a moment he forgot his backache!

★ ★ ★

Cpl D. V. Maslowicz may be interested to know, following his article in our first issue, that Aero Electronics (AEL) Ltd, of Horley, Surrey, in England, have developed a miniature aerial target system — the AEL SNIPE.

The aircraft used is constructed of wood veneer covering a polystyrene foam core which makes them extremely rugged but very easy to repair. Flying control is by aileron and split elevator, each with its own high performance servo. It is launched from a trailer which can be towed by a Landrover. A special radar reflective mesh is incorporated and the Doppler Miss-Distance Indicating equipment is an optional extra.



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