ARMY JOURNAL

No. 264 MAY 1971

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Printed and published for the Australian Army by The Ruskin Press Pty. Ltd., and issued through Base Ordnance Depots on the scale of one per officer, officer of cadets, and cadet under officers.

Contributions, which should be addressed to the Editor, Army Journal, Directorate of Military Training, Army Headquarters Canberra, A.C.T. 2600, are invited from all ranks of the Army, Cadet Corps and Reserve of Officers.

$10 will be paid to the author of the best article published in each issue. In addition, annual prizes of $60 and $20 respectively will be awarded to the authors gaining first and second places in the year.

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COVER: The German counter-attack on Australian positions at El Alamein, November 1942, by war artist W. A. Dargie. At the Australian War Memorial.

ARMY JOURNAL

A periodical review of military literature

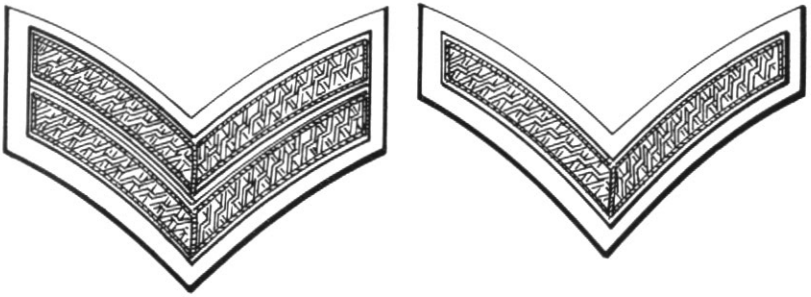
No. 264, MAY 1971

Contents

(Australian War Memorial)

After a 5,000-foot climb into the Finisterres during the attack on Shaggy Ridge, New Guinea in January 1944 the

Centralized



Junior NCO Training

Be not deceived; God is not mocked: for whatsoever a man soweth, that shall he also reap.
—Galatians 6-7

Major F. Fazekas
Royal Australian Infantry

Introduction

HAVING spent all of my army life in regimental and training appointments in a number of postings, and having compared the quality of our present-day junior NCOs and those of a decade ago, I have come to the conclusion that our system of junior NCO training today is inadequate.

Major Fazekas was born in Hungary in 1929. He left Hungary in 1945 and four years later migrated to Australia. He was appointed lieutenant in the 27 Inf Bn CMF in October 1957 and two years later began full-time duty with the 16 NS Trg Bn. In 1960 he joined 1 RTB Kapooka as a platoon commander, and next year went to 1 RAR as Assault Platoon commander. He was promoted captain in 1962 and was for three years an instructor at the School of Infantry. He joined the AATTV in 1965, was OC Tra Bong Special Forces Camp for five months and then took over the Nung Bn. In 1966-68 he was an SI at JTC, Canungra and since 1969 has been OC Sp Coy/Ops Offr in 1 RAR, at present in Singapore.

How often does one hear these remarks from officers and senior NCOs: 'Our young corporals and lance-corporals are unreliable; one cannot trust them at all.' 'They are unable to work without supervision.' 'One might as well do the job and then one knows, at least, that it is done properly.' Such remarks are being made at this moment in one or another unit and, by and large, are true. However, what the officers and senior NCOs do forget is that today's junior NCO has had very little service and very little formal NCO training. The NCO of a decade ago had at least four to five years' service and taken part in many platoon, company and battalion size exercises: within the unit he did a much more comprehensive cadre course, or graduated from the Central NCO Course at Kapooka for first promotion. This is not the case today; due mainly to shortage of time and to our expansion in the ARA.

I shall deal with my subject under two headings:

Present day junior NCO training.

Proposed junior NCO training.

Present Day Junior NCO Training

During the last few years the ARA has expanded rapidly and large gaps in the new unit establishment had to be filled from existing resources. Not only had these gaps to be filled, but each unit earmarked for South Vietnam had to take a percentage of potential junior NCOs away to fill possible vacancies. Senior NCO appointments were filled from long-serving corporals and sergeants and rapid promotion became an everyday occurrence. Junior NCO vacancies were and are filled from unit cadre courses of four weeks' duration.

The selection of the candidates occurs at company and platoon levels. The trouble here is that most of the officers and senior NCOs have not been in the unit long enough and have had to rely on brief observations, or on the opinion of other junior NCOs less qualified to make the selection. AAB 83s are generally not adequately recorded and individual training cards are just as sketchily noted. Despite these deficiencies in selection, the candidate is sent to the unit cadre course.

During the four-week cadre course he is taught instructional techniques and leadership; he will be given the blue print for drill and weapon lessons, he will try his hand in instructing fellow candidates in form of mutual instruction. He will be taught tactics at section and platoon level, map-reading, voice procedure and message writing. He

will be introduced to the intricacies of marking a roll book, he will learn how to frame a charge. He will be told about the responsibilities of a section command and section 2IC. All these and other subjects will be taught to him and all the while he is expected to do a fair amount of private study as, due to the shortage of time, the instructors cannot deal with any subject in depth, much less can they ensure that the subject material has been absorbed, understood and will be acted upon.

Eventually the candidate will be assessed on several drill and weapon lessons, will answer a Tactics paper and a Subject 'C' paper. Providing he obtains 50 per cent or better in each subject he is in line for promotion and will be promoted in due course to lance-corporal or corporal. One of the problems in assessment is that the candidate is working in a familiar environment and the assessment is perhaps not quite as impartial as it should be or could be. The other problem is that generally the standard of instruction is not as high as in a training establishment. A typical detailed syllabus is reproduced below for Subjects A, B and C:

BLOCK SYLLABUS FOR SUBJECTS A, B, AND C FOR FIRST PROMOTION

Trg Periods

a.	Wpn Trg revision	4 periods
b.	Drill Revision	4 „
c.	Bayonet Fighting	4 „
d.	Mil Law	16 „
e.	Peace Administration	8 „
f.	Method of Instruction Technique	8 „
g.	Mutual Instruction Drill	20 „
h.	Mutual Instruction Wpn Trg	20 „
i.	P1 and Coy Drill	4 „
j.	Front, Flanks, Blank Files and Guide	2 „
k.	Communication Drill	2 „
l.	Students Instr Drill	10 „
m.	Students Instr Wpn Trg	10 „
n.	Examination Periods	10 „
o.	Range Practice	4 „
p.	Course Pdes	15 „
q.	Misc and Administration	24 „

r.	Map-reading	5	„
s.	Voice Procedure and info in the fd	5	„
t.	Battle procedure and deployment Quick Battle Appreciations and Orders	10	„
u.	Attack	6	„
v.	Defence and protection	9	„
w.	Patrolling and ambushing	8	„
x.	Organizations	3	„
	TOTAL	211	„

He is expected to learn the rest of his trade within the unit on the job, making mistakes and profiting by them and so become an adequate or good section commander both in the field and in garrison.

Some of them, a fairly large percentage, surprisingly do this but there are just as many who do not and are moved around until eventually they are the dead-wood of the unit, or some other unit. Some even get posted to training establishments and become part of the machinery which trains newcomers into the Army. The results of this are that units have to partly retrain these soldiers.

In time, most of these junior NCOs get promoted and 8-10 years later arrive at the Infantry Centre for the long Warrant Officers course. At the end of the 17-week course, when 35-40 per cent fail one or both subjects, everyone is very upset and blame the instructors, the system, but very seldom themselves. Partly they are right, as at the School of Infantry, for the first time in their career, they meet the standards that they should have met as NCOs from the start. These standards are high and exacting and the pressure is applied throughout the course. The requirements are not only knowledge, but dedication, sense of responsibility, degree of professionalism—qualities that many of the candidates are unable or unwilling to furnish. Hence the high failure rate. Some NCOs of the WOs course may have attended mortar, anti-tank, platoon weapons courses at the Infantry Centre, but the above courses are designed to make efficient mortar numbers, anti-tank gunners etc., not efficient NCOs.

I feel that junior NCO selection and training must be of a high standard, centralized, have continuity, and be assessed by impartial instructors. We must build into the future NCO a sense of responsibility,

dedication, integrity and professional competency right from the start, thus avoiding the large percentage of wastage in manpower, and eliminate the ineffectives, present in most units.

Proposed Junior NCO Training

The selection of potential NCOs must begin in 1 RTB. Platoon and company commanders should be constantly on the lookout for NCO traits in all members. These traits must be marked on the member's individual training card. Not only, 'NCO potential'—but in detail —'Slow but very conscientious, excellent sense of responsibility' or 'Quick and decisive, good organizing ability and leadership potential.' These same traits can be observed in corps training and in units later and an assessment can be made whether the individual has progressed or regressed. Observations like these must be recorded on the Individual Training Card in all establishments and must follow the member to his new unit. Only in this way can the company and battalion commanders rely on more than their own opinions when selecting potential NCOs. The candidate's SG rating must be also looked at to ensure that he is able to absorb more complicated instruction.

In other words selection is most important, and careful and proper selection will ensure minimum failure rate. Among the decisive factors must be a sense of responsibility and dedication.

The Junior NCOs course should be of 10 weeks' duration and the school should be modelled somewhat along the lines of the US Army NCO academies. The syllabus should be divided into two parts: a 'Teaching' and a 'Testing' in all three subjects:

Subject 'A' two x $2\frac{1}{2}$ weeks period	=	5 weeks
Subject 'B' two x $1\frac{1}{2}$ weeks period	=	3 weeks
Subject 'C' two x 4 days	=	$1\frac{1}{2}$ weeks
Miscellaneous and Admin Periods	=	$\frac{1}{2}$ week

It should encompass the present cadre course syllabus, but instruction should be in much more depth and practised much more thoroughly in the second part of the course.

Courses should be of platoon size and should start every five weeks so there is a junior and senior class running concurrently. The senior class in the second part of the course could do some of the instruction in the form of mutual instruction and could act as advisors, section commanders, section 2ICs and platoon sergeants under the guid-

ance of the permanent staff. This system would ensure that only a relatively small staff is required. It would also ensure that the leadership potential and instructional capabilities of the senior class are fully realized and tested. Under supervision the seniors could do room and dress inspections, weapon inspections, run range shoots etc. In other words, teach and practise all the new skills they have learnt and supervise all or most of the practical work of the junior class, thus ensuring that the senior classmen not only prepare their periods of instructions, but any mistakes made will be corrected by the permanent staff and no 'wrong drum' will be taken back to the units. The old saying, 'One does not know a subject until one has taught it,' is as valid as ever.

Courses should run throughout the year continuously. If there is a requirement to train other arms and services junior NCOs, the platoon should be expanded to company size with arms and services platoons, where the Subject B syllabus could be varied a little. In achieving uniformity in training and in the standard of all NCOs, we should also achieve a uniform solid foundation in the lower echelons of the ARA. Subjects 'B' and 'C' should be more comprehensive and practical. Candidates should be introduced to simple section and platoon TEWTs and then execute the problems as a section or platoon along the lines of the DS solution.

In Subject 'C' the candidate should be schooled and given a little practical training in company orderly room procedure and company Q store systems, ensuring that as a corporal he can take his place anywhere in the company structure.

Thus, the fully equipped young NCO could serve for a few years as a corporal in a field force unit and training establishment, preferably in that order and have 2-3 years in each posting. Before his promotion to sergeant he should come back to the school for a six weeks' course:

Subject 'A'	2 weeks
Subject 'B'	2 weeks
Subject 'C'	2 weeks

The reason for the long Subject 'C' course is to ensure a thorough grounding in administrative and Q procedures as the candidate, after promotion and a few years' service, should be able to have the choice of specializing in A and Q or G type work to become a CQMS, an RQMS or a CSM and, eventually an RSM. Once his choice is made,

then the next course should be alternatively a CQMS and RQMS course at JTC or the WO and later the WO refresher course at the infantry centre.

Conclusion

Following the outlined system one can see that the end product after 24-33 weeks of training and 18-20 years' service, is a highly professional and well trained RSM or RQMS who has been through all stages and phases of the system and has had considerable experience in other fields besides his own. It is a pity in a way that these professionals become commissioned and all their experience and expertise is seldom used again.

Perhaps one of the reasons that so many warrant officers leave the service is not money, but lack of prestige and sense of achievement. Why not follow the US Army example and have a Brigade Sergeant Major, Divisional SM, Command SM and the SM of the Army? There should be these WOs, with the responsibilities of our present unit RSM, plus additional ones to advise commanders at various levels, including the CGS, on matters affecting the soldiers. These SMs could do a lot for the young soldiers, the junior NCOs, and the senior ones, as they were once themselves.

Perhaps if these appointments, with the added responsibilities and prestige were created, the present day RSMs would not dread the day they became commissioned officers, but would willingly serve on and by their wealth of experience would ensure that serving in the Army would be made easier for all ranks, and all would benefit in some measure by their hard won experience. □

U.S. MARKSMANSHIP TRAINING

preparing today's rifleman

Jac Weller

AMERICAN fighting men fire more rounds during basic marksmanship training than the armies of the rest of the world combined. More time and money are spent on U.S. marksmanship training today than we or any other nation ever spent before, even during World War II. We are producing some superb combat shots. Skills which are taken for granted by Americans are envied in most other armies.

On the other hand, U.S. commanders in Vietnam have not always been pleased with the results from tens of thousand of small arms cartridges expended in relatively short actions.

The proficiencies of young American riflemen who are presently being trained in the U.S. Army and the U.S. Marine Corps vary not only with natural aptitude, but also with the type of instruction, and the skill, ability, and dedication of the instructors. This variation is reflected in a great variation in the product from different training centres within the Army.

I found a considerable difference between Army and Marine rifle marksmanship training during my visits to some of their training centres

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Reprinted from the October 1970 issue of The American Rifleman, *by permission.*

during the preparation of my article 'Military Rifle Training' which appeared in the January 1965 *American Rifleman*. I have since revisited these same places plus one new one. There are even more variations now than formerly, even between different U.S. Army training centres. Before going into these in detail, however, we need a little background in connection with present and future American military rifles.

The U.S. M1 rifle was considered to be the best used by any nation during World War II. It was a semi-automatic, capable of discharging eight rounds before reloading was necessary, and firing bullets weighing between 150 and 180 grains at velocities of between 2,600 and 2,800 feet per second.

Following World War II the major nations were split into two groups, those of the East and those of the West. The two groups adopted different infantry rifle concepts.

The NATO nations of the West adopted first a common round, the 7.62-mm NATO. Although the overall length and weight of the entire cartridge are less than for the 30-'06 used in the U.S. M1 rifle, the bullets are identical in diameter and about the same in weight and velocity. After various periods of delay, most of the major Western nations adopted new infantry rifles to fire the 7.62-mm NATO round.

The U.S. Armed Forces began to substitute U.S. M14 rifles for M1's about 12 years ago. The M14 is essentially a mechanically improved M1, having also a magazine delivering 20 rounds instead of eight; it can also be reloaded without clearing the chamber. These two changes are both advantages. The M14 is also slightly lighter and is capable of full-automatic fire when left as manufactured. Burst fire from the M14 may or may not be an advantage. The M14 rifle and new U.S. M60 machine-gun use the same ammunition, 7.62 NATO; it is, of course, of full rifle power.

After 1945, the Eastern or Communist nations adopted a lighter and less powerful family of weapons built around an intermediate power cal. .30 Russian cartridge (M1943) which fires a 120-grain bullet at approximately 2,300 feet per second. This cartridge and the arms designed for it are now being used from the Iron Curtain in Europe to Korea and Vietnam in Asia and in some other parts of the world where the Communists are dominant. Semi-automatic carbines, burst-firing assault rifles, and squad level machine-guns all fire the same intermediate power round.

Both these concepts are valid. The Eastern intermediate-power small arms are better under some circumstances; U.S. M14 rifles and M60 machine-guns are superior in others. The fighting since Korea has been low level, mostly guerilla and counter-guerilla in character and in thick, hot jungle country. Light arms with limited range and power have advantages in this type of combat. But Americans responsible for choosing our military small arms consoled themselves in the early 1960s with, 'The M14 is only an interim weapon. We already have something better on the way.' They were referring to the SPIW, pronounced 'spew' and standing for Special Purpose Individual Weapon.

This was shown to selected military personnel as early as 1959 and was said to be 'a radical new approach to arming infantry soldiers'. A famous general testified before Congress not only that the SPIW 'could replace the M14 sometime after 1965', but that one of these 'with 750 rounds of ammunition would weigh no more than an M14 with 160 rounds'. He added that 'the Army hopes the SPIW will leapfrog the AR-15'.

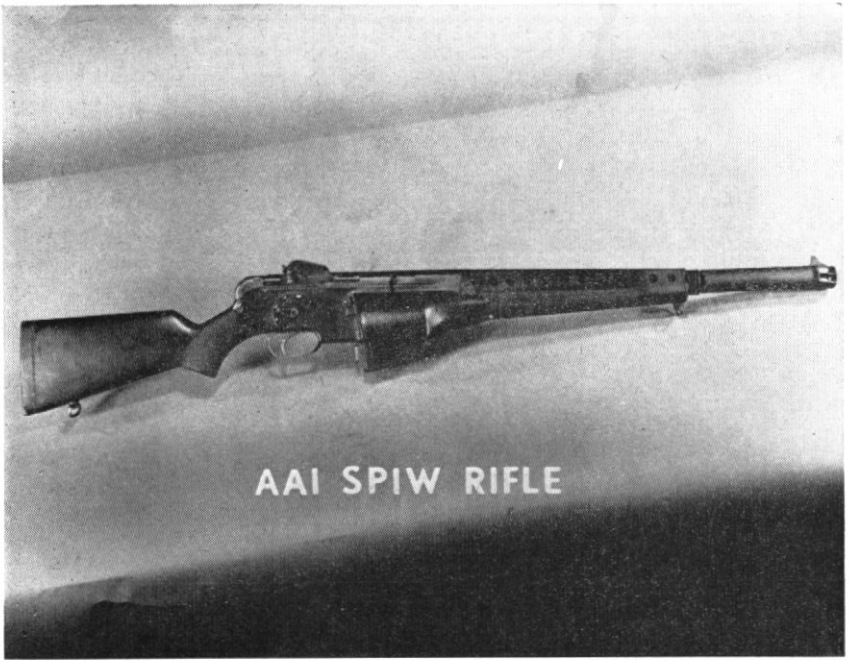
The SPIW has now been 'oriented to the time frame of 1980'. I gather that this means that it won't be ready for at least ten years. It's safe to say it has not been a success. It was said to have a point and an area capability. Actually, the SPIW concept never was just one single weapon, but several. People assumed that SPIW shot a lot of little arrows at high velocity either one by one in bursts, one following another, or in groups as from a shotgun. It was also said to be able to discharge high explosive shell. The weapon needed to be loaded only occasionally; ammunition was not conventional, but extremely light.

Many people believed that SPIW was a kind of Buck Rogers weapon that didn't need to use normal bullets and powder. The entire system is still classified, but we do know a good deal more about it now. The SPIW in its simplest form looks a lot like other shoulder rifles, although it sometimes has a smooth bore. It fires little metal arrows instead of conventional bullets. Some SPIWs use caseless, self-consuming rounds in which a plastic propellant is moulded around the projectile.

During the time when the U.S. Armed Forces were being re-equipped with M14 rifles and waiting for SPIWs, we became heavily involved in the Vietnam War, a conflict in which full-power rifles like the M14 were often at a disadvantage. Coincidentally, the U.S. Air Force was in part armed with the AR-15.

AR-15 Becomes the M16

The AR-15 was rechristened the M16 on its adoption. The 5.56-mm cartridge has the same bullet diameter as other centrefire and rimfire '.22s'. The military bullet however has a full-metal jacket and weighs 55 grains. Its muzzle velocity is about 3,250 feet per second. The cartridge used is similar to, but not quite the same as, the .222 Remington Magnum.



One version of the SPIW 'rifle'.

The U.S. Army and finally the USMC wanted this new light shoulder rifle for combat like that in Vietnam. In spite of some shortcomings, it has been popular with our forces and those of our allies. Its accuracy and killing power have been satisfactory for South-East Asia. However, the M16 rifle is not so rugged and requires far more cleaning and care than either the M1 or the M14. The most dangerous malfunctions of the M16 are when a fired or even an unfired round sticks in the chamber. Unless you have a cleaning rod, you are out of action and a sitting duck. During both my visits to Vietnam I saw

soldiers and Marines with cleaning rods taped to their M16s to clear their chambers if this was required.

So far, no regular issue machine-gun has been introduced into the Army or USMC which fires the 5.56-mm cartridge. Eugene Stoner, the original M16 designer, has had a machine-gun tested extensively by the Marines, but its use in combat has been on a 'field trial' basis only. A U.S. rifle platoon must carry three kinds of ammunition, one for their M16 rifles, another for their M60 machine-guns, and still a third for their pistols.

The M16 is thought to be extremely lethal at short range. The extra velocity probably causes more serious wounds. But as range increases, velocity of the 55-grain bullets drops more rapidly than for the M14 and even the Russian 'intermediate' power round. Beyond about 250 yards the bullets of the enemy begin to have considerably more energy than our .22 bullets.

With these disadvantages, the M16's advantage is lighter weight. A man with an M16 can carry more than twice as many rounds for the same total load as with the M14. Actually, some strong young Americans go on patrol with 25 or even more loaded magazines, a total of 475 rounds or more. To help against malfunctions each magazine is combat loaded with 19 rounds, not to its full capacity of 20. Total load (rifle and 475 rounds in magazines) is about 22.9 lb for the M16 and slightly above 50 lb for the M14. No man can carry 50 lb of rifle and loaded magazines in Vietnam, but some can and do approach half that weight. When a man's life may depend on his supply of cartridges in a hot, jungle combat area, he wants the M16 not the M14.

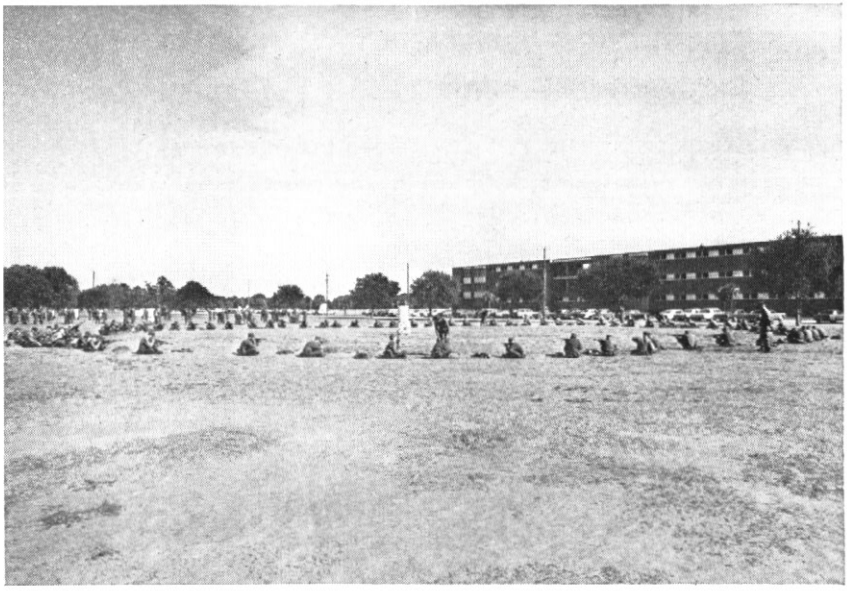
All M16 rifles are capable of full-automatic fire. The M16 can be fired more accurately full-automatic than the M14. The extra ammunition plus this burst capability has led to new combat techniques; an American unit hit in Vietnam usually sounds off with fire like the end of a July 4 fireworks celebration. Thousands of bullets go out somewhere quickly.

I asked dozens of soldiers and Marines, 'Can the M16 replace the M14 entirely and for all conditions of combat?' Not a single one with enough overall experience to have a right to an opinion said, 'Yes!' Many pointed out that the weight advantage of the M16 is important mainly in footmobile operations and perhaps marginally in heliborne missions. Even in Vietnam, mechanized units patrolling vital roads in armoured vehicles have somehow obtained enough M14s for everyone.

The U.S. Seventh Army in Europe has only mechanized infantry. If an armoured personnel carrier or other vehicle is available to carry men, rifles, and ammunition, the M14 is obviously better because of its much greater range and penetration.

Marine Marksmanship Training

The USMC has two basic training centres or depots, Parris Island on the East Coast and San Diego on the West Coast. There are enough fine shots in the Marines so that both have superb marksmen training



A training platoon of Marines snapping-in in a large circle around a central group of reduced targets.

personnel. Their facilities are as good as any in the world, perhaps the very best. The Marine Corps is larger than the entire British Army and those of many other major nations.

On the other hand, the need for Marines in Vietnam, and the ever expanding number of skills that they use in combat there, have meant a curtailing of their entire basic training programme and a reduction of six days in the time devoted to rifle marksmanship. In 1964, they devoted three full weeks to rifle marksmanship; the time is down

to 15 days now. The 900-inch (25-yard) firing has been eliminated entirely.

Young Americans from all types of background with outlandish haircuts, crazy ideas, and all the rest arrive at Parris Island in an astonishing array of civilian clothes. About all that they have in common is that they have volunteered to be Marines. They spend their first three weeks in physically punishing activities; they are also usually mentally reoriented. The change is difficult to put into words, but is obvious. By the time these boys arrive at the rifle ranges — they live there during their marksmanship training — they look you square in the eye, and have learned to give 100 per cent of themselves in order to be U.S. Marines.

Each incoming platoon marches past a sign that says, 'Weapons Training Battalion — We train the world's best Marksmen.' Every man receives an M14 rifle and a *Rifle Marksmanship and Data Book*. I found on the first page of the latter the following:

> *This is my rifle. There are many like it, but this one is mine. My rifle is my best friend. It is my life. I must master it as I must master my life.*
>
> *My rifle without me is useless. Without my rifle, I am useless. I must fire my rifle true. I must shoot straighter than my enemy who is trying to kill me. I must shoot him before he shoots me. I will.*
>
> *My rifle and myself know that what counts in this war is not the rounds we fire, the noise of our burst, nor the smoke we make. We know that it is the hits that count. We will hit.*
>
> *My rifle is human, even as I. I will learn its weaknesses, its strength, its parts, its accessories, its sights, and its barrel. I will ever guard it against the ravages of weather and damage. I will keep my rifle clean and ready, even as I am clean and ready. We will become part of each other.*

I wish I could write like the above, but it isn't really writing. It's the distilled combat wisdom of generations of Marines from the 'Halls of Montezuma to the Shores of Tripoli'. A U.S. Marine and his rifle that are truly a team and work well together are about the toughest combat opposition in the world. This was true at Belleau Wood in World War I, on Iwo Jima in World War II, and on the Naktong in Korea, and is still true outside Danang right now.

On reporting to the range, each recruit platoon is assigned a Primary Marksmanship Instructor who conducts the platoon through all phases of marksmanship training throughout the 15-day period. The Primary Marksmanship Instructors and coaches, with individual Drill Instructors who stay with the platoon throughout its entire eight weeks, supervise platoon firing.

The first four days are devoted to instruction on the Marines' basic weapon, the M14 rifle. This includes sling adjustment, proper firing positions, rifle sight setting, and rapid-fire techniques. All this is done in the old way with careful explanations exactly as if these recruits were going into a National Championship rifle competition. The Marines point out that these elementary things which go to produce accurate shooting must be mastered before any man can fire his rifle effectively at either a target or an enemy.

Basic Weapon is the M14

The Marines mix lectures and demonstrations with periods of dry firing which they call snapping-in. During these periods, the recruit practises the fundamentals which he has been taught. They usually spend more time at it than the lesson plans call for.

The Marine Corps has decided that the best way to learn to shoot a rifle is to take advantage initially of every favourable factor — known range, a black on white target, and personal comfort including a rifle shooting jacket, a rifleman's glove, and a comfortable cap, not a steel helmet. Each man learns to shoot from four standard positions: prone, sitting, kneeling, and standing. Able instructors teach each new recruit the standard positions for delivering accurate fire as established by Marines in National and International competition. Standing and prone are much the same for everyone. In the standing or off-hand position Marine recruits now do use a sling; the supporting elbow can touch the side.

Sitting and kneeling positions are more difficult because not all men are built alike. The suppleness of some young Marines has to be seen to be believed, while some recruits have physiques or injuries which require position variations. Marksmanship Training Instructors are better qualified to recommend a position for each young man after a few preliminary tests than he is himself. Few recruits have fired a rifle before joining up. Special sitting and kneeling positions are necessary for

men with football knees and ankles hurt in automobile accidents. Less drastic changes are required for legs that are unusually short, long, or stiff.

On the other hand, if a Marine can take a sitting position that is so extremely low that he is almost lying down, he is coached to assume it. He is not actually allowed to rest his elbows on the ground, but some come so close to it that they look as if they were. Many recruits can take a kneeling position easily and without strain that is fully as much supported as most older riflemen are in their sitting positions.

An extremely supple Marine in an unusually well supported position.

The Training Battalion Marines use every available minute during the first ten days that each platoon spends at the ranges — plus a few that aren't supposed to be available — in getting these recruits ready to compete. There is a coach for every two men on the firing line. Those who need extra instruction in sight picture, trigger control, positions, rapid fire techniques, or even score book procedures get it, and

from men who know what they are talking about. The range personnel work just as hard on less gifted shooters as on those who probably are going to be Experts.

Motivation and Competition

The last five days of basic rifle training, Monday through Friday, are spent in the same way, as if the recruits were firing in competition. Actually they are, and with a gradually increasing emphasis. The motivation throughout is competitive. Every man competes with every other man in his platoon; each platoon competes with every other platoon. Even the instructors compete with each other. Every shot fired is not just to hit the target somewhere, but to score as high as possible, in the centre of the bull preferably.

Each recruit fires 50 shots each day for the last five days, with a possible score of 250. The first stage is ten rounds fired offhand at 200 yards, each round fired, scored, and spotted individually. Second, ten rounds are fired in 50 seconds sitting from standing at the same range. The ten rounds are divided between two magazines so the firers learn to change magazines quickly and precisely. This 200-yard firing is, of course, the first two stages of our standard National Match Course.

Then everyone moves back to 300 yards. Each recruit fires five shots slow fire from a sitting position, and then five shots kneeling in the same manner. Targets are pulled, spotted, and scored after each shot. This double stage is not in our National Match Course. The Marines think that slow fire from both kneeling and sitting positions is important, however, especially for recruits.

The final 300-yard firing is ten shots prone from standing, rapid fire, in 60 seconds. Again two magazines must be used.

Now back to 500 yards; firing at this range is all from the prone position and slow fire. The National Match Course calls for 20 shots (usually at 600 yards), but the Marines fire only ten. The 500-yard stage now constitutes only 20 per cent of the qualification firing, but many instructors believe it to be the most important part of the course. Minor faults show up quicker at 500 yards; a recruit who can learn to handle adjustments for wind at this range in a total of only 15 days may easily become a truly fine shot.

Scores for all five days are recorded and averages made up, though objective is the final 'qualification' fired on Friday. Range personnel

have found, however, that recruits do better with a kind of increasing seriousness rather than 'four days practice and then the big game'. On Thursday there is an officer in the pits checking every score. On Friday, as much care is taken as in the Olympic Games. If a firing point score and the pit score — these are checked automatically — don't agree, the pit score is official. By Friday these young Marines are behaving like seasoned competitive rifle shooters not only in their firing, but with their score books also.

Medals are Awarded

Friday's total score means a lot not only to the individual, but to the entire platoon and to his instructors. Badges won are awarded formally. In many instances, these medals are the first things that these boys have ever won by their own individual efforts in their lives. A score of 190 out of 250 is required to receive a Marksman classification; the lower limit for Sharpshooters is 210. A young Marine scoring 220 or better is an Expert. A badge of any sort after only 15 days — most of these recruits have never used a firearm before — is something that a man can be proud of. Above 90 per cent of USMC recruits do win badges. Qualification as Experts is far rarer, under ten per cent on the average.

Marines realize that their basic training emphasis on the ultimate in accuracy, proper positions, sight adjustments, slings, gloves, score-books, and the like is not realistic for battle. Combat targets will not appear at known ranges, black on white and conspicuous against the skyline, and remain motionless for precise periods. They feel, however, that in basic training they should make it just as easy for each young man to shoot as well as he possibly can. The emphasis is on competition because the Marine Corps, war, and life itself are competitive. They also use it because they believe that competition is the very best way to produce maximum proficiency within individual limitations in the least time. Young men mature quicker this way.

Once a young Marine has learned how to shoot a rifle, has mastered to some extent at least the techniques required for competence with it under near ideal conditions, he can adapt to non-ideal circumstances more readily. Marines have courses in combat shooting before they report to their final units, but these are secondary to their 'boot camp' training. If the basic skills of holding and squeezing, sight

picture, and the rest are not learned, a rifleman of any type won't ever be an acceptable shot on the range, in the hunting field, or in battle.

Now let's look at comparable rifle marksmanship training in a good U.S. Army training centre.

More than ten years ago, the Army changed from known distance, black-on-white target instruction to what was then called Trainfire. As first proposed, the idea appears to have been, 'We will teach recruits to shoot at the same kind of targets they may see in battle. We won't pad jackets, or use slings, or spend long hours mastering techniques and positions because these cannot normally be used in combat. Since men shoot in war with equipment on their backs and helmets on their heads, they should learn to shoot with them also.'

U.S. Army rifle marksmanship training in even the best centres still pays lip service to this doctrine. The opening lecture includes, 'During World War II and the Korean conflict, a battlefield survey estimated that infantry soldiers detected and fired at less than one-third of the targets facing them in combat. Another investigation produced two rather significant facts: First, many soldiers in combat did not fire their rifles at all. Second, soldiers who did fire scored an astonishingly low number of hits compared to the total number of rounds fired.

'With the preceding points in mind, basic rifle marksmanship was developed with the mission of providing the soldier with the necessary training to allow him to use his rifle effectively in combat. This was based upon the conclusion that the most important skills for the rifleman in combat are: First, detecting enemy targets; second, aiming properly at detected targets; third, firing on targets without having to adjust the sights for a particular range or do any of the other preliminaries normally associated with known distance firing.'

Differences in Training

As one would expect from the above, U.S. Army marksmanship training is different from that of the Marines. The most obvious differences are in connection with apparel. Army recruits come to learn to shoot their rifles in helmets and combat uniforms complete with skeleton packs, belts, and pouches. Their serious shooting is at silhouette rubber targets which are supposed to blend into the background. These are always mechanically controlled and ultimately rise in unexpected places at unknown ranges. They fall when hit anywhere; no precise scoring is possible.

Even more unusual compared to Marine training techniques is the emphasis on 'do it the way that comes naturally'. The Army is now really 'teaching' only three positions, prone, standing in a foxhole, and kneeling. Once a rifle is sighted in at 25 metres, no further adjustments are made, even though some targets shot at later may be as far as 350 metres away.

A US Army poster not quite in keeping with the original Trainfire concept.

The Trainfire was supposed to be something new that would make combat rifle marksmanship easier and quicker to learn. Presumably, recruits would not have to master techniques like sight picture, trigger control, proper breathing, and similar things, practically the whole lot of fundamentals which become a part of Marines during their snapping-in. I don't know whether this idea will work or not; I have never actually seen it tried. U.S. Army basic marksmanship courses are more like those of the Marines than they are different from them. This is especially true at the better training centres.

Among the obvious similarities in basic training in both services are that both take eight weeks with a total of a little over two weeks devoted to rifle marksmanship. Most Army training centres are still using the M14 rifle, although two have now been using the M16 for several months.

Most important in our discussion, both services now stress the same fundamentals of good marksmanship — sight alignment or sight picture, trigger control, breathing, and the like. In the better Army training centres, where the marksmanship instruction is in the hands of men who know weapons and excel in their use, you hear almost the same words. There is really only one way to shoot well; the same techniques must be mastered regardless of what firers wear, what the targets and ranges look like, or what positions are taken.

The Army devotes 17 hours early in its marksmanship programme to target detection, something that has no direct bearing on rifle shooting at all. A boy who has been hunting regularly doesn't need this, but young men raised in cities certainly do. At first, the latter are astonishingly poor at picking out even a man in full view at 50 yards, but they improve rapidly with a little theory about scanning with the eyes, and some practice.

This target-detection instruction is given on ranges which vary with the part of the country in which the training centre is located. The trick is to get the young man to pick up what is in plain view, but motionless. No one has any trouble seeing a centre fielder chase a fly ball, but an imitation guerilla with fresh leaves breaking up the usual human silhouette will be unobserved by more than half the young soldiers in most classes initially.

Two other differences between Army and Marine basic training need to be discusssed briefly. The Army devotes seven hours split into three separate periods to night firing and a similar amount of time to a programme known as Quick Kill. Most of the shooting during these 14 hours is done with air rifles made without sights. Both programmes emphasize instinctive pointing rather than aiming. I will not try to describe either because of space limitations. The Marines are considering adopting Quick Kill with modifications, but not night firing.

The first three periods of actual Army rifle instruction, a total of seven hours, are devoted to safety, how the M14 or M16 works, and the theory of shooting accurately. Instructors using training aids, demonstrators, and carefully worked out and rehearsed lesson plan material,

teach trajectory, sight picture, trigger control, breathing, and the rest. This is exactly the same material used by the Marines. In good Army marksmanship training centres, even the attitude is the same. The Army and the Marines even use the same form of rifle box in dry fire triangulation. About the only difference at this stage is that the Army does not go in for as much snapping-in as the Marines and teaches fewer positions.

Firing From a Foxhole

The first firing in the Army programme is done at 25 metres, three rounds fired from a foxhole with both arms supported by sandbags. This is about the steadiest possible position and leaves the soldier free to concentrate on his sight picture and trigger control. Each soldier repeats firing these three groups at least three times. If a man cannot place three bullets inside a 3-centimetre circle — a little more than an inch — he gets special instruction and more firing.

Still on the 25-metre range, each man used to do substantially the same thing prone, sitting, squatting, kneeling, and standing, although the Army appears to feel that offhand shooting has no place in basic marksmanship training because it takes too long to shoot satisfactorily from this position. Some, but not all, Army training centres now teach only the foxhole, the prone, and the kneeling positions. The theory is that soldiers don't often use either sitting or squatting positions because they are not 'natural'. The kneeling position is taught, however, with the firer both in open ground and leaning against a short section of telegraph pole, called a 'stump'. A recruit normally spends 19 hours on the 25-metre range and expends a total of 82 rounds. Remedial firing is extra. The last session of this firing is done on a special target which allows exact adjustments so that each man's rifle will be zeroed for later firing at longer ranges.

The next 21 hours are spent on what is called a Field Fire range. The targets, not concealed in any way, appear in three lines: the closest is 75 metres from the firing points, the intermediate 175 metres, and the most distant 300 metres. All are mechanically controlled and fall when hit. A self-sealing feature makes it possible to use these targets even after they have been shot repeatedly in the same place. They are of two types, head and shoulders only at 75 metres and head, shoulders and torso at the longer ranges. The Army does not fire at any paper targets on which groups can be checked or scored, at any range beyond 25

metres. From there on out, it's hit or miss only, with no greater score for a shot in the centre of the target than for one on the edge. The theory is that a man wounded is an even more serious responsibility for the enemy than one who is killed.

This arrangement has obvious advantages. No pit personnel are necessary. Scores are simply recorded; it's either a miss or a hit according to whether a target drops when shot at or not. A given firer

A soldier in the second stage of Record Fire.

shoots only at the targets in his lane, although there are two at 300 metres. He uses different positions and learns to get rounds off in times varying from 5 seconds to 10 seconds according to the range. Later he will shoot at two and three targets exposed at the same time, 20 seconds for two and 30 seconds for three. In these exercises, each firer has more rounds than targets.

During this firing, soldiers are taught to use different sight pictures for different ranges. At 75 metres the 'head and shoulders only' target

is placed on the front sight; at 175 metres, the front sight is placed at the bottom of the head, shoulders, and torso silhouette. At 300 metres the approved sight picture is with the front sight in the middle of the chest. This variation is not necessary for trajectory reasons with the M14 and probably not with the M16 either, but it works out psychologically.

The most astonishing thing about this field firing is the number of rounds expended in 21 hours. Each man fires 250 cartridges; some use considerably more. We have spent money on mechanical-electrical

The kneeling supported firing position on the 25-metre range.

equipment to eliminate pit personnel entirely. We fire more rounds in three days than most foreign soldiers do in three years. Dedicated, experienced instructors are necessary if we are not to learn merely to spray the landscape.

The last phase of Army rifle marksmanship training is Record Fire, on ranges quite different from either the 25 metre or the Field Fire

layouts. The theory is that each soldier has learned how to use his rifle under normal conditions and is ready to be tested under more ready combat conditions.

The first stage of Record Fire normally takes three hours; each recruit fires 56 rounds at targets which appear singly, but in unexpected places and at unknown ranges. A line of firing points is set up spaced a considerable distance apart with wilderness in front of all of them. Targets are placed more or less in two lines before each firing point. There are usually seven of these targets for each point; the farthest can be 350 metres away. Target locations are not quite the same from firing point to firing point. The backgrounds also vary. An effort is made at every training centre to camouflage the positions from which the silhouette targets rise and to have them roughly the same colour as that which predominates in the wilderness.

Stages of Record Fire

During this first stage, each man fires 56 shots at 56 different single exposures. He fires 32 of these from the foxhole, and 24 after he has begun to move down range and taken either a prone or a kneeling position. Exposure times are limited. Each man used to have eight opportunities from each of seven different firing points, but this procedure is no longer universal. Since there are 56 exposures, a perfect score is 56.

The second stage of Record Fire is like the first except that targets appear in unpredictable groups and for relatively short periods of time. When targets appear in front of your firing point you fire as you desire. Each man has 40 shots to expend at 28 targets; if a recruit shoots perfectly, he will have a score of 28 and still have 12 rounds of ammunition left over.

In actual practice, men never have perfect scores with this much ammunition left. A perfect score of 84 has been achieved occasionally, but only by recruits with unusual rifle backgrounds. Some training centres don't have a single man shoot 80 or above for periods of a year or more. Units usually average in the high 40s to middle 50s.

It should be emphasized that Trainfire as originally conceived was not to be competitive. The qualification firing is not necessarily the same for individuals who use different firing points nor between platoons which don't necessarily have the same opportunities at the

different ranges. Exposures are not uniform in regard to time nor in the same sequence. Different Army training centres have variations in target visibility, average distance to targets, and other factors. Distances from firers to targets can also vary when men 'move out'.

Another and even more important variable is the rifle. The M14 is better at the longer ranges, especially in wind. A target can be located as far out as a full 350 metres from a foxhole on those Record Ranges. The Army now teaches men to hold off for wind, but not to adjust sights. On this basis, hitting a target at 350 metres on a windy day with an M16 is difficult for anyone, actually near impossible for most recruits. Two experienced rifle instructors and competitive riflemen told me in reply to my question, 'The maximum effective range of M16 is 250 metres!' These men ought to know; they fire both the M14 and the M16 regularly and have been up with the best at Perry and other places for 15 years.

The most remarkable impression I had while visiting U.S. Army training centres this time was the difference from one to another, even though both use the same lesson plans and the same sort of ranges. I was told at one post that basic rifle instruction can be safely entrusted to bright young soldiers — officers and NCO's — whether they have any real ability with weapons themselves or not. Instructors of this type speak well; their words come out freely because the manuscript material has been learned by heart. To me, however, they don't sound convincing. Even their demonstrators are far from breathtaking. There aren't any distinguished badges among groups of this type. Perhaps coincidentally, I found that this training centre had added full-automatic fire from the M16 to its basic course, only one day with no formal recording of hits and misses, but still full-automatic fire.

I don't mean to be critical. This training centre has produced fine soldiers for all our 20th Century wars. It has been hard hit, however, by retirement of experienced instructors over the past five years, and has had to depend more on what smart academic minds have said about rifle training and how it should be conducted than on the opinions about shooting of those who can shoot.

It was my privilege to visit one U.S. Army centre where the commanding general was himself a rifleman and appeared at irregular, but frequent, intervals on the range to listen to instruction, to say a few words himself, and to do some personal firing. His rifle instructors were commanded by a colonel of the same type. He and his men

were all combat veterans of at least one war and knew their weapons. Some of them proudly wore their distinguished badges; practically all are avid hunters.

I admit I was taken by surprise; I didn't realize the above when I arrived at this centre. I had spent the previous three days with the Marines and expected just another Trainfire demonstration. I was still 50 yards from the stands behind the 25 metre range when I realized that the instructor who was talking had something special. He was using the same lesson plan, but putting it over harder. He was emphasizing the same points that the Marines do. He may or may not have agreed with Trainfire doctrine, but it really didn't matter. He could teach rifle marksmanship regardless of the syllabus or the weapons used. He was putting his heart into it along with his own skill and love of guns. I have never heard anything quite so good.

How had this attitude come about? Why was this centre able to achieve something different with the same material? Seven months before, the general, then relatively new, had a meeting. 'I am not satisfied. You fellows are going through the motions. I want you to get out and teach. It's your job to train these young men to shoot, to save their lives maybe.

'I want those record scores to go up, but not by your making the firing easier. I want you to get more of your own skill over to your recruits.'

This centre graduates close to 1,000 men per week. The average rifle qualification score has been going up slightly more than one target per month — a total of just under eight points in seven months — with the end still not in sight. This is good instruction essentially because the instructors themselves are good and have the backing of real leaders. If anyone has a new idea that might improve the way they coach young soldiers, the reply from their top brass is usually, 'Try it!'

The U.S. Army is expending a near unbelievable 622 rounds of centre-fire rifle ammunition per recruit plus about 923 BB's in Quick Kill and in night firing in a total of only 83 hours. The facilities and the equipment are magnificent. Those who are in charge and we Americans who pay for it in taxes are surely doing all we can to train our young soldiers to shoot and to save their own lives. Most of them can when they leave the training centre, although what happens later in combat may not be as satisfactory as we would like.

Most of our young soldiers and Marines are getting good rifle instruction, but they are still not veterans. We have them shoot a lot, but over extremely short periods of time. In the stress of combat, they often just blaze away. But can it be any other way? Who among us has learned to shoot quail in one season? How many of us have not missed shots we should have made on big game, even though animals don't shoot back?

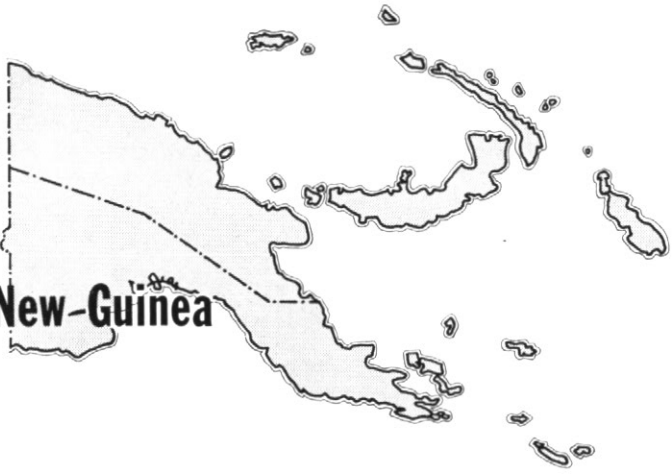
I am old-fashioned; I like the way the Marines teach. But at least one U.S. Army training centre accomplishes the same thing in a different way and with the M16. Considering our time limitation, we do as well as any other nation, a lot better than most. □

SOVIET DEFENCES

The Soviet defence system inside the Kursk bend consisted of typical Red Army earthworks, being based on parallel lines of trenches, reminiscent of those used on the Western Front in the First World War. The main forward defensive zone was up to three miles deep and consisted of sets of five lines of trenches, sometimes more, one behind the other, all interconnected and provided with pits and shelters, these having been built with the aid of civil labour. A second defensive zone lay about seven miles behind and resembled the first, and a third zone lay a further twenty miles behind the second. The front reserves, probably forty miles in the rear from the forward defended localities, also dug their miles of linear trenches. So the trenches ran for hundreds of miles, through the cornfields and villages and up the long gradual slopes of the steppe hills. The strength of the defences lay in their formidable anti-tank protection, the whole area being heavily mined and covered with anti-tank strong points, it being claimed that on the Central Front alone nearly half a million mines were laid with a density of 2,400 anti-tank and 2,700 anti-personnel mines a mile.

—Colonel A. Seaton, *The Russo-German War 1941-45* (1971).

Language and the Army of Papua - New Guinea



Major H. L. Bell
Royal Australian Infantry

OF all the topics concerning the future of New Guinea's Army[1] none is so hotly debated as that of its language of operation. Of course, it is supposed to be English, but the planners have yet to consult the people who will have the final say—the Niuginians[2] who are to speak it.

Melanesian Pidgin

Centuries of isolation and fear have resulted in New Guinea's two million people possessing 600 mutually unintelligible languages. No lingua franca existed and one merely knew one's own tongue and perhaps a smattering of one's neighbours. European contact commenced to break down this inter-tribal barrier, particularly in coastal areas. Deficiencies in boats' crews would be made up with natives, many of

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Major Bell graduated from OCS in 1952 and was posted to 13 NS Trg Bn. Service with 1 RAR and 2 RAR followed until he became Adjt 30 Inf Bn in 1958. He returned to 2 RAR before joining the Army Team of Lecturers in 1961. Posted to HQ 1 Div he performed the duties of DAQMG before attending the Staff College, Queenscliff 1963-64. After serving with 1 PIR he was appointed GSO2 in DMO&P, AHQ Canberra in January 1968. In November 1968 Major Bell rejoined 1 RAR in Vietnam and in February 1969 was sent to AATTV. In February 1970 he was appointed OC PNG Mil Cadet School, Lae.

whom would be the only member of their language group on board. Others were 'recruited' for Queensland sugar plantations. Lacking a mutual tongue these exiles had to seize upon the only lingua franca, English. Fortunately, despite their quite different vocabularies most Melanesian languages have similar grammatical and cultural concepts, so European words were grafted onto an indigenous grammar. As many of these early people were Tolais many Kuanua words were added. The presence of Malay plume traders on the coast introduced some Malay terms. By the time German and British Government arrived to divide the territory, Pidgin was the well established lingua franca, of a tiny minority it is true, but of those people who had significant inter-tribal contact.

The two occupying powers pursued different language policies. The Germans quickly realized that a *Pax Germanica* was going to spread Pidgin quicker than they could spread German, and being realists made it the lingua franca. Pidgin therefore flourished, adding German to its vocabulary. In British New Guinea (the present Papua) the reverse applied. An existing trade language, a Pidgin derivative of the highly complex Motu, with no English vocabulary, was officially adopted and is now known as Police Motu. It still strongly persists but is giving ground to Pidgin.

The False Ideas on Melanesian Pidgin

Arguments against Pidgin are many, and are often soundly based. However, there are a number of more outrageous fallacies espoused, especially by those critics who themselves do not understand the language. The main ones are:

- It is not a true language.
- As it is merely garbled English, then why not teach indigenes 'proper' English in the first place.
- It is a debasing language, imposed by Europeans to keep the indigene down.

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[1] The term New Guinea is meant to imply the future independent state of the present Territory of Papua-New Guinea. Geographical New Guinea embraces West Irian, Papua and the mainland portion of the UN Trust Territory of New Guinea.

[2] 'Niuginian' seems the term most favoured by indigenes themselves as preferable to the present cumbersome 'Papuans and New Guineans'.

- Its use is resented by the rapidly growing indigenous educated *élite*.
- It lacks the means of conveying more complex concepts.
- It is unadaptable to modern technology.

Not a True Language.

What is a true language — a garbled mess of Latin and Norman French words added to what was originally a barbaric Germanic tongue? (English). If such an argument is applied to Pidgin then Western European languages could be dismissed as Pidgin Latin. Roman-imposed peace permitted social mobility among tribes not much more civilized than those of pre-European New Guinea. The language of the conquerors was too complex for adoption by the locals who merely applied its vocabulary to their own grammar.

Melanesian Pidgin is in fact already the first, and often the *only* language of some thousands of people, and rapid detribalization is accelerating the trend. Moreover, with the merging of tribes the lesser vernacular languages are tending to die out and give way to Pidgin, not English. If a tongue can be the only language of a group of people then it is a real language in its own right.[3]

The Garbled English Myth

To hear the garbled baby-talk twaddle spoken by most Pidgin speaking expatriates, including, alas, Army officers, one could be forgiven for believing Pidgin to be merely corrupted English. But despite its heavy reliance on English for vocabulary (60%?) Pidgin follows grammatical forms quite alien to that language. Moreover, even the English-derived vocabulary is often unrecognizable from the original, many words having different or even opposite meanings. This is the main cause of those inexplicable performance failures of indigenous house-boys who have been given supposedly clear instructions by their employer.

When Kamun tells us that he's *painim* (from 'to find') the lost article he means that he is looking for it. When he finds it he will *lukim* (from 'to look'). When the Second-in-Command of 1 PIR was told by a corporal that he refused to *bek* (from 'to back') the officer's

[3] It is noteworthy that the Australian National University School of Pacific Studies carries out much research on Pidgin. Queensland University has even conducted classes on the language as an extra-curricular activity.

orders he didn't mean that he wouldn't obey them. Indeed he would *behainim* them willingly. But he wasn't going to be insolent to a commissioned officer! One can *dai* but merely be unconscious, but *dai pinis* and you will be very dead.

Yet a cherished belief of opponents of Pidgin is that surely a man who learns Pidgin can just as easily be led onto English. This view is not shared by non-English speaking expatriates in New Guinea. The very old Chinese in the Territory are fluent Pidgin speakers but often understand no English, despite the daily presence of their Australian educated children and grandchildren. I have lived with German missionaries for two days and we could converse only in Pidgin. They, at least, find Pidgin no easy road to acquiring English.

In fact, while knowledge of Pidgin can help an indigene to acquire a reasonable English vocabulary, it thereafter hinders his future progress in the language. Even university students, when using words common to both languages, often use them in their Pidgin context whilst speaking English.

Of course, the reverse applies: prior knowledge of English is just as much a hindrance to the acquisition of fluent Pidgin. Not for nothing are the best expatriate speakers of it invariably non-Australians.

The Debasement Allegation

This is a widely held belief, well reinforced by past expatriate opposition to the teaching of English, on the grounds that 'the natives would become cheeky'. To shackle the Niuginian solely to Pidgin would deprive him of much, but then so would confining *any* race to its own vernacular. The Germans during their limited tenure in New Guinea, had by 1914, fully appreciated the need to promote German as a means to producing the skilled manpower necessary for the country. But at the same time they willingly adopted Pidgin as the lingua franca (as they also adopted West African Pidgin and Swahili in the Cameroons and Tanganyika).

They were realistic and the reality is that *we did not teach the Niuginians to speak Pidgin. They taught us.* It is primarily a language for internal Niuginian consumption, not for intercourse between native and European.

It is amusing that similar charges are not levelled at Police Motu. Yet it was the deliberate imposition of this minority tongue, by Govern-

ment enforcement, that obliterated Papua's Pidgin, the retention of which would have gone a long way to overcome present Papuan/New Guinean tensions.

Resentment of Pidgin by the Indigenous Élite

This resentment exists, but it was stronger when the present Government education system first started. An English-speaking Niuginian *does* resent being addressed in Pidgin by a strange European. But what he resents is not the Pidgin but the arrogant assumption that, as a black man, he is not likely to be educated. The same Niuginian is more than likely to speak in Pidgin to a European whom he trusts and knows can speak the language. But he is not going to endure a patronising harangue of 'im' and 'fela'[4] gibberish.

The *élite's* opposition to Pidgin seems to be waning, except perhaps among the Papuan minority. Often it is merely a face-saving device. A couple will tell their European contacts that they speak English all the time. But arrive unannounced at their front door and you won't hear English. I have sat among Teachers College students viewing a film and *all* remarks passed were Pidgin ('but of course, our students *never* speak Pidgin!').

Of late the trend is the reverse. The *élite* are taking pride in the language *(tok bilong yumi* i.e. 'our language'). Addresses at seminars are given in Pidgin. Plays at the university are being written and produced in Pidgin, and a sizeable proportion of the emerging indigenous literature is in Pidgin.

It is not so long ago that Afrikaans was reviled in South Africa as 'bastard Dutch' and last century Afrikaaners were taught to read and write in modern Dutch and not their own amalgam of Dutch, French and 'native' vocabulary. Yet today it is a language in its own right, with a flourishing literature and is acquiring adherents in South Africa, albeit with government support, quicker than English.

Inadequacy to Convey a Full Range of Meaning

That Pidgin is inadequate to convey the concepts expressed in English cannot be denied. Chaplains, fluent Pidgin speakers, resort to English to explain some aspect of Christian ethics to a class of literates.

[4] Although most expatriate residents seem unaware of the fact, 'im' doesn't mean 'him', it denotes a transitive verb. 'Fela' makes a word an adjective.

But this is the *whole* point. They were explaining a foreign (i.e. European) concept. One imagines it would be just as hard for a Sepik sorcerer, no matter how fluent in English, to explain *his* line of business. Pidgin will only come to grips with a subject when substantial numbers of indigenes themselves are familiar with it, use it, and feel inclined to speak about it. When that day comes Pidgin will extend its vocabulary to cover the subject concerned.

After all, in 1860 Japanese had no provision for explaining mechanical devices but somehow it seems to have solved the problem since.

Any language has the basic capacity to convey any meaning. An absence of a concept in a language is not due to its deficiency but to the fact that the indigenous culture has no need for it. We too often assume that primitive vernaculars are simple—the old explorers' tales of 'their language was a series of grunts, not more than 200 words'. In fact, they tend in New Guinea to be more complex than English. That Pidgin has not become equally complex is because, operating as a second language, it does not need to cover as many subjects as a first tongue (for example one does not usually discuss one's tribal sorcery with a fellow from another tribe.)

Eskimos presumably have a very limited vocabulary of agricultural terms but they have dozens of words to describe different types of snow. We just use 'snow' and add an adjective. But if we lived in Greenland we would suddenly acquire an interest in snow, as identifying its different forms may mean the difference between life and death. The people of the D'Entrecasteaux Islands have some 200 words denoting kinship. If they want to identify their husband's sister's eldest son's daughter they probably have one word to describe her. To them relatives, however distant, are vitally important. To us they are not, so we struggle by with probably less than twenty such words.

A language is geared to the culture of its users. If their culture changes, so will the language. The English spoken by me is not the English of my son, born as he was in the television generation.

Inability to Cope with Technology

My science teacher at Sydney High School once said that the Japanese were not inventive and could only copy. No doubt he also considered Japanese an inadequate conveyor of the thoughts of science. Today no one would seriously challenge the ability of the Japanese to

produce original scientific papers in their own language. Of course, Japanese has acquired thousands of foreign words (mostly now unrecognizable to their original owners) but only because it had a *need* to incorporate them into Japanese culture. If Japan progresses at its present rate one can see English starting to borrow words from Japanese technical terminology.

A naval officer once explained that his Niuginian crew 'always spoke English'. Yes, they did—when he was around. I stood by while his best English speaker fluently described a shipboard device to an equally fluent Army officer cadet. All went well until he got to the technical bit. Grasping for an inspiration he came out with it 'As bilong wokim dispela samting ol i kolim *centrifugal force* na dispela *centrifugal force* em i *pressurim* em i go aratsait'.

When the bulk of Niuginians need to discuss Einstein's Theory of Relativity they will no doubt acquire the necessary English terminology, phonetically spell it, and incorporate it into Pidgin. Until that unlikely day those few indigenes who need to discuss it will have to learn English for the same reasons that the few Indian technicians who first trained on the MIG 21 had to learn Russian. And like those Indians, the Niuginian scientist will leave his laboratory to go home and resume speaking his own language.

The Present State of Pidgin

At the 1966 census 36% of Niuginians were Pidgin speakers as opposed to 13% claiming English (of which 11% claimed literacy). As the literacy test used was very simple it is probable that many, or most of these qualifying as literate in English speak Pidgin through choice or necessity. The tendency seems for less educated indigenes to read English better than they can speak it. After all, to whom can they speak it anyway?

Pidgin is making great inroads into those areas with no lingua franca and is spreading faster than the primary school system. Even when the school does get to the village, its teachers usually speak imperfect English and indeed often themselves speak Pidgin when off duty.

There is no reliable figure of those who speak Pidgin as a first tongue but rapid detribalization is likely to increase the total. It is argued that many of these inter-tribal marriages, where a couple *must* speak a lingua franca, are among the educated *élite*. Yet even here the

trend is for the offspring to be brought up on Pidgin. This is the case in the Army community, including even families of the better educated.

Among the expatriate community use of Pidgin is dwindling, but it probably wasn't very high at any time. Australians, particularly in recent years, share the grand old Anglo-Saxon tradition that if one speaks English loudly enough, adding the odd vowel, then all will be well. A rough and hopeful guess is that one in fifty can understand Pidgin as spoken by indigenes to each other. Certainly it is doubtful if more than a handful of Army officers in the Territory would so qualify, and I have heard soldiers discussing the character of a 'Pidgin-speaking' officer, in his presence, without his being aware of what was said. Of course PIR Pidgin is a breed of its own, heavily loaded with military slang, and is as indecipherable to a plantation labour line as the highly-Anglicized ABC Pidgin News seems to be.

Present Status of English

The upsurge of education in New Guinea has resulted in a vast improvement in Niuginians' knowledge of English. However this is often deceptive inasmuch as it does not necessarily indicate that the English-speaker concerned is not also, or indeed primarily, a Pidgin-speaker as well. Signal Corps officers may proudly point to their soldiers' excellent fluency in English, but this fluency is geared to an environment where there is constant European supervision and the passing of messages on behalf of Europeans. Remove the European element and in a short while the troops may well have switched back to Pidgin.

Overall quality of English is very low. The average indigene entering university has only a fraction of an Australian's vocabulary. Officer cadets in the Army tend to give up in despair when confronted by the need to learn masses of information, all in what to them is a difficult foreign language. At Teachers Colleges, teachers who themselves are going to be *Secondary School* teachers of English, have to be given basic remedial English in their actual teachers training course! More should be done to overcome this problem but it may become worse, for the following reasons:

- As indigenization progresses the percentage, and indeed the total number, of students being taught by teachers who speak fluent English, will decline.

- Current expansion of the Secondary School system will mean dilution of teaching standards. Even now junior forms are being taught by teachers who themselves did not complete High School.
- As indigenization proceeds, the Niuginian, and particularly those outside the main towns, may have fewer opportunities to speak to Europeans.

Only forty per cent of the Territory's children are attending school. At best the majority of school leavers have six years of schooling taught by a teacher who himself neither speaks English fluently, nor voluntarily uses it as his off-duty tongue.[5] The urgent need to produce really skilled people, as opposed to disgruntled subsistence farmers, has now forced the emphasis onto Secondary School expansion at the expense of primary.

Furthermore it has now become apparent that Territory Form IV (the School Leaving Year) is inadequate to launch a youngster into tertiary education and further effort is being diverted from expansion merely to raising the standards (to Form VI) of the tiny minority who are to pass out really fluent in English.

Add to this the problem of teacher recruitment in the face of mining company opportunities and the soaring population growth it may be that the percentage of even bare literates to the school age population may decline.

The number of English speakers is growing, to be sure, but as in India, it is likely to be a case of a well-educated *élite* and a poorly or non-educated majority.

The Relative Advantages of English versus Pidgin

No one would question that Niuginians would profit by miraculously becoming English-speakers overnight. English has its obvious advantages:

- No problems of massive book translation commitment for a small reading market.
- Without it, a small non-self-sufficient nation cannot possibly keep up in science and technology.

[5] A criticism made of the unavoidably low standard is that a Standard VI leaver is more likely to have acquired an extensive vocabulary to graft onto his Pidgin, rather than a real grasp of English.

- It affords cultural links to a substantial portion of the world's population.
- It is an international language, whereas a Pidgin-speaker can only use his language in the British Solomon Islands, and then imperfectly.
- As the country will remain heavily dependent on Australia, the advantages of a mutual language are obvious.

Against the above it could be argued that Ceylon has resolved its translation problem, that New Guinea is not likely to want to keep up to the rest of the world's technology and that the more important cultural links may well be with non-English speaking Asia, on the country's own border.

The advantages of Pidgin are:

- It is easier to learn.
- It is more suitable as a vehicle for indigenous expression.
- Its adoption may be more satisfying to the national ego, particularly in the light of English being the colonial power's legacy. (The adoption of Swahili by Kenya is an example).
- It is most suitable for national politics, being a superb language for oratory.[6]
- It can be used as a medium for teaching foreign languages, including English. (At present we are trying to teach six-year-olds English, in *English.)*
- It prevents undue advantages being given to the better educated minority population (e.g. coastal Papua and New Britain) —significant in view of likely Highland electoral supremacy.

Against this could be argued that its promotion will result in a wider gulf between an English educated *élite*, whose production no one can question, and the masses (but this is likely to occur in any event). It could also make Niuginians the subject of ridicule, but no one ridicules that other Pidgin national language—Bahasa Indonesian. More telling is the impracticability of changing the education system at this late stage.

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[6] British Solomons and New Hebrides Pidgin lacks the German, Kuanua and Malay content of Melanesian Pidgin. It is reasonably understandable to a Niuginian but the reverse is not so.

The Future

No one can foresee the political future, on which the choice of a national language will depend.[7] Deterioration of race relations in the Territory (sadly, all too likely), a clash between New Guinean and Australian political leaders in the pre-independence stage, the influx of other national influences into New Guinea once Australian entry controls are loosened, and the ultimate inevitable sending of students to non-western nations could all produce an about-face in political ideas. Whatever the outcome, New Guinea is not likely to become a tame vassal of Australia, and her decision will be taken without, and possibly deliberately against, our best advice.

The Army's Problem

Where does the Army fit in? How can we plan for the future if we do not know what the future language will be? Here we have one great advantage. We do not have to teach our Niuginian troops to speak Pidgin, should it become the national tongue. In any event we will have to teach literacy in English, as being the only practical method of training a technically-oriented organization whose small numbers make translation prohibitive. What then should we do?

- First, continue to promote Army education in English—it will be a worthwhile effort whatever becomes the national language.
- Ensure that Army educators, who are usually ignorant of Pidgin, learn the language. They will at least then discover why it is that the same errors are made by students even after thirteen years of schooling in English.
- Start producing a small number of Pidgin linguists. They will be useful if we have to support independent New Guinea in a conflict. They would be even more so in the remote chance of New Guinea being unfriendly. In the meantime they can be profitably employed teaching expatriate military staff the language.

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[7] Pidgin is the main language used in the House of Assembly, including the white elected members. The Official Members (including some who have spent years in the Territory) seem the most ignorant of Pidgin but their position in the House seems destined for an early demise.

- Insist on real Pidgin capability among Australians serving with Niuginians, so that they may address all troops collectively. They of course should not discourage the individual from speaking or being spoken to in English.
- Realize that ridicule of Pidgin as a 'useless' tongue is taken as an insult by the Nuiginian, even those who favour English. (Comedy acts by Australian entertainers in clubs, such as recounting the 'Three Little Pigs' in Pidgin, are regarded with increasing resentment.)
- In view of the likely future pressures on Nuiginian troops' loyalties, be aware of the sheer folly of having officers in command of troops who are unable to understand what those troops are talking about amongst themselves.
- Do not discourage troops who wish to speak in Pidgin, even to the extent of allowing a question in Pidgin during a lesson given in English.
- Above all, accept the fact that when that first shot rings out, a PIR platoon, even if it has a bucketful of 1st Class Certificates of Education, will resort immediately to Pidgin.

Conclusion

'But they *must* learn English' is the plaintive cry. In truth they need not do anything of the sort. Gurkha battalions operate quite efficiently in Gurkhali, with a core of specialists learning English, and if the New Guinea army equals their performance we can surely be satisfied. Canadian soldiers going to specialists schools need to know English but French-Canadian battalions in that Army run quite satisfactorily on French. New Guinea and its Army is likely to become multi-lingual, with English the language of technology and external relations and with Pidgin the language of everyday usage, including that spoken in the Officers' Mess. Any undue persistence by either the Government or the Army to ram English down unwilling throats may ultimately produce a hostile reaction against English, such as that in Ceylon, which can only do New Guinea harm.

The language of Niuginians and their Army will be their choice and theirs alone. □

The School Of Military Engineering

Lieutenant Colonel J. M. Hutcheson, MC
Royal Australian Engineers

INTRODUCTION

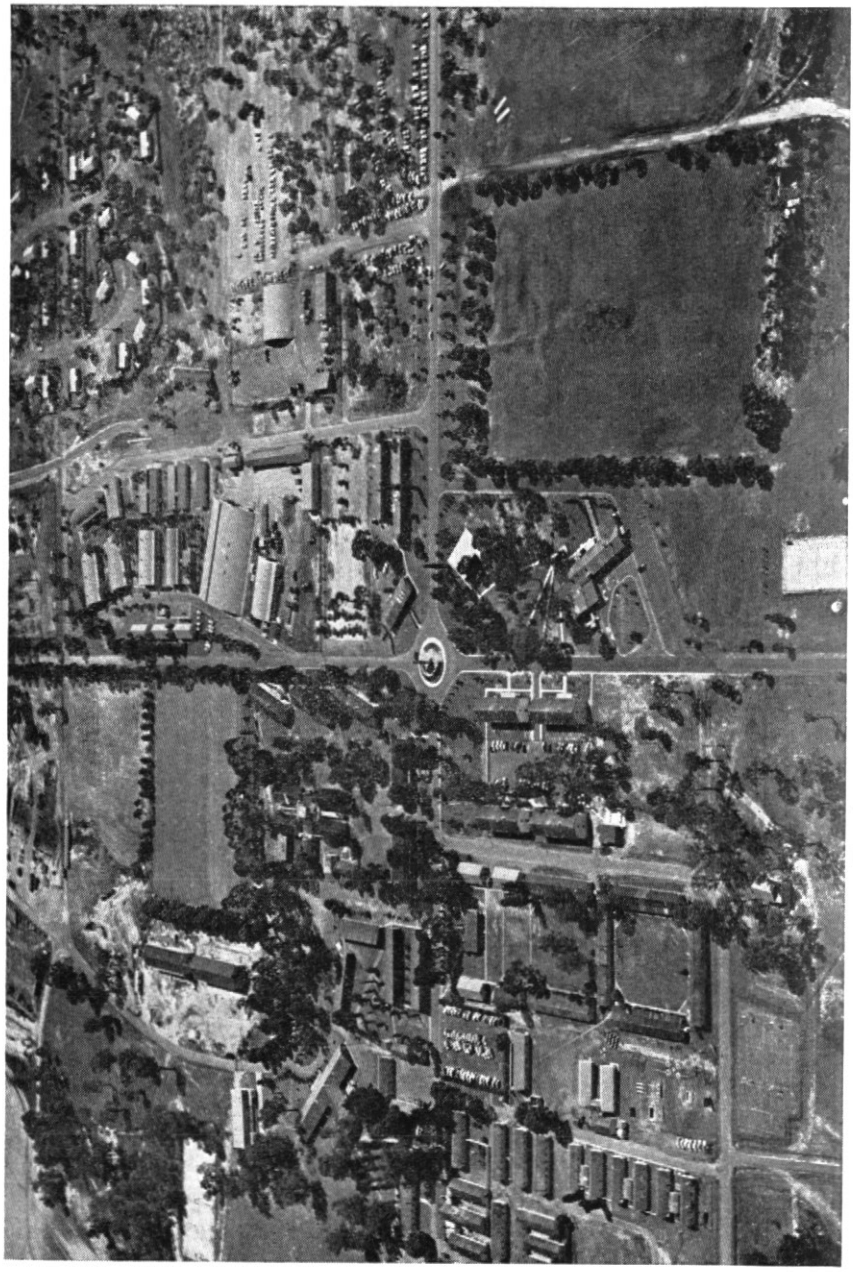
THIS article outlines the history, roles, organization, environment and spirit of the School of Military Engineering. Some of the text has been taken from school documents which have been prepared from time to time. Therefore, acknowledgement is given to the assistance of some unknown authors.

HISTORY

Early Years

RAE Courses in Field and Fortress Engineering (sometimes designated as 'Schools' of Military Engineering) were held under the aegis of Army Headquarters at various locations in Australia after Federation in 1901. The students comprised mainly members of the Permanent Military Forces from all States and the subjects mostly confined to those necessary for promotion, or the attainment of a Qualified Instructors Certificate in Field Engineering, Fortress or Signals. The instructors were withdrawn from regimental or staff duties for the duration of the course and were under the direction of a Chief Instructor nominated by the Staff Officer for Engineers at Army Headquarters in Melbourne. The first military engineering course in the Liverpool area was conducted in 1923, sixteen years before the establishment of the School was authorized. This course was held in what was then known as the Hospital Block, an area across the road from what is now Yulong Oval.

Lieutenant Colonel Hutcheson is a graduate of RMC Duntroon, the University of Sydney (BE) and University of Queensland (B Com AAUQ). He has held four appointments at SME viz; IORE (1953), Maj Instr FE (1954), SI (1961), CI and CO (1968-71). As well as regimental service in RAE and RE he was the Aslt Pnr Offr 3 RAR (1952-53) and OC 2 Cdo Coy (1956-58). He was DES (1964-68) and his present appointment is CE AFV.



The School of Military Engineering, Casula, NSW.

World War II

The School of Military Engineering as we now know it was established on a permanent basis on 15 September 1939, in the Bank Block of Liverpool Camp (now a light industrial area). In November 1939 it moved to the Hospital Block in Liverpool Camp and in early 1940 it was moved to Anzac Rifle Range. Later in that year it was transferred to its present site where special buildings had been constructed for it and the newly raised School of Signals. At that time the establishment was known as the Field Engineering Wing of the SME, as another wing (Anti-Aircraft and Fortress) had just been raised at Middle Head. Later, this latter wing was disbanded, the Signals School moved to Bonegilla in Victoria and the SME (Field Wing) has been known simply as SME ever since. During World War II, a total of 7,450 students, both officers and non-commissioned officers, passed through the School in twelve different types of courses. At its wartime peak, the staff consisted of 31 officers and 191 other ranks.

Recruit Training

In 1947, the RAE Training Centre at Kapooka, which was the basic training establishment for the thousands of sappers who passed through the many RAE units, was disbanded and the RAE Recruit Training Squadron was raised to train the sappers of the Regular Army. This new unit was placed under command of the SME and is now called the Depot Squadron.

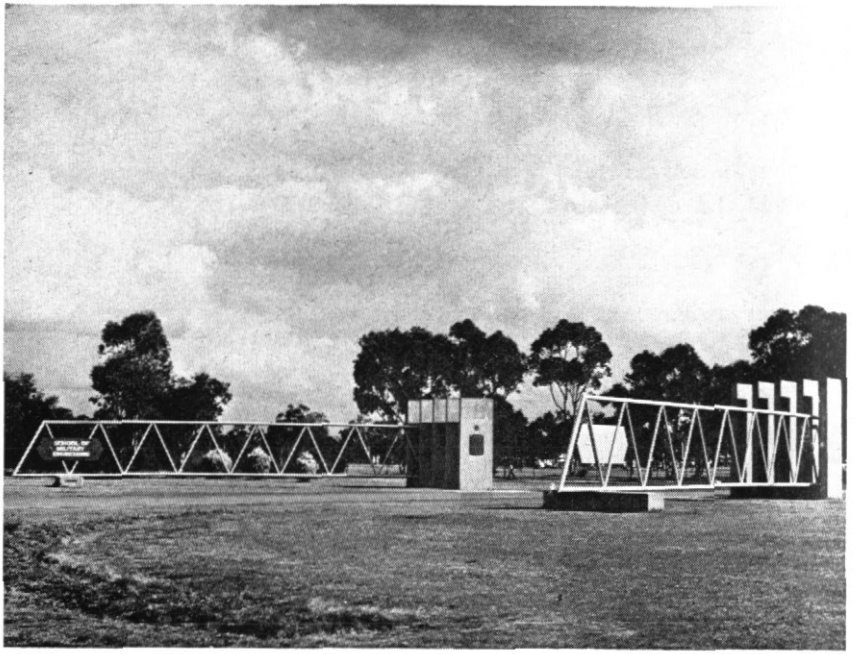
The Coal Strike

1949 was a memorable year for the SME. The Chief Instructor was appointed Chief Engineer for Coal Mining Operations in New South Wales and the School undertook an intensive training programme to prepare both sappers and soldiers of other corps as excavator and gantry operators, powder monkeys, mine supervisors, etc. for employment in the State coal mines. It was these men that kept the mines operating and so assisted in breaking the coal strike of August 1949. The silver model of a bulldozer presented to SME by the Joint Coal Board is a handsome memento of this operation.

Post War Period

With the end of the war, the activities of the school were gradually decreased in accordance with peace-time needs. In 1949, to assist

in meeting the requirements of the Regular Army manpower for the successful launching of National Service, the establishments of all Army schools were severely restricted, that of SME being cut to 5 officers and 45 other ranks. To the Royal Australian Engineers, the blow was one which was felt for many years and resulted in large numbers of non-commissioned officers being unable to qualify for promotion and left untrained in advanced military engineering.



The 'Steele' Gates.

The First Expansion

Early 1954 saw the end of the period of restriction for the SME. The establishment for staff was almost doubled and the span of instruction was broadened. Of particular importance was the establishment of the Trade Wing, responsible for trade training and Works Service and Stores Service instruction. Today this is the Engineer Services Wing. The years following saw a gradual increase in training commitments and student throughput. It was also a period of expansion of facilities

and training areas. Much of the new construction in the area was undertaken by sappers, either from one of the lodger engineer units or trainees of the school, or both. The school curricula changed from time to time to meet varying requirements of both the corps and the army as a whole.

The Second Expansion

The Nuclear, Biological and Chemical Warfare Wing was raised in 1963 and since that date has expanded slowly in both instructional and developmental commitment. The introduction of the two years Selective Service Training Scheme in 1965 and Australia's involvement with the war in Vietnam gave rise to another substantial increase in the school. The Depot Squadron was expanded to allow for the increased recruit training commitment to 1,200 men each year. The Reinforcement Troop was also established at SME in 1965. Today all sappers, officers and other ranks pass through this element of the school before movement to Vietnam. Currently, the Reinforcement Troop processes in the order of 1,100 members of the corps each year. The Advanced Training Group has about 1,000 students per year. The staff is now 35 officers and 290 other ranks.

As a result of the increasing demands for more effective assessment of a wide range of new and improved equipments and materials for corps use, the Trials and Development Wing was established on 9 December 1968. This important wing not only undertakes controlled technical and user trials of proposed new equipments and materials, but in conjunction with the Avanced Training Group updates training and technical publications.

POINTS OF INTEREST

RAE Memorial Chapel

Dedicated to the fallen members of the corps this beautiful chapel was constructed, using donations from members and friends of the corps, by soldiers serving at the SME under the supervision of the Engineer Services Wing. The stone used in the walls was taken mainly from the old Bow Bowing Mill, donated for the purpose by the Campbelltown Historical Society. The wooden cross in the chapel courtyard is formed from sleepers recovered from the Burma-Thailand Railway, and is set

in stones gathered from Changi Gaol in Singapore. This memorial was erected to symbolize the sacrifice of soldiers of the 8th Division Signals, who, before embarkation for Malaya, undertook their training at Casula.

Major-General Sir Clive Steele Memorial Gates

Constructed by serving soldiers of the corps, these gates, erected from funds donated by sappers, are dedicated to the memory of Major-General Sir Clive Steele, KBE, DSO, MC, VD, the first Engineer-in-Chief. The truss is symbolic of the bridge designed by General Steele and manufactured in Australia during the Second World War when Bailey bridging supplies were unavailable. The construction method used for the concrete pillars was unique. This was the first attempt in Australia to employ slip form techniques for close multiple units with so many sections poured in one operation.

RAE Monument (1954)

This imposing monument to the fallen stands at the intersection of Chatham and Ripon Roads, appropriately in the heart of SME. Like the other two memorials the monument was erected to the specifications laid down by winning designs submitted from competitions conducted by the corps committee and was built by sappers of the corps.

RAE Museum

This was established to provide a permanent home for material of historical interest and value to the corps. The museum houses exhibits which give the visitor a good insight into the activities of army engineers in both peace and war from the mid-1800s to the present day.

ORGANIZATION

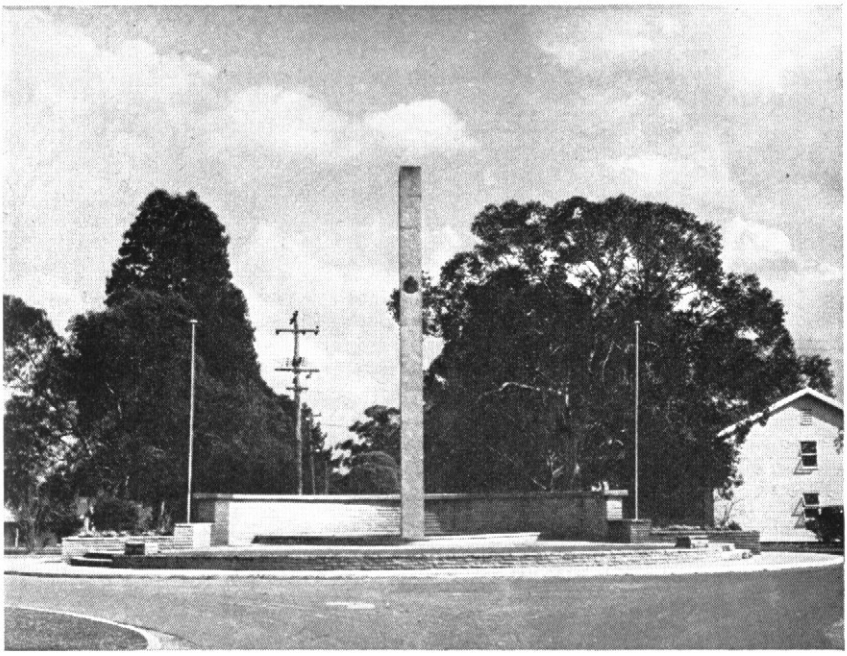
Role

The role of the School of Military Engineering is to train all ranks of the Royal Australian Engineers in all aspects of military engineering, other than those peculiar to transportation units, and the school has a headquarters and four functional groups:

- Administration Group
- Depot Squadron
- Advanced Training Group
- Trials, Development, and Demonstrations Group.

Administration Group

This group is responsible for the administration of the school, and hence contains a number of elements each responsible for selected administrative aspects. These include accommodation, catering, personnel administration, transport, workshops and maintenance.



The RAE War Memorial

Depot Squadron

The Depot Squadron is responsible for the corps or military engineering training of all recruit soldiers joining RAE, except for Transportation National Service soldiers. Successive intakes of sappers from the recruit training battalions undergo a nine weeks training programme in field engineering, bridging and watermanship, and other such subjects in addition to continuation training in basic military knowledge and skills. The Depot Squadron utilizes the Reinforcement Troop to prepare soldiers for overseas service.

Advanced Training Group

This group is responsible for all training except for basic training. Because of the diverse nature of the training commitments, the Advanced Training Group is organized into six training wings each under the control of a Major, Instructor:

Operations Wing. This wing is responsible for tactical and general military engineering as distinct from the purely technical training given by the remaining five wings. All promotion courses conducted by the school undergo varying periods of training with this wing.

Field Engineering Wing. This wing is responsible for combat engineering. The major subjects are mine warfare, field defences, obstacles, water supply, bomb disposal and demolitions.

Bridging Wing. Training in bridging covers military floating and dry span bridging, improvised bridging, bridge classification, etc. The wing also teaches watermanship, rafting, field machines and structural mechanics.

Plant, Roads and Airfields Wing. This wing trains plant operators and surveyor tradesmen for the corps and, in addition, undertakes officer and NCO training in all aspects of location, design and construction of roads, helipads and airfields.

Engineer Services Wing. This wing is concerned with tradesmen training together with instruction in engineer works and stores services responsibilities. Ten different types of trade courses are conducted by the wing, varying from preparation of senior non-commissioned officers for employment as warrant officer works supervisors to basic trade training of clerks, storemen, fitters, firemen and refrigeration mechanics.

Nuclear, Biological and Chemical Warfare Wing. This wing undertakes training of officers, warrant officers and senior non-commissioned officers of all arms in the defensive aspects of nuclear, biological and chemical warfare operations.

Trials, Development, and Demonstrations Group

This group has three functions:

a. The conduct of user trials of proposed new engineer equipment and materials.

b. The writing and updating of training and technical publications.

c. The organizing and co-ordinating of demonstrations conducted at SME.

THE ENVIRONMENT

Master Plan

From time to time concerted efforts have been made to improve the training, administration and living accommodation at the School. In the last few years there has been a major effort to utilize the capacity of trainees to construct facilities. However, to be cost effective it is essential that the bulk of the present buildings (timber) be replaced with more appropriate facilities. Therefore, a master plan incorporating many visionary features has been submitted to Army Headquarters.

Spirit

With its techno-military courses at the tradesmen, sub-professional and professional level, there is an atmosphere akin to a technical college. But the environment of parades, weapon training etc. gives a military spirit to the atmosphere which is recorded in the museums, chapel, memorials and messes at the school.

CONCLUSION

At times during the year twenty-five per cent of the Royal Australian Engineers are within the perimeter of the school. Therefore, with its traditions and standards established from humble beginnings the school is the paternal home of all Australian sappers. □

Task Force Logistics:

The Medical Problem

Major P. C. Anderson
Royal Australian Army Medical Corps

AN article, 'Proposed Reorganization of Task Force Logistics', by Major P. A. Davison appeared in the April 1970 issue of the *Army Journal*, and discussed the logistic support of a division and an independent task force. The main concept which emerged from the article was the formation of a support battalion to provide the maintenance system of the division. The command and control of the battalion would be by its headquarters, which would assume the planning and deployment of service units normally undertaken by the formation staff. Within the battalion, a redeployment of S/T, ordnance and EME units was discussed. The medical services received only superficial consideration,

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Major Anderson enlisted in the Citizen Military Forces in 1963 and served in CMF units in Western Command until 1969. He then served as a surgeon in South Vietnam with 1 Aust. Field Hospital. His present posting is Western Command Training Group.

suggesting that the present order of battle is satisfactory for the type of operation under consideration. However, the field ambulance allocated to a task force within the divisional organization has significant limitations in personnel and equipment.

There have been several factors affecting medical deployment in the limited wars in which troops have been committed in recent times:

1. *The number of battle casualties.* The company group operation, which is the principal type of deployment, limits the number of casualties from a contact, ambush or mine detonation, compared with the large numbers associated with an offensive in a conventional war.

2. *Evacuation.* The helicopter has given the medical services the method by which battle casualties from the platoon or company area can be evacuated rapidly direct to a major medical installation. This service has limitations of employment due to weather and enemy action. In the future it seems to be an essential part of the medical plan, even if it operates from an RAP or CAP to the rear. The helicopter has presented the medical services with these problems:

a. The very seriously injured can be evacuated from the forward area. It is important to realize that these casualties are not priority 1 cases. They might be called priority zero, as these casualties in former campaigns would have been KIA if they did not reach a medical installation alive. They require a comprehensive medical service to manage their injuries.

b. As the helicopter and its crew can cover the stages from a CAP — RAP — ADS — CCS in one rapid journey, deployment of the RAP and ADS needs reconsideration.

c. In order to deal with these cases the medical facility must be effective, adequately staffed and the equipment comprehensive.

In order to support an independent task force or division operating in a limited war or counter-insurgency operation, a maintenance area in a secure position is required. In such an area it would be appropriate to set up a medical facility. The size of the unit depends upon the force deployed, the casualty rate and the holding policy. Nevertheless, several considerations require deliberation:

1. Construction of hospital wards, triage and operating theatres on hard standing are essential.

2. The staff in the hospital must be adequate to deal with the number and severity of injured. The basis for planning should be a

minimum of two teams consisting of a surgeon, anaesthetist, general duty medical officer and supporting operating theatre technicians. The surgical team require the comprehensive support of a laboratory and ward staff to carry out the resuscitation and aftercare. Consideration should be given to the difficulty in evacuating the very seriously injured to the base area and the need to retain such cases in the forward facility for some time.

3. Provision is necessary for medical cases, many of whom may contract one or more tropical diseases. Facilities for holding minor sick may require rapid expansion to deal with an unexpected outbreak of one of these conditions.

4. By using the helicopter for casualty evacuation, the deployment of medical personnel in the forward areas needs reconsideration. It is essential that the 'medics' — ORs with a good knowledge of first aid — are deployed down to platoon level. The training of these men must be of a sufficiently high quality to provide first aid, thus saving life in the forward area. Under these conditions a doctor can do little more than the well trained 'medic'. Consequently the size of the battalion medical platoon may need increasing to provide a pool of 'medics' who can replace those who may become casualties and to cope with the major incidents.

5. The requirement for the adequately trained 'medic' in the battalion does not fulfil the needs of the medical facility when the casualties receive surgical treatment and aftercare in the wards. The OR specialist personnel for this facility consist of the radiographer, the laboratory technician, the operating theatre technician, the medical assistant working in the ward area, and the medical clerk. In a busy period there is little time to provide training for these personnel in the war zone but it is upon their experience and ability that much depends.

6. The location of regimental medical officers who are traditionally located at their RAP requires reassessment. It should be noted that the casualty receives emergency management by the 'medic' in the forward area and the helicopter by-passes the RAP. It is questionable if the location of the RMO at the fire support base contributes much to casualty management, other than acting as a staff officer in an advisory role by talking to the sub-units and the DUSTOFF helicopters by radio. This role could be centralized in the task force command post. The best use of the RMO is at a medical facility where he can participate

in the management as one of the hospital staff. It would give the troops a lift in morale to see their doctor assisting in the casualty reception area, and enable the unit to have a liaison officer at the hospital. It is suggested that medical officers should be brigaded in the task force under the control of the SMO to carry out the medical administration, care of the minor sick, conduct of sick parades and in addition make at least one doctor available to support the hospital staff. The medical officers need the opportunity to be attached to the medical facility for short periods to maintain their professional skills.

7. The command of the medical platoon will therefore require consideration. An administrative/technical RAAMC officer could fulfil the role satisfactorily. Such an officer could be promoted from the ranks, having been trained up to civilian standards as a State registered nurse and hygiene inspector. The opportunity for such a career would give the medical assistant a goal during his military service.

8. It is necessary to have a hygiene section on the establishment of a task force or its supporting medical facility.

Medicine has much to offer the armed services in time of war. Many advances have been made in recent years and the services must make best use of the experience and skills of many branches of medicine. The painting of 'Casualties at Vung Tau' at the Australian War Memorial, depicting casualties being lifted out of an ambulance, has not displayed this modern concept, just as the order of battle of medical units reminds us of the time when a field ambulance used horse drawn transport. □

JOHN MONASH, by Cecil Edwards. (State Electricity Commission of Victoria, Melbourne 1970, $3.25).

Reviewed by Mr A. J. Hill, Senior Lecturer in History, RMC Duntroon.

THE latest sketch of Sir John Monash is a well produced book of seventy-six pages, notable for its illustrations. It is a crisply written account presented in the short paragraphs which newspaper editors appear to regard as suitable for the masses so it is no surprise to learn from the dustcover that the author is a former editor of the Melbourne *Herald*. While working on his history of the State Electricity Commission of Victoria, Mr Edwards assembled so much material on Monash that the Commissioners 'decided on separate publication of this short but authoritative tribute to a great man'. He is obviously more at home in the post-war period of Monash's life and even this brief outline—it is barely seventeen pages—adds to the stature of John Monash. For the war years, Mr Edwards leans heavily, as he must, on C. E. W. Bean's great history, so often quoted, so little read.

A useful feature of this book is the list of sources but surprisingly, there is not even a mention of Monash's military papers and maps, indexed by himself, in the Australian War Memorial. The reference to volume 6 alone of Bean's work is unintentionally misleading as there is plenty of material on Monash in the other five volumes, especially in the second. Fortunately, the able article by John Terraine in *History Today*, January 1966, 'Monash: Australian Commander' is included; its special value lies in Terraine's analysis of Lloyd George's vicious post-war use of Monash to denigrate the leadership of the B.E.F. Terraine shows convincingly that when Lloyd George sent Smuts and Hankey to France in January 1918 to study form among the generals and advise him on a successor to Haig, Monash was only one among sixty divisional commanders, and the battles in which he was to make his name, Hamel

and Amiens, were yet to be fought. This is a powerful reason, in addition to the usual three given by Mr Edwards, why Monash was unlikely to become C-in-C in France. In any case, when Monash played his great part on 8 August, Haig was beginning a series of massive victories all along his front; if 8 August convinced Ludendorff that the game was up, it and the victories which followed made it impossible for Lloyd George to rid himself of Haig. That Monash had the *capacity* to be C-in-C is another matter; on this point Liddell Hart and Montgomery are in firm agreement.

In so condensed a work, there is not much space for Monash the man as distinct from the engineer, the soldier, the organiser. There is, however, this paragraph: 'That year he married Hannah Victoria Moss, the daughter of an early Victorian colonist, and went right on studying.' Some warmer touches appear in the last chapter, among them his love for his grandchildren and a reference to the doll's house he built for his grand-daughter. Within its narrow limits, *John Monash* is an interesting sketch of one of the most remarkable Australians but it does not pose the questions which one asks about Monash, let alone seek to answer them. □

THE SECRET LIVES OF LAWRENCE OF ARABIA, by Phillip Knightley and Colin Simpson. (Nelson, 1970).

Reviewed by Lieutenant Colonel A. Argent, AHQ Canberra.

TODAY in even the smallest private or public library, it would be difficult not to find a book or some reference on T. E. Lawrence. To some Lawrence was a charlatan, 'backing into the limelight'; to others a hero; to most a romantic and somewhat mysterious figure. Yet Lawrence has been dead now for thirty-six years and his exploits in 1917 and 1918 in the Middle East — when viewed against the whole backdrop of the Great War — were no more than a side-show to a side-show. So what is the reason for this continued, almost avid, interest in Lawrence?

This book, while it adds fuel to the fires of interest, does not really give any reasons. Perhaps this is understandable. Lawrence, by any standard, was a complicated, brilliant man who marched to his own strange music.

The authors, who are correspondents for the London *Sunday Times*, have broken Lawrence's life into four phases. The phases have been delineated by persons who, at that time, the authors consider had the greatest influence on Lawrence. These are: D. G. Hogarth, the author, archaeologist and orientalist who first interested Lawrence in archaeology, imperialism and intelligence work; S.A., to whom *Seven Pillars of Wisdom* is dedicated and whose identity (if there ever really was such a single person) is still argued almost as much as is Shakespeare's 'W.H.'; John Bruce, a young man who enlisted with Lawrence into the Royal Tank Corps in 1923 and who for thirteen years was to play a strange and sad part in Lawrence's life and finally, during the last ten years of his life, Mrs Bernard Shaw, wife to G.B.S.

(Australian War Memorial)

Lawrence in Arab dress with ceremonial dagger. Photograph taken in 1918 when Lawrence was thirty years of age.

The 'Secret Lives' of the title mainly relates to information gained from State documents of Paris and Cairo Conferences of 1919 and 1921, recently released when the fifty-year rule was reduced to thirty years, and to statements made by John Bruce.

The book deals well with this post-war period and tells of Lawrence's plan for a 'brown dominion' in the Middle East, his hate of the French, his disillusionment that finally drove him to despair and the extreme effort he put into writing *Seven Pillars of Wisdom*. One is left with the feeling that things in the Middle East would be much happier today had Lawrence's plans been followed. Certainly things could hardly be worse.

Lawrence sought seclusion in the newly-formed RAF after the Great War. In August 1922 he enlisted under the name of John Hume Ross (the recruiting officer was W. E. Johns, author of 'Biggles' books), but the RAF handled it badly and because of publicity he was discharged five months later. The British Army did things better and as T. E. Shaw, Lawrence was a storeman in the Royal Tank Corps at Bovingdon

for two and a half years. Two days after his discharge he enlisted once more in the RAF and ten years later, still an aircraftsman, he was discharged. Just ten weeks later on 19 May 1935, he died from severe head injuries when he fell from his motor cycle. His death certificate read, 'Thomas Edward Shaw, male, 46 years, an aircraftsman (retired). . . .'

These are the bare facts of Lawrence's life after his much publicised Arab revolt. But they tell little of the man. While this book tells much more, I would not recommend it to be amongst the first books to read to try to discover Lawrence. One should first read *T. E. Lawrence by his Friends*, then the chapter on Lawrence from Robert Graves' *Goodbye to all That*, perhaps followed by Garnett's *Letters of T. E. Lawrence*. Then read this book.

I think Lawrence's account of his RAF service in his *The Mint* should be read before 'Seven Pillars' because the first is written in a natural manner, and while the latter is now a twentieth-century classic, its keyed-up, striving-for-effect style can be somewhat daunting.

At Lawrence's funeral, at Moreton, Dorset, Churchill wept and said '. . . . Whatever our need we shall never see his like again.' It is interesting to speculate on what job Churchill may have given Lawrence during the Second World War. Lawrence would have been 52 in 1940. □

NEW GUINEA—PROBLEMS AND PROSPECTS, by Peter Hastings. (Cheshires, 1970, $4.95).

Reviewed by Major G. C. Andrews, AHQ Canberra

AS New Guinea's independence draws closer to realization there has been an upsurge in the interest shown by Australians in this area; an interest that has been lacking in the past. Peter Hastings, a journalist and recognized authority on New Guinea, has produced a most timely book which will greatly assist those people who wish to understand the problems confronting Australia and the people of New Guinea at the present time and in the post-independence era.

Before isolating the problems and developing his thoughts on the future of New Guinea, the author introduces the reader to the country with a concise description of the geography, people, language and cul-

ture of the area. This is followed by a brief history. The history is particularly well recorded, especially the petty bickering and political in-fighting between the early administrators of New Guinea and Papua and the Federal politicians which prevented the formation of a single administration until 1945.

The author asserts that as a colonial administrator Australia has made many mistakes, particularly in the areas of racial harmony and the development of political parties, trade unions and national identity. Education and employment are not being mutually planned, which will result in large number of high school graduates being unemployed in the next five years. This will provide a fertile field for radicalism when in the emerging years conservative and stable politics are essential. Prompt action is required to remedy these and many other errors before independence, which the author believes could come in the next few years. It is a pity that Peter Hastings has not made comparisons with other emerging nations, where many similar errors have been made by colonial administrators with results which have been recorded. This would have given greater impact to his arguments.

The economy of New Guinea is discussed at some length and the conclusion reached is that Australia will have to give monetary assistance for some time after independence unless the discovery of further mineral fields allows the country to become economically independent. However, two important political problems arise from the economy. First, West Irian may well wish to secede from Indonesia and join New Guinea when they view their neighbour's relative prosperity. If this proposal enjoys political favour in New Guinea it would be very embarrassing to the Australian Government's relationship with Indonesia. Secondly, the likelihood of Bougainville seceding from New Guinea is a very real one, as the people of Bougainville with their mineral wealth will become increasingly dissatisfied because they are producing a large proportion of the country's revenue, which is being spent mostly for the development of the mainland. The author hopes that a Federation of Melanesia may evolve, which would help to alleviate these problems.

Peter Hastings has written an astute book in which he develops many logical arguments. However he has raised many contentious issues which give scope for disagreement, as when he states that New Guinea is no longer necessary for Australia's defence. The book is disappointing in one very important area. The role of the Army as a political power in a post-independent New Guinea has only been given cursory

attention. Military power has become significant with many emerging nations, and it is inconceivable that this subject should not deserve a more careful study in a book of this nature. The index is adequate and there are useful tables detailing the growth of New Guinea's economy; but the maps are poor and they should be the fold-out type for easier reference.

The importance of this book to Australian service officers is obvious. Consideration should be given to making the book compulsory reading for candidates sitting for promotion examinations. □

MONTHLY AWARD

The Board of Review has awarded the $10 prize for the best original article published in the February 1971 issue of the journal to Senior Chaplain J. Hughes for his contribution 'The Chaplain in the Service of the Soldier'.

Letters To The Editor

Adventure Training

Sir, — I have just read Major Bray's interesting sequel (March 1971 issue of the *Army Journal)* to Major Peter White's crusading article on this same subject in the April 1970 issue. It has occurred to me that many readers may not be aware that the Australian Cadet Corps has developed an outstandingly successful adventure award scheme in the last few years.

In all Commands the response of senior cadets offering themselves as candidates has been most encouraging — the spirit of adventure is not dead! The successful student is awarded a badge in the form of a gilt boomerang and this is authorized to be worn above the left breast uniform pocket. So far, in Eastern Command alone, three hundred and fifty candidates out of one thousand starters have won the award during the last three years. This pass rate is a fair indication that the scheme is a challenging one and that the candidates have to be really fit and prepared both mentally and physically.

The scheme varies slightly in each Command due to local conditions but in all cases there are three basic requirements, a shooting test, a confidence course test, and a forty-eight hour patrol. In Eastern Command, during a four-day assessment period, each cadet is required to:

a. Gain at least two thirds of the possible score in a snap shooting practice.

b. Successfully negotiate a difficult confidence course in under the prescribed pass time.

c. Complete the patrol specially designed to test each candidate's ability in:

   (1) leadership qualities
   (2) navigation and map reading
   (3) hill and rock climbing
   (4) observation
   (5) endurance
   (6) teamwork.

Each patrol consists of six candidates who each assume command of the patrol on a fixed time basis. So that the patrol does not develop into an endurance test only, a number of situations are arranged along the patrol route by day and night to test powers of deduction. This culminates in the submission of individual patrol reports prior to debriefing and subsequent badging if successful.

HQ 2 Cadet Brigade
Darlinghurst NSW

D. M. Ramsay, Lt Col. □

The Prisoner of Armed Conflict

Sir,—I was interested to read Lieutenant Colonel P. J. Cameron's article 'The Man Who Has Tried To Kill You' in February's *Army Journal*, and I am delighted that my essay has produced such a detailed and well-written reply. However, I feel a rejoinder is neccessary to correct a few misconceptions.

First, Colonel Cameron summarized what he understood to be the three propositions put forward in my essay. Whilst I have no complaints about his interpretation of the first and third of these propositions, I must take issue with him on his purported summary of the second. Whilst I did say that the use of confessions and other propaganda information should be specifically forbidden, nowhere did I venture to suggest that this would protect prisoners from all mistreatment. I am afraid that there will always be people in this world who will maltreat prisoners for the pure innocent joy of it, whether 'confessions' are required or not.

Passing now to the 'Code of Conduct', Colonel Cameron's refusal to admit the relevance of the French code cannot be accepted. That the French were slowly being defeated in a war of colonial reconquest is certainly important as far as it concerns the proportion of captives taken, their attitudes to the war and their country's attitude to them, but it would be wrong to suggest that the French experience was unique and that no lessons can be learnt from it. Speaking generally, the late Bernard Fall has pointed out that the history of Indo-China since the fall of the French shows a number of instances where a refusal even to consider the French successes and failures has resulted in grand repetitions of the French mistakes.

Regarding the American code, Colonel Cameron admits that its deterrent effect would be small when a captive was faced with death or

torture. This being the case, what then is the value of setting an almost unattainable standard? If the standard will not deter, why should it be kept solely to punish? Colonel Cameron himself says ' . . . punishing the criminal is less useful than preventing his crime'.

As a matter of interest, what would be the effect on the morale of a captive, after he has been coerced into signing a false confession which he knows to be a breach of his code of conduct? By not reaching this standard which he has been taught he should strive to reach, would he not feel that he has 'let the side down', and would this not cause his own self-respect to suffer? I cannot speak from personal experience here, of course, as I have not experienced either the real situation or the Army's Code of Conduct Course (which I understand is virtually impossible for CMF personnel to attend).

Finally, I must disagree with the contentions in the last paragraph of Colonel Cameron's article. Whilst certain belligerents may continue to extract false confessions in defiance of world opinion and international law, it would always be remembered that Ho Chi Minh told Wilfred Burchett in an interview as long ago as 1961 that he regarded public opinion as being highly important. It will be recalled that Commander Bucher of the *Pueblo* spoke of the trouble that the North Koreans took to conceal from the world the fact that Bucher and his crew were being beaten up. Again, it is interesting to note that the Democratic Republic of Vietnam never repeated its performance of parading American prisoners of war through the streets of Hanoi and subjecting them to public abuse, after the great outcry in 1967 in many of the uncommitted nations of the world, including the Scandinavian nations which had followed a strong anti-American policy in regard to the Vietnam War. These days North Vietnamese propaganda places more emphasis on showing US prisoners leading a relatively comfortable life in showplace prison camps, including the one nicknamed the 'Hanoi Hilton'. From this, we may perhaps draw the conclusion that, even if only for the fortunate few, attempts to adhere to a standard laid down by International Law (whilst it may be done solely as a Public Relations exercise) have protected some prisoners of war from some hardship. If that is the case, then the time and effort spent in framing conventions to cover the treatment of prisoners of war has not been entirely wasted.

23 Field Regiment
Belmore NSW

S. H. Scarlett, Lt □