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#### FRONTISPIECE

In July 1942, a Japanese force landed at Buna on the north-eastern coast of Papua, and advanced across the Owen Stanley range before being brought to a halt within a few miles of Port Moresby. Australian troops then launched a counter-offensive and, surmounting the most formidable difficulties, drove the enemy back across the range to a beachhead in the Buna-Gona area. 32 US Division was then flown in to join in the battle.

The reduction of the Japanese beachhead was one of the most difficult and costly operations of the war in the South West Pacific.

With a well-organized defence in depth in dense jungle and extensive swamps, the Japanese fought bitterly for every yard of ground. The Allied troops gradually pushed the enemy back into a small, heavily-defended beachhead. The beginning of the end came on 1/2 January, 1943, when 2/12 Australian Battalion and the 128 US Infantry Regiment captured Giropa Point and split the Japanese beachhead into two parts.

The picture shows Australian machine gunners clearing Japanese snipers out of coconut palms in the Giropa Point area.

# AUSTRALIAN ARMY JOURNAL

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Number 137

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#### CONTENTS

Pa	age	
Will the Tank Survive Captain B. H. Liddell Hart	5	
The Central Treaty Organization Lieutenant R. T. Smith	11	
A Call For Integrity, Realism and Honest Thinking		
Brigadier R. T. Eason	15	
Red Crosses in the Outback Major J. T. Ashenhurst	18	
New Guinea and Papua Staff Sergeant P. G. Gittins	22	
The Space Race — Strategic Review	28	
An Operation on Guadalcanal Lieutenant Colonel J. V. Mather	31	
Early Towing Problems	45	
Recondo, Patrol of Opportunity Major Lewis L. Millett	46	

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Photo: Australian War Memorial, Canberra.

Giropa Point, 1942

### AUSTRALIAN ARMY JOURNAL

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# WILL THE TANK SURVIVE?

Captain B. H. Liddell Hart

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HAS the tank a future or is it finished? Can it still play any important part in the military field, and if so, what kind of part and what kind of tank?

Time after time during the past forty years the highest defence authorities have announced that the tank is dead or dying. Each time it has risen from the grave to which they had consigned it—and they have been caught napping.

Here are five examples of such death sentences, recorded in my files. In 1928, when the world's first experimental armoured force was disbanded by the British War Office after two years' trial, an official spokesman declared to the press that "tanks are no longer a menace." In 1932 General Edmonds, the head of the Historical Section of the Committee of Imperial Defence, confidently assured me in a letter that:

"Any tank which shows its nose in the open . . . will be knocked out at once. . . . The wars you and Fuller imagine are past."

In 1934 the British Secretary of State for War, Mr. Duff Cooper, predicted that in a few years' time "the most heavily armoured tanks" would be as vulnerable to the new anti-tank weapons as "an old wooden caravan." A year later the Germans, disregarding his warning, formed their first three Panzer divisions, and five years after that the defences of the West were overrun by the tank drive that Guderian led.

The sweeping victory of these armoured forces momentarily opened the eyes of Britain's leaders to the practical value of the new theory that had been conceived there, but neglected by them. They belatedly began to build armoured divisions

like the Germans. A similar effect But immediately afterward the dewas produced on America's leaders. fence of South Korea crumple

Even so, the cry that the tank was in decline arose afresh whenever tanks met a temporary check. The cry became particularly strong after the campaign in Sicily and Southern Italy, when the mountainous country normally cramped armoured mobility. That affected the preview of its potentialities in the 1944 invasion of France. Churchill had one of his periodical reactions and in February declared, "We have too much armour — tanks are finished."

His doubts were fanned by his official advisers. The Chief of the Imperial General Staff, Field Marshal Sir Alan Brooke, addressed a conference of British and American generals and there sounded a keynote that warfare was "back to 1918," and the lightning drives of 1940 were no longer possible. The U.S. high command was affected by this slow-motion view.

few months later, the American and British armoured forces, breaking out from the Normandy bridgehead, drove swiftly forward to within close reach of Germany, unchecked by the enemy. Unfortunately they were then halted by shortage of fuel supplies, due to lack of administrative preparedness to exploit the great opportunity. If there had been more foresight on the top level, the war would have ended that year.

Five years after the war, many top-level soldiers in America and Britain were talking in just the same manner as before. On the eve of the Communist invasion of South Korea in 1950, the U.S. Secretary of the Army voiced such views in predicting that "tank warfare as we have known it will soon be obsolete."

fence of South Korea crumpled under the impact of a small number of obsolescent tanks.

Now, a decade later, another wave of disparagement has arisen—inspired by the belief that the new anti-tank guided missiles have "sounded the death knell of the tank." This belief is at least dubious and could be very precarious for any army which discards tanks to fight the enemy's tanks in favour of guided missiles, either manually controlled or guided to the target by a "homing" system.

These missiles are bulky and heavy compared with the shells fired by a tank, thus limiting the amount of ready ammunition that can be carried, while the "homing" kind are liable to interference and electronic counter-measures. Guided missiles are slow in response and flight compared with the gun in a tank, thus giving the attacker who has a large number of tanks more chance of swamping a defence which relies on missiles to stop them.

The low speed of response and flight allows the enemy tanks sufficient time to move into cover before the missile arrives—behind a tree, hedge, hayrick, house, mound, or slope. A tank that is firing from a "hull-down" position has only to reverse a few yards to get under cover and become invulnerable.

Moreover, the relative slowness of response by the missile gives the tank a good chance of knocking out the launcher before it can shoot. The technique of tank gunnery has developed immensely since 1945 in its combination of speed and precision—so much so that it amounts to a new technical "break-through."

This striking development in tank

gunnery is a fresh reinforcement of the inherent value of tanks compared with other arms. The basic factors and most distinctive features in tank operations are speed and flexibility. These twin qualities are of more fundamental importance than the armour of the tank. They give its armament, which is not in itself unique, a unique quality in action.

These twin qualities remain essential and have even gained in importance with the coming of nuclear weapons. For the strategic problems of the present time, in a world that lies under the shadow of the catastrophic nuclear cloud, depend more than ever on the time factor throughout the whole range of risks from a minor "brush-fire" outbreak or sudden local pounce upward to all-out war.

At every stage, and every level of command, the prospects depend on alertness, immediate readiness for action, manoeuvrability in switching forces, and rapidity of intervention.

Such a combination of qualities is essential not only for military success, but, above all, for averting the fatal spread of a local outbreak into a world conflagration.

The development of thermonuclear weapons has gone far to annul the prospects of success in all-out war, because that kind of war is so likely to result in mutual annihilation. So the likelihood of another "great" war has greatly diminished. But the possibilities of "limited war" have not diminished to the same extent and even have been increased.

Thus an aggressive power is able to exploit a choice of strategic techniques, different in pattern but all planned to make headway for the aggressor while causing hesitancy on the other side—especially in taking the fateful decision to order counteraction with nuclear weapons. Such aggressive moves might be made at a carefully limited pace—by a gradual process of encroachments.

Alternatively, they might be made at a swift pace, but to a limited depth—sudden pounces quickly completed and as quickly followed up by a conciliatory offer to negotiate. They might also take the form of stirring up or exploiting internal revolt in another country and then infiltrating or parachuting reinforcements of "volunteers."

Although internal outbreaks call mainly for infantry to restrict and suppress them, mobile armoured troops can do much both to damp and disperse them. In meeting more direct aggression they form the most effective answer to a sudden pounce. Moreover, if such limited aggression should spread and develop into nuclear war, an armoured force has a much better chance of survival and of movement than infantry.

Armoured forces, however, need to be remodelled on a more flexible and less vulnerable pattern. That is essential, because the threat of nuclear bombing or missile bombardment will be a constant shadow. It also is essential to avoid being disrupted or paralysed by nonnuclear air and missile attack. Every vehicle in an armoured force ought to have cross-country mobility and sufficient protective armour to keep out bullets and splinters from shells and bombs.

The incorporation in an armoured force of men who can fight on foot is a tactical necessity for ferreting out enemy troops who are under cover behind obstacles, and for various defensive tasks. But it is a basic error of organization if the proportion of infantry exceeds the proportion that fights mounted, manning armoured fighting vehicles and self-propelled guns. "Armoured fighting men" ought to be preponderant in an armoured force if it is to justify its name and fulfill its purpose.

For tactical efficiency the "mounted infantry" element of the force needs to have a cross-country mobility closely equivalent to that of the armoured fighting element. This condition can be met only if the whole of the infantry element is carried in armoured personnel carriers. Otherwise it will not be able to accompany the tanks closely enough for prompt action to clear defended obstacles which block the tanks.

There is abundant experience to show that the quicker these "foot fighters" can intervene the fewer will be needed. A company of armoured infantry coming action immediately they are needed, might brush away resistance that a whole battalion of ordinary motorized infantry, brought up later, could not overcome when the obstacle has been reinforced. Time is decisive in war, especially in quenching a local threat before it spreads into a general conflagration.

There also must be a drastic reduction in vehicles and supply requirements in order to attain adequate mobility. To that end armoured troops ought to apply the principle that Sherman practiced a century ago and by which he revived mobility in the later stages of the Civil War prior to his advance through Georgia and the Carolinas.

Modern mobile forces likewise

must learn how to "slim"—to reduce their military "fat" in order to increase their mobility and endurance. They ought to be capable of self-contained operation for several days, or even weeks, instead of being tied to vulnerable lines of supply.

Moreover, supply by air needs to be employed to the fullest practicable extent—and this should become more fully possible as the helicopter is improved or is superseded by new ground-hopping vehicles. That would also enable a reduction of the foot-fighting and other auxiliary elements.

While much can be gained by organizational progress, it is no less important to achieve a new advance in tank design. A fresh trend is already developing. Successive efforts to mount a bigger gun and thicker armour trebled the weight of tanks in the course of the last war at the expense of tactical agility and strategic mobility. The heavier types of tank became, and remain, a serious handicap to speed and flexibility of manoeuvre, strategic and tactical.

The tank of the future will need to be fitted with night-driving vision and with radar if possible. should also be able to pass safely over a radio-active stretch ground. If such requirements were to be combined with a heavy gun and heavy overall armour, the tank would become an increasingly clumsy monster. The development of the guided missile is likely to cut short the reign of such monsters, while providing a substitute for their role.

So our primary objective should be a lighter tank of greater firepower through the development of a new and lighter kind of hard-

hitting weapon and an effective way of mounting the main weapon externally instead of in the turret. Lighter-weight protection should be developed to replace the present armour plate, and a new form of motive power. We must always be seeking a technical break-through to achieve a revolutionary change. Meanwhile, we should strive to reeffective gun-armour concile an combination with manoeuvrability, keeping constantly in mind the guiding principle "smaller and better."

Our goal in tank specification and design should be to produce a mechanized David instead of Goliath. We should aim to get a thoroughly effective battle tank that is capable of being carried by air. That means a weight, under present conditions, of not more than 22 or 23 tons. Moreover, 30 to 40 tons is about the maximum for effective properties under logistical any physical conditions we can visualize.

Beyond the importance of lighter tanks, there are also other lines of development leading toward greater mobility and flexibility. One of these is the development of new kinds of obstacle-clearing equipment; another, new kinds of tank bridging equipment or, better still, new flotation devices to make any tank capable of swimming rivers without having to pause more than briefly for adjustment and without diminution of its fighting efficiency.

It is also very important to develop helicopters or other new forms of direct-lift aircraft for supply, except in first-line transport. In such transport we need vehicles with greater cross-country capabilities. A still greater advantage is promised through the prospect of air flotation—by the fuller develop-

ment of "zero ground pressure" vehicles, capable of short grass-hopper-like jumps over obstacles or of more lengthy tactical hops to the scene of action on the ground.

A further need, particularly for an army that has to deal with overseas emergencies, is for an adequate scale of tank-landing ships. It becomes more essential for an oceanic power, as the prospect of strategic air movement is becoming restricted by the increasing unwillingness of Continental countries, especially in Asia and Africa, to allow the use of bases on their territory, or even flights over it.

Changing conditions also call for changes in tactics. The offensive and counter-offensive success of moured forces in World War II was dangerously dependent on freedom from air interference. It would be fatal folly to dream that armoured forces could, as they did then, operate in mass and deliver concentrated punches beneath an enemydominated sky-or in the face of nuclear weapons. The "princple of concentration" must be interpreted and applied in a new and more fluid way, with the aid of a new technique of "controlled dispersion."

Controlled dispersion differs essentially from piecemeal distribution. A force operating in a dispersed swarm of small battle groups, under radio control, can have multiple effect without ever offering a concentrated target to air attack or a nuclear burst. A swarm of hornets do not concentrate — they attack from all directions simultaneously. Their practice demonstrates the meaning of "multiple effect"—the guiding idea for tactics of controlled dispersion.

Now that the development of nuclear weapons has led to a situation of nuclear stalemate—only breakable through mutual suicide—the traditional aim of "destroying the enemy's main armed forces" has become obsolete and utterly absurd. To pursue such an absolute aim is the surest way to induce on the opposing side a feeling of desperation that will produce mutually fatal results.

Strategically and tactically, the

only sensible aim now is not the destruction, but the paralysation of the enemy's action. In pursuing this aim the capture or maintenance of positions will count for much less than the domination of areas—which is best achieved by offensive (and counter-offensive) fluidity of force.

Such "fluidity of force" is a principle that fits the future, because it is adapted to the new conditions, and mobile armoured forces are particularly well fitted to fulfill it.



# THE CENTRAL TREATY ORGANIZATION

Lieutenant R. T. Smith

Royal Australian Army Medical Corps

THE Middle East is outstandingly notable as the centre of the world's earliest civilization. The problems of interest to the inhabitants and to the rest of the world in the present period are those of its security and of its political, economic and social development.

#### Strategic Importance

The security of the Middle East is of vital concern to world defence against an aggressor with a view to world domination. Strategically it provides the most important landbridge in the world by linking three continents, Asia, Africa and Europe. Through the Middle East are found the shortest sea and air routes linking the United Kingdom and Europe with Asia, Africa and Australia.

The Middle East is now the largest oil-producing region in the world except for the United States; it contains about two-thirds of the world's proven oil-reserves. It may be considered that the importance of this oil is of greater strategic importance to the Western world today than the military opportunities against seapower offered by the region's geographical situation.

### History of the Emergence of the Arab States

Prior to World War I Britain aimed at preventing domination by outside powers in order to ensure the security, in particular, of India. Aden had been occupied in 1839. Egypt at the request of the Khedive was occupied in 1882, and for the purpose of ensuring Egyptian neutrality and the security of the Suez Canal with its economic and military value remained under British occupation until 1922. A series of treaties with the sheikdoms of the Persian Gulf area assisted in the eradication of the slave trade and piracy in the area. Britain had also given support to the Sheikhs of Mohammerah and Kuwait in maintaining independence against the claims of Turkey and Persia.

With the entry of the Ottoman Empire into the First World War on the side of the Central Powers and the efforts of German statesmen to bring the Middle East under the control of Germany, Britain and France fought in the Middle East on behalf of the coalition of Powers which resisted this aggression. As a result

of this closer contact with European nations Arab nationalism rapidly developed.

In 1913 Ibn Saud succeeded in ejecting the Turkish garrison from Hasa and Neid. About this time Hussein was contemplating similar action in Heiaz. In 1915-16 the UK signed a treaty recognizing Ibn Saud's independence, and undertook to support Arab struggles for independence over large areas of the Middle East. Sherif Hussein, assisted by Lawrence of Arabia, was instrumental in the pinning down of large Turkish forces in Arabia, the capture of Akaba and the cutting of Turkish communications in the Arab revolt of June 1916. This action assisted the British and Commonwealth advance through Palestine. Basra, Baghdad and Mosul (Iraq) were liberated by British and Indian forces, whilst Arab forces assisted with the capture of Damascus.

In 1918 an Anglo-French declaration stated that one of the aims of the two Governments was "The establishment of national governments and administrations to derive their authority from the initiative and free choice of the indigenous people." This statement referred, in the main, to Syria and Iraq.

The San Remo conference in April 1920 gave mandates for the territory of Palestine, the Kingdom of Iraq and the Amirate of Transjordan to Britain and to France for Syria and the Lebanon. The terms of the mandates, however, made it clear that they were of a temporary nature and were granted to assist the progressive development of the territories as independent states.

Egypt had become a British protectorate in 1914 and was declared an independent sovereign state in 1922. To ensure the retention of British troops in Egypt, Britain reserved certain questions for later settlement, namely the defence of Egypt against foreign aggression. In May 1937 Egypt became a full member of the League.

In Iraq the United Kingdom Government considered that the objectives of the mandate had been achieved in the 1920's, and on 3rd October 1932 it secured the termination of the mandate and the Anglo-Iraqi treaty of alliance came into effect.

In 1946 the UK recognized the full sovereign independence of Transjordan, and in 1950 the country became the Hashemite Kingdom of Jordan. It was admitted to the United Nations in 1955.

Following the invasion of Syria and Lebanon by Free French and British forces to expel German troops in 1941, the UK Government undertook to support an undertaking by the French Commander to terminate the mandate and give both states their independence. These agreements were concluded in December 1943/January 1944, both states subsequently becoming members of the United Nations.

Libya, which was cleared of German forces by the Allied armies in 1942-43, remained under British administration until December 1951 when it became an independent sovereign kingdom. Libya was admitted to the United Nations in 1955.

Due to the Arab-Jewish problem the British mandate for Palestine continued until May 1948. The day the mandate ended the Israelis proclaimed the State of Israel. It was admitted as a member of the United Nations in May 1949.

To ensure the security of the Middle East area as a whole and the effective defence of the newly independent states in particular, the treaties between the UK and Iraq 19301, Egypt 19362, Jordan 19483, and Libya 1953, each contained similar clauses. These clauses provided for mutual military aid in time of war or imminent danger of war, for UK military training and supply facilities to the other signatories and for the use by UK armed forces of specified bases in time of peace. treaties provided peacetime facilities and bases which would be immediately available for joint defence of the Middle East against any aggression. The United sudden States has the use of air bases in Libya and Saudi Arabia by agreements with the Governments these countries.

#### Current Defence Pacts

In 1937 a non-aggression Pact between Turkey, Iraq, Iran and Afghanistan was signed at Scadabad. Due to the Second World War, this link did not effectively survive. April 1954 Turkey signed an agreement for mutual co-operation and defence with Pakistan.

In August 1954, the Iraqi Prime Minister put forward proposals for another association. In talks with Major Salem of Egypt he suggested that a regional alliance in agreement with Article 51 of the UN

Charter be used to strengthen the League Collective Security Pact. Britain and the United States could then be guestioned about the assistance they would offer to the new organization.

During the last three months of 1954 he held discussions with Nasser in Cairo and Turkish leaders in Istanbul and he also visited the UK. The Turks favourably received his proposals, and the Turkish Prime Minister visited Baghdad accompanied by his Foreign Minister in January 1955. "The Baghdad Pact," a pact of mutual co-operation between Iraq and Turkey, was signed on 24 Feb 55.

The pact, which bound the signatories to co-operate in matters of security and defence, was open to any member state of the Arab League or to any other state concerned with the region provided it was recognized by both countries. When at least four powers had become signatories to the pact a permanent council of ministers was to be set up.

In 1955 the following acceded to the pact:-5th April 1955 the United Kingdom, 23 September 1955 Pakistan, and Iran on 3rd November 1955.

Iraqi participation ceased in July 1958 following the Iraqi revolution. The revolution also made it impossible to use the Headquarters at Baghdad. At a meeting of the Council held in London shortly after the revolution the remaining signatories reaffirmed the alliance, leaving Iraq to decide on its future relationship to the pact. Iraq formally ended its association in March 1959.

In addition, in March, 1959, the United States signed Defence and Aid agreements with Turkey, Pakis-

Replaced by special agreement under the Baghdad Pact in 1955, this agreement itself came to an end in 1959 when Iraq formally left the Pact. 2. Replaced by the 1954 agreement, since

abrogated.

Terminated by mutual agreement in 1957.

tan and Iran. This agreement followed an announcement by the United States at the London meeting of the Council in July 1958 to the effect that the United States agreed to co-operate with the nations making this declaration for their security and defence, and would promptly enter into agreements designed to give effect to this co-operation.

Among the measures taken to date to strengthen the defences of the pact region may be mentioned the annual contribution of £500,000 in cash or kind, for defence purposes, the provision of mobile radar training units to Iran, gifts of modern aircraft and tanks to Iraq, and the loan of £40,000 worth of anti-aircraft equipment to Pakistan by the UK, combined sea and air exercises which were held in 1957, a military exercise in combined staff work in May 1958, naval exercises in 1958 and combined exercises in 1959.

A Nuclear Centre, founded to study radiation problems and to train post-graduate students in the application of radio-isotopes, was opened in Baghdad in 1957. Four courses were held there prior to the Iraqi revolt. The UK has now a centre in Tehran, which started work in June, 1959.

The Economic Committee of the Baghdad pact have detailed plans or have commenced projects for the

following: - Improvement of the telecommunications system between the four regional capitals and between each capital and London; the building of new roads and railways to link up the transport networks of the regional countries: the establishment of an international centre in animal reproduction and artificial insemination in Pakistan; the setting up of vaccine manufacturing and biological laboratories and the provision of tuberculosis centres in the pact region. The UK has undertaken to equip several laboratories in the faculties of engineering and physics at the Middle East Technical University at Ankara.

#### Conclusion

From the foregoing brief outline it is clear that the principal needs of the Middle East area have been for arrangements enabling its physical security to be preserved against threat of sudden aggression. Middle East countries have traditionally relied on Western support. Within the last 25 years they have also sought safety by association with one another. Hence the Baghdad Pact, now known as the Central Treaty Organization, which in addition to providing this collective security and mutual aid also provides a vital safeguard to and strengthens the extreme right flank of the North Atlantic Treaty Organization.

## A CALL FOR INTEGRITY, REALISM AND HONEST THINKING

Brigadier R. T. Eason, MC, ED, Royal Australian Artillery

CAPTAIN McCormick in his article, "Some Up-to-date Thinking," in the AAJ No. 132, committed, I fear, the sin of gamesmanship. I am at a loss to know just where he has been serving, but the CMF formations that I have served with could not be described as being "undoubtedly inefficient." In fact the concensus of opinion among all senior officers, all with long war service, is that the CMF could be ready for war after a maximum period of three months' full-time training. This, of course, was prior to the re-organization, but we hope to be as good or even better in the future.

Furthermore, I would like to point out that during a long Army career I have found time-servers, dunderheads, social aspirants and plain mercenaries right throughout the Army, but they were always in the minority. In fact, there is a small minority that completely lack integrity, realism and the ability to think honestly. The trouble is that Captain McCormick has selected one portion of the Army and impugned the professional and personal integrity of the great majority of its members. Apart from anything else

he could not possibly have personal knowledge of this great majority.

This type of criticism will have to cease if the confidence and integrity necessary for an Army is to exist. It is cropping up in many forms all too often these days and one example springs readily to mind. During a briefing conference I was interested to watch the reactions of a capable unit commander when told he must prepare his unit to take part in a five day tactical exercise involving fire and movement during his next He was thrilled with the opportunity because as he stated, "This will be excellent training and give a real opportunity to honestly assess the unit's preparedness for war, but I would like to be protected from ill-informed criticism on the first day."

The exercise was well conceived and planned, and the lessons to be taught quite clearly defined. However, the unit found it difficult to handle the first day, but as the Formation Commander remarked, "Well, officers and ORs learn best by doing and the lessons will be repeated during the next four days." During this period, as one Staff Officer who saw more than most,

remarked, "The unit performed very well indeed."

Here was an excellent training and testing run with interest maintained by proper methods, namely:

- (a) Being taught and then doing.
- (b) The various lessons previously learnt being applied concurrently so that the unit operated as a unit, at first uncertainly and then with growing confidence.
- (c) A testing of physical and mental stamina.

But in spite of this a staff officer from a senior Headquarters, who stayed only a few hours on the first day, reported very adversely. He made no attempt to find out what was being attempted or why and how it was to be achieved.

History gives the verdict that a large CMF is the best possible army for a democracy, but its purpose must be known and its policy for training clearly outlined. It must be criticised on its potential only, eg, it must not be criticised because its foot drill is not equal to the Guards, but an assessment made on how long it would take to achieve this standard after starting full-time training. The purpose of the CMF is not to be ready immediately, but a short period after the regular component is committed. If it is to do this and know exactly what this period is to be, it must train in its own proper manner.

The primary and vital job of the CMF is to train Battle Groups in all phases of war in a limited time to a point where the unit and formation commanders can assess their potential battle-worthiness and decide on the full-time training needed before

committal to battle. This can only be achieved by directing all home training and bivouacs to a definite aim, and the obvious aim must be to cope with camp tactical exercises of at least battle group level, and not just concentrate on a collection of interesting adventures. The Army is more than a Boy Scout or Outward Bound movement, and has aims both different and similar to these excellent organizations. It has other fish to fry and goes much further in training, discipline and stern purpose.

During home training and bivouacs all subjects interesting and otherwise must be covered and training in them conducted concurrently as it were, and here the very diversity of subjects plus well planned instruction will keep interest from flagging. But the time limit must be kept well in mind, and no attempt must be made to delay the teaching of one subject until perfection in another is reached. Polish and perfection come with time or full-time training. Besides, any trainer knows that near perfection can be reached today, and by lack of thought or practice can be lost one month hence. Continual study and practice on all subjects is necessary. The main thing is to relate everything taught to actual fighting. particularly in anecdote form. In this way men can be convinced of even the necessity for drill.

The very first and most permanent lesson that all ranks must learn, as did the AIF, is that although initiative and daring are vital things, slaughter and defeat will await them if they cannot efficiently carry out the basic drills and mechanics associated with the application of fire

and movement. This includes the necessary unit and personal administation.

Although Captain McCormick enumerated a great many things that ought to be done, he omitted to say that the many subjects and skills which have to be mastered must be related to a syllabus set to the strict time limits under which the CMF labours. A unit syllabus is necessary and should show:—

- (a) Periods.
- (b) Time to each subject.
- (c) Standard to be attained.
- (d) If the standard in (c) is attained, what full-time training will be necessary before battle?

The last two requirements are of course forecasts, but without a target or a star to reach no training is worth while. Without the above framework and forecasts worked out in detail, suggestions for improving the CMF are worthless. I must here remark that some staff officers do influence CMF training to a marked degree, but their suggestions are always placed before the Commander in the manner outlined and they

are always in detail. These officers are themselves standards of integrity, ability and foresight in detailed planning.

Incidentally, I don't wish to appear to labour this point of integrity where criticism in the Army is concerned, but I have often heard senior officers from other countries remark on the lack of it in the Australian Army. We are all supposed to be Christian Gentlemen serving a Christian Monarch—let us act as such.

And now let me state a most vital thing. If anyone wishes to make the demise of the CMF as a fighting force sure and certain, then just let it be believed that when Commanders aim high in their training syllabii they are merely aiming at paper efficiency.

In conclusion, I would like to point out that the last two wars show the standards reached by citizen soldiers. They actually built the martial traditions of this country. They have not yet let down The Army, Australia or The Realm, and they do not intend to do so in the future.

"I have spent all my life in trying to guess what was at the other side of the hill." That was one of Wellington's best-known sayings. It aptly defines the primary requirement in generalship, and in statesmanship—to guess what is going on behind the opposing front, and in the opponent's mind. Imagination is as important as information, and all the more where the latter is unreliable. To look at the situation—especially your situation—from his point of view is the best way of trying to get into his mind.

# Red Crosses in the Outback

Major J. T. Ashenhurst (RL)

Army Design Establishment

THE sight of two Army ambulances drawing into Alice Springs would cause some conjecture among the locals, but imagine the effect their appearance would have on the opal miners of Coober Pedy! That is exactly what happened in the late summer of 1960.

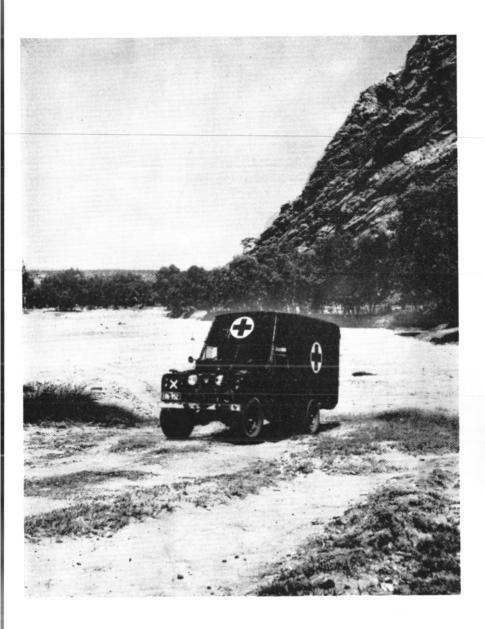
To get to Coober Pedy and points south the ambulances took a surprisingly devious route via Innisfail, 2000 miles due north of their starting place, the Army Design Establishment in Maribyrnong, Victoria. Thence they journeyed across the Queensland outback to Tennant Creek, south to Alice Springs, and back through South Australia and Victoria to Maribyrnong, a round trip of 5000 miles.

This arduous journey was arranged to test two experimental Australian ambulances. Each ambulance body is mounted on the long wheel base (109 inches), fourwheel-drive Land-Rover chassis. The bodies were designed and produced by the combined efforts of

the Army Design Establishment, the Rover Company, and the Pressed Metal Corporation, Sydney, to meet the Army requirement for a light, highly mobile ambulance that could operate efficiently under pan-Australian conditions.

One of these ambulances, known as the Indian Pattern, has a fabric flap at the rear and a non-insulated body. The other has rear doors and a double skin body insulated by one and a half inches of "Coolite." It has a pressurizing fan to exclude dust, a most welcome addition in the "bull-dust" areas of the Centre, and the copi dust region near Lake Hart. Both ambulances have tropic roofs.

Both are fitted to take four stretcher cases or six seated patients together with the driver and an attendant. En route the ambulances took turns at towing a loaded half-ton trailer. A 2½-ton cargo truck towing a 200-gallon water trailer served as a tender vehicle for the trials team.



A prototype ambulance at Heavitree Gap, the southern exit from Alice Springs, through which the Todd River, the railroad, the telegraph, and the road pass.

#### ARMY DESIGN ESTABLISHMENT

A JAN. 60 - 14 APR. 60



#### ROUTE MILES :-

MELBOURNE - INNISFAIL INNISFAIL - ALICE SPRINGS ALICE SPRINGS - MELBOURNE 1971 1468 1559

TOTAL 4998 MILES

100 O 100 200 300 SCALE - STATUTE MILES The ambulances were tested under "hot-wet" and "hot-dry/dust" conditions. The aims of the exercise were:—

- (a) To assess the suitability, performance and reliability of the ambulances, with particular emphasis on patient and crew comfort.
- (b) To determine the extent of deterioration of vehicles and components when parked for long periods in the open under tropical conditions.
- (c) To obtain data to assist future design.
- (d) To study servicing requirements under tropical conditions.

It was possible to carry out some of the specified trials while the vehicles were en route. The trials involving special "hot-wet" conditions were carried out in the Innisfail area at the wettest period of the year, when the monthly average rainfall exceeds 20 inches and relative humidity approaches saturation point. One such trial was the three weeks static trial of the ambulances left unattended in the jungle. During this period observations were made at regular intervals for signs

of corrosion and general deteriora-

The next phase of the trials provided a marked contrast between East Coast conditions and those of the Centre, where rain at that time of the year is almost a complete stranger, shade temperatures around the 100°F mark are commonplace, and the relative humidity is not worth mentioning.

As may be imagined, the going on this varied journey was not easy for men or vehicles. Shortcomings in vehicle design and performance were expected and, to some extent, realized. In general, however, the ambulances stood up well and proved more suitable for use in the tropics than previous types. There are still defects to be cured and weaknesses to be removed before they can satisfy the exacting standards set for this type of vehicle.

The tour itself has provided a wealth of detail for the design engineer, and increased knowledge on climatic conditions, terrain, personnel administration and general information on tropical Australia which will prove invaluable when planning similar trials in the future.

# NEW GUINEA AND PAPUA

Staff Sergeant P. G. Gittins Royal Australian Engineers

An assessment of the significance of New Guinea and Papua to Australia, together with an appreciation of the responsibilities assumed by Australia and problems which arise in the discharge of those responsibilities.

Island—the Spaniards called New Guinea when they discovered it for the Western World back in 1511. But for centuries nobody wanted the Gold Island, for New Guinea was an island where time had stood still, an island of Stone Age head hunters, a jungle with no commercial attractions.

Today, however, the western half, Dutch New Guinea, is one of the world's trouble spots. The new nation of Indonesia says it belongs to them, and the Dutch strongly rebut the claim.

Dutch merchants turned their eyes to New Guinea when building up their rich East Indies Empire. They were not interested in trade with the jungle isle, but wanted to ensure it did not become a stepping stone for British or Spanish "invaders," sweeping down from the Spice Islands.

Nevertheless the English East India Company half-heartedly annexed New Guinea in 1793, and the Netherlands Government officially took possession of the western half in 1828, establishing a Dutch settlement. Tropical disease crippled the settlement, so the Dutch Government confined its activities to patrolling the seas around.

A Dutch journalist, Matthew Smedts, in a review of New Guinea in 1957, admitted that at the time Holland was not very interested in the island. He says:—

"Only Germany and Australia saw something in New Guinea. When the Germans became colony minded, the best parts of the world were already gone, but they were prepared to spend their enormous energy on the crumbs that were left. The Australians, who had a shrewd idea of the country's importance, made such a fuss that the British Government acted at last—after Germany had taken control of the north-east coast in 1884.

"And so, in 1885, New Guinea was officially divided. Holland had the western part; Germany and Eng-

land shared the eastern part, of which Germany acquired the northern half and England the southern. England's portion was handed over to Australia at the turn of the century.

"After the First World War the German territory was mandated over to Australia under the League of Nations; thus it came about that Australia governs the eastern half of New Guinea and Holland the western."

The next stage came after World War 2—in 1949, when the Netherlands granted its former East Indian Empire independence. The new state of Indonesia was born, but the Netherlands Government specifically excluded New Guinea from it, saying that the island was not economically or geographically part of Indonesia, and that the natives were not nearly ready for independence.

As regards the terrain of New Guinea, perhaps the best description can be found in the MacArthur historical records:—

"In New Guinea the great mountain ranges with their high peaks and deep gorges, the dense jungle which covers almost all of the huge island, the reeking nipa and mangrove swamps-'a stinking jumble of twisted slime-covered roots and muddy soup'-the hazardous jungle trails, the vast patches of kunai grass, with its sharp-edged blades growing to a height of six or seven feet, the swollen streams, the everpresent mud, the dangerous offshore reefs, most of them uncharted. the poor harbours-these terrain characteristics exerted a constant and adverse influence on troops and military tactics.

"The problems of climate and health were no less severe. The

penetrating, energy-sapping heat was accompanied by intense humidity and frequent torrential rains that defy description. Health conditions were among the worst in the world. The incidence of malaria could only be reduced by the most rigid and irksome discipline. and even then the dreaded disease took heavy toll. Dengue fever was common, while the deadly blackwater fever, though not so prevalent, was no less an adversary, Bacillary and amoebic dysentery were both forbidding possibilities, tropical ulcers, easily formed from the slightest scratch, were difficult to cure. Scrub typhus, ringworm, hookworm and yaws all awaited the careless soldier. Millions of insects abounded everywhere. Clouds of mosquitoes, flies, leeches, chiggers, ants, fleas and other parasites pestered man night and day. Disease was an unrelenting foe."

General Casey of the US Corps of Engineers had this to say:—

"... if the High Command had been conducting war games, and had searched for the ultimate nightmare country, Papua and New Guinea must have been the inevitable selection. There was something cynically malignant about the weather and the geography."

### The Australian New Guinea Development Policy

Community development, that is, the answer to local demands, plays an important part in the general planning for solving the life and death problems of New Guinea, problems of health, agriculture, industry, education, and local administration.

However, there are obstacles to this development-lack of finance and lack of trained leadership. There difficulties in finding local leaders, and in forming "local government" units in some areas. There is no short cut-money must be spent in the fields of health, agriculture, education, and co-operatives, and we cannot hope for rapid returns. The process of a social change which will eventually produce skilled native administrators and technicians is a slow one.

A united people of Australian New Guinea, bound to the Commonwealth by a form of political partnership and by ties of friendship, can be attained only through a great social transformation there. Australia must assume the great "colonial risk"—we may succeed in fostering a political and social change, and produce a New Guinea leadership with the active support of the articulate, only to find that this leadership will oppose our own national policies.

However, this development policy may be justified as a great national venture as one of Australia's major contributions to civilization. penditure on discharging, in good faith, those responsibilities which we have internationally accepted, for a politically helpless people in an economically poor area, needs no justification other than that the individuals there are thereby given greater opportunity to extend their short span of life, to live it in a better world, and to learn of the world and how to move in it as citizens. Every successful effort, even on a small scale, brings reward in terms of individual welfare.

In New Guinea, most projects must be commenced without the de-

veloped systems which planners can generally assume in modern western countries. In New Guinea no such assumptions can be made. The agricultural officers may find that they can do nothing without the construction of a road and the services of the education and health A health project may inofficers. volve basic education, including An educational or coliteracy. operative project may have to become a multi-purpose effort, concerned also with health and agriculture and certain essential public works. In every case it may be necessary to stimulate villagers to provide or assist with buildings. roads, drainage and the like,

Sometimes a project concerned with development of health, literacy, housing, the status of women or cash cropping, has been regarded also as an exercise in democracy, with the people making the choices, fixing the priorities, appointing leaders and paying some of the cost. If the project is initiated in the first place through local community effort, it may then be correctly described as one of "community development."

Already natives are working and producing within their own organizations, in native co-operative societies and rural progress societies; and there are in addition a few native employers. It is government policy to encourage this development. This is a potential stimulus to efficiency everywhere.

Administrative efforts for a general lift in efficiency include the work of agricultural extension. For technical training there are three technical training centres, at Port Moresby, Rabaul (in New Britain) and Lae. Courses include carpen-

try, plumbing, sheet metal work and motor mechanics.

In the areas of administration where some kind of measure may be made of economic progress, the development of political and cooperative organizations, and of public works, the period of post-war reconstruction has given place to that of-new progress. One-indication-isthe rapid extension of the main centres of settlement, particularly at Moresby, Lae and Rabaul. old roads are being reconstructed and repaired, new ones are being One is being made in the Brown River area in Papua. important new dry weather road system will, when completed, link the stations of the Central Highlands with Gusap on the Ramu, and Madang with Gusap. This system, together with the roads in the Sepik Wahgi Division, are being built by the natives under the direction of the Department of District Services and Native Affairs; the effort being largely a voluntary one by communities anxious to produce and market cash crops.

The Department of Civil Aviation is extending the pattern of aerodromes. The slow but fascinating work of bringing the remaining communities who have not had European contacts within the orbit of administration goes on.

The establishment of new crops, such as tea, coffee, kenaf, and other fibres has involved development of strains suitable to the area. There has been experimental work in rice growing and milling, and efforts to produce a strongly strawed rice for mechanical harvesting, as well as to assist native projects with handharvested rice. Coconuts and rubber have involved efforts to develop

better planting material, and research into pest control. Cocoa is rapidly becoming a very important asset. Work has been undertaken on the foundation of a cattle industry.

New Guinea forests also have been the object of special study, with an eye to reafforestation as well as use. A very—important—plywood—mill—is operating at Bulolo.

The fight for better health is being extended against malaria, tuberculosis, and the causes of infant mortality. Many new health centres and hospitals have been established.

The essential, basic efforts in education are faced with vast commitments at a time when Australian teachers, so urgently required as Education Officers, are very hard to get and to keep, because of the shortage in Australia. The training of New Guinea teachers is an urgent priority.

Our only real defence against the critics of colonialism, of our control of New Guinea, is that we exhibit good faith in the efforts we make to increase individual opportunities for New Guinea people. Only capital investment from a "developed" economy can widen their horizons. It is more than probable that the only real hope for such developments in New Guinea lies in strengthening the Australian tie—more Australian settlers must establish themselves in New Guinea.

#### Russian Criticism of Australia and New Guinea Development

Over the past few months, the Australian New Guinea development policy has received much criticism from Soviet Russia. This criticism was "stepped up" towards the end of May 1960, when Mr. I. I.

Andreev, the Soviet representative on the United Nations Trusteeship Council, complained of the "lack of target dates" for the independence of the territory. He complained bitterly of Australia's 45 years of bungling on the political administration of New Guinea

This verbal attack was followed up by another United Nations Soviet Delegate, Mr. Valentin Oberemko. He charged, in a general debate on conditions in New Guinea, that the administration, legislature and judiciary of the trust territory rested in the hands of "Australian colonists"

He declared that the Australian Administration was not carrying out recommendations of the Council on the broadening of native participation in the Legislative and other Councils. The time had come, he said, for Australia to fix intermediate target dates and a final time limit for the independence of the territory. Broad masses people were openly expressing their dissatisfaction with the Administration. They lived in dire poverty, received "misery wages" of less than one shilling a day, and were subjected to an unfair personal tax. He said that instead of encouraging production, the Administration was importing food products from Australia. The Administration was only developing those sectors of the territory's economy which were in the interests of Australia. The situation in the education and health fields was completely unsatisfactory. least 90 per cent of the population was still illiterate.

In answer to this criticism, Monsieur Erik Bal, of Belgium, said documents before the Council pointed up the obstacles facing the Australian authorities in the development of New Guinea. He commended steps taken by Australia to provide for the health needs of the natives, to promote agricultural production and improve food crops. These and other steps gave assurance of the interest being taken in the welfare of the population. Australia was building in New Guinea a solid basis for a new nation.

This commendation was echoed by the representatives from Burma, Paraguay, Italy and the United States.

#### The Task Ahead

Few Australians are yet aware of the nature and gravity of the problems which face them in New Guinea. This quandary stems from the fact that our plans to lead the New Guinea people into independence are still based on a tempo of social and economic development that will make them fit to govern themselves in something less—but not much less—than 100 years.

It is possible that within five years our New Guinea liability may confer on us the distinction of being not only the last remaining trustee power, but the last "colonial" power in the world.

This frightening prospect has forced us into plans to telescope 50 years of progress in New Guinea into five years, a pace that could be financially killing to any Australian Government and socially fatal to the primitive peoples of the territory.

The continued Dutch presence in West New Guinea has temporarily insured us against a Communist intrusion at the heels of a weak Indonesion administration. But it is accompanied by Dutch political peacemaking among the natives a'most

as dangerous in its chaotic potential as Communist prodding.

Holland has given up hopes of making an economic profit of West New Guinea, or of using it as a card in power politics. The main concern of the Dutch is to erase their reputation in the eyes of the world as greedy colonizers. aim-to-set-up-some-sort-of-New-Guinea state in double-quick time. before pulling out and asking the world to acknowledge Dutch enlightened liberalism. They plan to give their half of New Guinea within six months a legislative council with a native majority.

At this rate, some sort of half-baked New Guinea independence will be taking shape long before Australia gets around to giving her section of the country any real measure of responsibility in government. The Dutch handle potential leaders among their natives by methods at once more ruthless and opportunistic than the methods favoured by Australia, in its more gradual and idealistic approach. The outcome, therefore, of this Stone

Age nationalism might be something to make darkest Africa seem by comparison a paradise of economic sweetness.

#### Conclusion

The problems of New Guinea are probably unique among trust territories. It is not only a Stone Age country, it has difficult problems of climate and terrain. The basic problem is to raise the standard of living above subsistence level, and at the same time educate the natives to a point where they can take their rightful place in the governing and running of the country.

The immediate target cannot be self-government; that would mean nothing but chaos and starvation. But while we are attempting to bring the territories under control and raise the living standards, we must be more active in educating the people. This task will take at least a generation, but we must recognize now that things are moving quickly, and we cannot act for ever as paternal administrators.

The philosophy of discipline has adjusted to changing conditions. As more and more impact has gone into the hitting power of weapons, necessitating ever widening deployments in the forces of battle, the quality of the initiative in the individual has become the most praised of the military virtues.

-Brigadier General S. L. A. Marshall, US Army

# THE SPACE RACE

Reprinted from the June 1960 issue of An Cosantoir, Eire.

THE launching of Sputnik I, in October 1957 dramatized the beginning of the space age and electrified world opinion. It also shattered US illusions that it would be first in the exploration and exploitation of outer space. Promptly on the heels of the Sputnik, in November 1957 a special Committee of the US Congress undertook a major analysis of the American satellite and space position.

The National Aeronautics and Space Administration (NASA) is the result. At the time of the enquiry were upwards of separate agencies and authorities dealing with space matters. biggest was the Department of Defence, which ran its own Advanced Research Projects Agency (ARPA) in addition to separate Army, Naval and Air programmes. Other important organizations were the National Advisory Council for Aeronautics (NACA), founded as long ago as 1915, The National Science Foundation, The National Academy of Science, The Atomic Energy Commission and The Federal Air Administration.

This galaxy of personnel, facilities and resources made it clear that the main deficiencies in the US space effort (with a few outstanding exceptions, such as pure mathematics) were not in technology and equipment, but in organization and administration. The winning of the space race was essentially a problem in public administration, and if the US was just beginning to learn about outer space it had numerous experts considerable knowledge public administration. **Political** scientists, as well as scientists, would be required to solve the difficulties of satellites and space.

#### A Civilian Agency

The need was for an organization which in the welter of competing agencies would remove the formulation of policies and programmes from a process of negotiation to one of decision. It was felt that for reasons of national policy (the fear of militarism!) and because military and civil space requirements differed, that the new organization should be a civilian agency. Space projects which were primarily military would, however, remain under the Department of Defence.

Thus NASA, which was to bring order out of chaos, was born in July, 1958. Its framework and HQ organization are built around the 43-year-old NACA which had done valuable

work for US aviation in World War I. NASA is organized in four major divisions, administration, aero and space research, space flight development and rocket vehicle development.

Practical field operations in each of the three technical divisions were promptly initiated. The most important and certainly the best known of these operations is carried on at Langley Field, Vermont, by the Aero and Space Research division. Here "Project Mercury"—the "man in space" project-has as its aim "to provide capability for accomplishing advanced space flight miswhere on board human sions intelligence and appraisal is required." In theory, suitable instruments may be devised to perform increasingly complex space missions. but, in practice, man's flexibility of action and his analytical and devision-making capacity in the face of unexpected problems make his presence in outer space invaluable.

#### Four Main Points

The success or failure of NASA tends to be judged by its achievements in the much publicised manin-space field, but it is certainly true that in the overall space race the US continues to lag behind the This apparent failure has caused critics-and in an election year they are many and vocal-to take a new, long look at the whole field of American space operations. Attention has been focussed\_on four\_ main points, NASA-military relations, administrative co-ordination at top level, Russian achievements and, finally, the ultimate purpose and achievement of the immensely costly space race itself.

NASA is specifically designed to meet scientific and peaceful requirements. At the same time, however, the Department of Defence, which in the pre-Sputnik era controlled 75% to 90% of space activities, is obviously interested in projects which are related to military purposes, but are not exclusively military nature.— Similarly,—much—civilian space knowledge concerning weather forecasting, communications and mapping has obvious military implications. In utilising to the full scarce men and resources the maximum co-operation between these two organizations is clearly essential. It is by no means certain that this co-operation is fully effective as recent friction over the transfer of the Army Ballistic Missile Agency (ABMA), headed by Dr. von Braun, missile expert. German-born NASA showed. It has also been implied that as a result of the present dispensation the US has fallen conspicuously behind the Soviet Union in military missile development.

#### President Involved

NASA, created to co-ordinate US space activities, is itself dove-tailed into the higher echelon of government by the National Aeronautical and Space Council (NASC), a body similar in concept to the top level National Security Council which advises the President on Defence and Security matters. The Secretary of State, Secretary of Defence, Director of NASA, and representatives of a number of other important government agencies, are members of It is presided over by NASC. General Eisenhower.

In practice NASC has become a fifth wheel to the coach, it has not

helped administrative efficiency at any level and it has unduly involved the President. It is now suggested that NASC be abolished and the law amended so as to place direct and unequivocal responsibility on NASA for planning and implementing a national space programme.

Russian achievements are the backdrop against which these interservice rivalries and administrative tangles are played out. The Russians have taken their space effort and forged it into a sharp, effective weapon in their increasing struggle to capture the minds of men through. out the world. American consciousness of this and of their own relative inferiority is a factor which permeates all aspects of the space programme, not always in a beneficial way. To an extent the Soviet Union is forcing the hand of the USA and determining the pace at which projects are developed and the manner in which they are gone about. There is a tendency to undervalue basic research and development at the expense of ICBM production and other items which have an immediate military or propaganda value vis-a-vis the Soviet Union.

#### Final Question

The final question mark against NASA is a fundamental one. Do the prospective results of such a programme justify the huge outlay of funds which will be required to

sustain it? The purse of even the United States Treasury is not bottomless and there are many worthwhile Cold War projects—Afro-Asian economic aid, NATO defence support, to name but two—which make extensive calls on it. The cost of the space programme will continue year after year and it will increase year by year. Nor can anyone say precisely what the payoff will be or how soon it is likely to materialize.

It was considerations such as these which probably led the Administration to decide that this year the budget was more important than the space race. It is to ask Congress for only \$800m. (nearly £268m.) for the space programme for the coming year, although the amount estimated necessary for a real effort to catch up with the Russians was between \$900m. to \$1,000m.

This decision not to be rushed by the Russians is likely to be hotly contested by a Democratic Congress (the Administration is Republican) which is more or less pledged to spend more on space research. The Democrats feel that the safety of the country and the world leadership of the United States is more important than the balancing of one year's budget. Thus the affairs of NASA are likely to be a critical issue in the United States for a long time to come.

---R.A.H.

# AN OPERATION ON GUADALCANAL

Lieutenant-Colonel J. V. Mather, ED, (RL)

THE following narrative is based on personal experience of an operation carried out by the 2nd Raider Battalion, United States Marine Corps, on Guadalcanal in 1942.

During this period I was attached to the battalion as a liaison officer. Perhaps some word of explanation is advisable as to how I came to occupy such an appointment. about eight years prior to the war I lived in the British Solomon Islands Protectorate and carried on business there as a trader, sawmiller and recruiter. "Blackbirder" was the old name, but by the time I arrived the rules instituted by the British Government were observed reasonably well by both whites and natives. Naturally, after eight years, I was quite familiar with the area, could speak one of the Malaita languages besides pidgin, and, as a successful recruiter, could say that I was fairly well liked by the natives.

When war broke out in 1939 I volunteered for overseas duty, but was rejected for medical reasons, and subsequently served in a number of appointments on the mainland of Australia. Early in 1942 I graduated from a six week's Senior Officers' School, which gave intensive

training in tactics and a thorough grounding in the operations of artillery, supply, intelligence, etc.

After the US Marines landed at Guadalcanal I offered myself for service in the area if it was thought that my previous experience would be of value in any capacity. This application was taken up much more quickly than I had expected, and on 1 September I reported for duty to Vice-Admiral Kelly Turner, USN, on board his flagship, USS Macauley, in Noumea harbour.

A few days later I was transferred to 1st US Marine Division (Maj-Gen A. A. Vandergrift) and arrived on Guadalcanal on 18 September. I was then attached to the Intelligence Officer of the Divisional Staff (D2), Lt-Col Ed. Buckley.

My first real job was to make an "estimate of the situation" and plan for the capture of an outpost of Japanese at Cape Astrolave on Malaita Island. It was very gratifying to find that the General, after studying my report, saw fit to write on it, "Not one word of this is to be altered . . A. A. Vandergrift." The subsequent operation which was based on my report was a success, but I was not there to see it, as I was shortly detached for duty with the

2nd Raider Battalion commanded by Lt-Col Evans Carlson. This battalion was at that time in training at Espiritu Santo, and Col Carlson and I left Henderson airfield, Guadalcanal, one morning with no regrets and with Jap shells landing at one end of the field as we got off the other.

After joining the battalion quickly got to know the officers and the general set-up of this battalion. although naturally, to an Australian. it was at first a little strange. battalion had enormous fire power with a liberal provision of automatic weapons. However, at this period of the war, it was the old Lewis gun which was most in evidence. The battalion was made up of six companies with three platoons each company. Within platoon itself the men were divided for tactical purposes into units of three. All members of the battalion were magnificently fit and remarkably young, including the officersnone except the CO being over 25.

Not long after I arrived I took part in a full battalion exercise into the jungle and was present at the conference on it which was held the next day. At the end of the conference I was asked if I had anything to say, and rather upset things when I drew attention to the remarkable amount of time taken to set up their wireless and gain wireless contact. I explained that it seemed to me that the men responsible for this went about their work in a very casual manner. Fortunately for me the criticism was received well and in the spirit in which it was offered. Col Carlson told me later that he had spoken severely to the Marine Gunner in charge. This bore fruit. as from the time we arrived in

Guadalcanal our communications were excellent, and I didn't observe any delay which could be attributed to laxity on the part of the men responsible.

Some time later orders arrived for our move to Aola on the northern coast of Guadalcanal, thirty-five miles to the east of Henderson field. It was planned to construct another airstrip there, and our job was to land first and ensure that the area was cleared of Japanese.

During our preparations for the move I had some difficulty in explaining my needs for food for the native carriers. I found it hard to convince those responsible that the natives would not work unless they had proper food, i.e., food that they understood and were used to-and plenty of it. There seemed to be some idea that money would be a sufficient attraction to obtain natives to do the necessary carrying work, and I had to go to great lengths to explain that as there were no stores and no taxes, money was of no attraction to the natives. Food and suitable tobacco (certainly not cigarettes) would be the only attractions that would induce them to carry for us. After explaining that once these stores were landed the natives themselves would have the worry of carrying them, I finally got my own way, and space was made available for them in the ship, and down on the loading lists went 100 lb. rice, 25 lb. bully beef per 100 men, plus tea, sugar and Emu Twist tobacco. This last item is the key to all public relations in the Solomon Islands and in most of the Melanesians. With it friendly relations are more quickly established than with any other "white man's" products, including money.

During preparations for the landing I was naturally asked what I thought of the forthcoming operation and replied: "Well, it's an unopposed landing; my friend Martin Clemens will be on the beach to meet us. There are a lot of beautiful bananas and pawpaws for everyone who, like myself, has not had any fruit lately." The word went round "a papayarun." Many days later and many times I was made to eat those words!

As it turned out we made a text-book secret landing at dawn with-out artillery support in case there were any enemy ashore. Sure enough, in the dim light of the breaking day we did meet, as I had predicted, my friend Martin Clemens and a party of marines who had been sent down from Division to guide us. We had no casualties, naturally, but unfortunately the army, who landed later in the day, lost five men who were killed by their own "trigger-happy" guards.

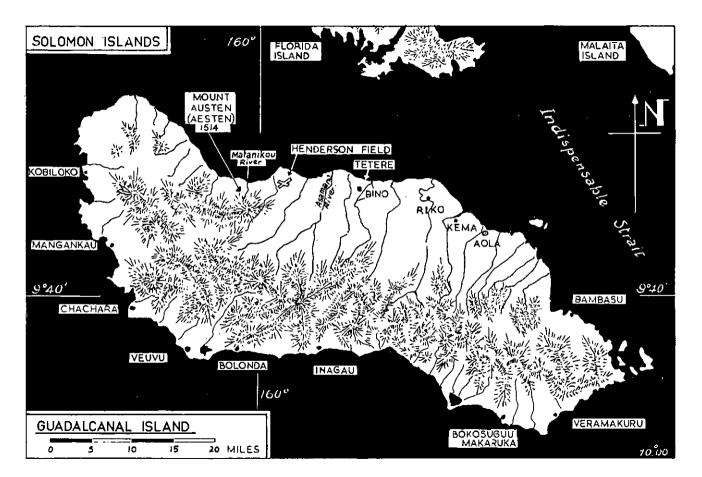
After the marines had had their fill of bananas as promised. orders arrived that we were to on the coast westpush up wards towards the airfield, clearing the area of Japanese as we went. By taking a short cut we were able to get to Kema. Although I had by this time collected a few native police, including a corporal Poi, the natives whom we had planned to contact to form our carrier force had not been seen, as they were farther up in the bush.

We moved along the old native tracks which in the days before the Japanese invasion were the main means of communication and also the best. Although they allowed travel only in single file, as that is the normal manner in which natives move from place to place, they were

the easiest way to travel, as, in the main, they followed the contours. These tracks were known as "Government roads," which, because of the grandiloquence of the expression, tended to be somewhat misleading. The term was used because under the pre-war Administration each village was responsible for keeping-the "Government roads" in its area clear and free for traffic.

Up to this time no one in the battalion had actually seen any Japanese, and, although news of a small party had come in to us, it was extremely difficult to obtain worthwhile information. second day out from Aola the leading troops, which included my native corporal, ran head on into five Japanese who were busy killing a Both sides immediately opened fire; my corporal was badly wounded, and although two Japanese were killed the remainder escaped, despite the fact that they were pursued for some way and a thorough search was made for them. The wounded native corporal was evacuated to Kema (and eventually to Henderson field, where I later saw him almost well again), and as the rear elements of the battalion were trailing badly it was decided to remain at Riko for the night. During the night the rear company closed and the column was again a controlled unit.

This trailing away by the rear of the column was a constant cause of delay and difficulty throughout the operation, mainly because no one had worked out a time and space schedule of travel for this relatively large body of men marching in single file on jungle tracks with many obstacles to cross. The other extreme fault in connection with



movement was bunching, and was seen at its worst whenever contact was made or was anticipated. Time and time again I drew attention to the need for the men to refrain from doing this, for the obvious reasons, but I admit that I did not have much success, as they continued, for the old, old reasons, to group themselves in-five or six or more as soon as it appeared likely that some action was in the offing.

From Riko we came down to the coast again without further incident, and made plans to use this as a base for supply. Col Carlson had received orders to continue generally along the coast in a westerly direction towards Henderson field, clearing the area of Japanese as he went. Naturally I was aware of this, and as the guide attached I had made a general "estimate of the situation." As I felt that the Colonel intended to take his orders quite literally, I thought it necessary to draw his attention to the main factors regarding this operation and what to me were the deductions to be made from them. I put the situation to him as I saw it in somewhat the following words:-

- 1. The main object of the operation was to declare the area clear of Japanese and to kill or capture as many of them as we could whilst doing so. Therefore we had to ensure that the whole effort of the operation was not directed toward the completion of a more or less spectacular cross-country tour.
- 2. The nature of the coast in this area, as in many other islands, gives a small strip of sand and coral along the seashore, behind which there is a swamp up to a mile or more wide, through which any movement is extremely difficult, and which natur-

- ally would rule out any effective deployment and/or tactical manoeuvre if opposition were encountered on the coastal strip.
- 3. Progress along the coastal strip would require us to cross the rivers which, even including the sandbars normally found, were too deep to cross without special equipment, such as boats, rafts, etc.
- 4. In moving along the coastal strip we would be subject at almost any time, and particularly at the river mouths, to bombardment from Japanese naval forces, which at that time had local superiority on the sea.
- 5. We had as yet made no real contact with the natives who we hoped would become our carriers, and it was assumed that they were further inland.
- 6. By moving the main body in a westerly direction on dry land, inland from the coastal swamps, we would avoid the difficulties outlined with regard to movement and manoeuvre on the coastal strip. would be in a position to send patrols in any required direction, we would be free from the danger of bombardment from the sea, we would be able to cross all the rivers by wading, and would be much more likely to be amongst the natives whose help we wanted both as carriers and as providers of information regarding the enemy, and, in addition, our presence would give their morale a considerable boost.

Therefore, it seemed to me that the order to move along the coast should not be interpreted too literally, so long as we ensured that we did in fact clear the area of Japanese. We could do this effectively by moving the main body behind the swamps

with active patrolling outwards to ensure proper coverage of the area we were to clear.

Col Carlson was rather doubtful whether my proposal was in accordance with Div's orders, but he finally agreed that my plan for carrying out the general purpose of the orders we had received could be achieved better from inland than from the coastal strip. What finally convinced him, however, were the difficulties we would encounter in crossing the rivers at their mouths.

We arrived at Bino on 9 November, where I suggested that patrols be sent out immediately both to the north and the west, i.e., northwards towards the coast and westwards towards the general area behind the force which I knew to be concentrating around the Japanese who had landed at Tetere. I thought it advisable to make contact with this force, as we had no maps of the area. However, Col Carlson decided that the force would rest where it was and await further information from This was because he the Division. had previously sent off a request by wireless for a map to be dropped giving all available information as to the situation. We received this map about noon on 10 November, and it showed clearly that the Japanese at Tetere were surrounded by the American force just mentioned.

"Hell!" said Col Carlson. "We have missed the bus!"

It was all my fault! We should never have left the coast, and now none of his Raiders were going to see any action!

Although for the moment it did look as though we might well miss any fighting which would take place in the immediate area, I was sure that that was quite beside the point as far as we were concerned, as I kept clearly in the front of my mind that we had received definite orders to declare our area free from Japanese. In other words, the Japanese at Tetere were not our business, but any which were in our area certainly were, and there was a distinct possibility that we might find Japanese to concern ourselves with. It was possible that there might still be some about from a previous landing, that the main body of Japanese to the west of Henderson field might have despatched a force around the south of the field to assist those at Tetere, and that there might be some Japanese who had remained in the area after the attack on the Henderson field perimeter, which was made from the south-east in late October.

Col Carlson decided to send out patrols, and the remainder of the 10 November was spent in organization and preparation for their departure early on the 11th.

There was much excitement this day when nearly all the patrols made contact with Japanese. Apparently there was a gap in the line of the American force surrounding the Japanese at Tetere, and it appeared that considerable number of the enemy had moved through it in a southerly direction. We were now in exactly the right spot to operate against this escaping force, and Col Carlson started to do this immediately with confidence and ability. All his previous training and preparation came to the fore, and it was soon apparent to all ranks that he knew exactly what he wanted to do and how he would go about it. During the rest of the operation his method of fearless leadership gave me considerable

concern, as he was always much too far forward for a commanding officer, and exposed himself to considerable risks.

By 13 November Col Carlson was with his forward companies on the Asamana River, five miles to the west of the base at Bino, where I had\_been\_left\_to\_co-ordinate\_information and to organize the native carrier force to bring up supplies from the coast. As soon as we had moved in from the coast I had been fortunate to find Sgt-Maj Vouza, whom I had known as a native constable in the pre-war days. He was very pleased to see me and told me that he had been wounded by the Japanese when the US marines first landed, and had been decorated by both the British and Americans for gallantry. When I found him he was back with his people, but was very willing to serve again in any capacity against the Japanese. He proved to be a great help to me, as he was an important man in his own area. His knowledge of English assisted me a great deal in the questioning of natives, although he was limited to "pidgin," as was any other native we contacted. It often took a long time to find the real truth after a native had run into the command post excitedly calling "Japan he stop" or some such thing. On these occasions it was my job to find out "where, when and how many." was only after careful interrogation that eventually I would be able to say either that the information was days old or that a patrol should go out immediately, and that so many Japanese would be found, so far away, and in what direction. One such patrol captured Maj-Gen Kawaguchi's sword, which was later handed to General Vandergrift, together with a lot of useful material and information.

At least one native was attached to each patrol, as this was found to be essential for satisfactory movement in the area. They were particularly useful with patrols which made contact with the Japanese. It was very unusual if a patrol which had been-chasing and engaging the enemy had any idea where it was when it wanted to get back home. With the help of the natives this was often accomplished after dark.

During this period there was one particularly unfortunate incident. About half a patrol returned with the officer who was in charge hysterical and exhausted. He reported that they had left the remainder of the patrol fighting Japanese, but they had lost all idea of where that was taking place. I interrogated the officer, and naturally asked him if it had not been possible to extricate the whole force if he considered that that was necessary. I formed the opinion that this particular officer had no idea of what he should have done, and that very likely he would have been successful in bringing home his whole force if he had known how to move it by sections and to employ covering fire to do so. He certainly did not appreciate the enormity of his offence in abandoning portion of his force whilst engaging with the enemy. nately a later patrol located these "forgotten men" and extricated them from their "pinned down" position.

Whilst at Bino I noticed that once the outposts were placed (about 1600 hours) everyone got busy preparing the evening meal. As the officers did not have batmen they would group themselves around a fire, each to get his own meal, whilst the rest of the battalion did the same thing. I asked about this practice and was informed that a Marine Officer did not have and did not need a batman. Rather naturally this getting together of the officers usually developed into a social evening extending often past nightfall, and they would not always be back with the troops who were their responsibility until quite late. One night whilst these circumstances existed a few shots from an outpost led to a general outburst of firing, and this resulted in a message from Col Carlson, who was at Asamara: "I can hear firing from your direction. Are you being attacked?" to which I replied: "No attack." We eventually got things auietened down by going to each outpost in turn, shouting loudly to cease fire, and that as I was going to walk across the front of their position please not to shoot me!

As rations had to be replenished at this time, Col Carlson called for a general expression of opinion on the food from the men, and asked them what was required. had been a few complaints that Col Carlson's "Gungho" ration was no good-in fact the natives were better fed than they were. (Gungho was Carlson's catchword for greetings among his battalion, and had been transferred to the ration, which was his idea of the best food during such operations as these.) The most interesting request was for tea rather than coffee. Apparently the coffee ration had run out long ago, and the troops had been getting on to the native chow line in the mornings when hot sweet tea was issued to them. This was issued with either hard crackers or rice if it was available.

After cleaning up the Bino-Asamana area we pushed on westwards. eventually crossing the Malambiu River. Here I struck trouble with my native carriers, for we had reached the boundary of their territory, and farther westwards was foreign country to them. Naturally the guides I had would also be useless in the country ahead, and I had to send for more. I settled the carrier question by standover tactics with old Sgt-Maj Vouza-for two days I called him "Sergeant-Major" instead of the familiar and friendly Vouza. But the guide question was a different matter. Fortunately I picked up a party of natives who, after reporting at Divisional Headquarters, were going on home, which, quite by chance, happened to be in the area we were moving into.

On this day, about 20 November, as I could not supply guides immediately and as Col Carlson wanted a patrol to move into the area, he decided to go himself. I declined his invitation to go with him. He returned that evening very tired, saying that he had got lost, moved in a complete circle and eventually found his own tracks, which led him back to camp. As he had seen quite a few tracks made by Japanese and Americans, we realized that we had moved into the area patrolled the Japanese and the Americans facing each other on the Henderson field perimeter. It was fortunate for us therefore that the new native guides arrived that evening as, from now on, it would be imperative for a native guide to be with each patrol. They were the only people who knew their own roads and could distinguish them from the well-defined tracks often made by patrols.

I now had to deal as best I could with the natural temptation to move along patrol tracks, as they were usually better defined than the Government highways, which were often by this time completely overgrown. Naturally the patrol tracks were of a more or less circular nature and of no real help to us in proceeding through the area in the manner required by Division.

At about this time we received orders to wipe out a Japanese gun at a given map reference. Fortunately I found amongst the new guides a native who knew this gun and, after talking with him I was able to locate it on the map according to this native's report. placed it quite a long way from the map reference given in the order we had received. I therefore reported to Col Carlson that he could send a patrol in strict accordance with the instructions received, but that the only chance of silencing the gun as required was to send a patrol out with the native as guide. From our position it would be possible for the latter to complete its mission and be back within six hours. For a patrol to proceed according to orders would take at least three days and would not go anywhere near the gun. Col Carlson decided that we would send out the patrol with the native first, and that if it did not get results we would then send the patrol according to orders. Fortunately my guide was accurate -he even showed me the decayed body of a Japanese he himself had shot from ambush three weeks earlier. We found the gun, although it had already been knocked out by accurate fire from the 11th Marine (Arty) Regiment.

By 25 November we had moved

westwards to a position south of the Henderson field and about five miles from the perimeter. We now had a photo-map with Div HQs own grid, but this did not mean that it was always easy to pinpoint our own position. Naturally Col Carlson wanted to know exactly where we were, especially at bivouac times, and I am afraid I took the easy way out by placing us generally under a cloud. This usually allowed me a comfortable error of a thousand yards or so.

During our approach to the Lunga River both Col Carlson and I. with my guide, were with the most forward troops. We found the remains of a Japanese brigade HQ and a trail from there leading down to the The river at that position was too deep for a native crossing. and I ordered my guide to move on to find the ford, which I knew must be near. We were within about twenty yards of the river when the guide stopped and said very softly, "New track here." I could see nothing, but my guide was most insistent. so I motioned him forward. As soon as he reached the water's edge he raised his rifle to the firing position and looked back to me for permission to fire. I nodded, at the same time drawing my .45 and looking in the direction that the guide was pointing. Just as the native fired and missed I saw the Japanese, so fired at him. He ran a few paces and then dropped.

As Col Carlson had pushed on ahead whilst this was going on I ran after him, stopped him and said: "I have just shot a Jap."

"Yes, John, good show, I saw you," he replied.

"But where are you going now?" said I.

"Oh, I must find an open space along this river for a plane drop. We are out of chow and I must get a message away as soon as possible so that we can have some before nightfall."

"Look, Colonel, before we get chow we must declare this area clear. We have just shot one Jap, and that means he must have some mates around here somewhere. Please put the forward platoon at least through this area before you move any further."

Col Carlson agreed to do this and ordered his leading company to clear the area immediately. It was just as well he did, for we found the remnants of the main base complete with a hospital unit. This was a "left-over" from a strong Jap attack on Henderson field on 23/25 October, when the main attack from the west was supported by a diversionary attack of brigade strength from a south-east direction. tunately for the Marines, something went wrong with the Jap's co-ordination and the two attacks did not coincide, the south-east attack being two days late! This allowed complete concentration of US artillery defense on each front in turn instead of the opposite effect, which the Japanese general had intended.

The whole battalion really got to work then, and for the rest of the day "mopping-up" operations continued. Only one marine was killed, and he was a quartermaster-sergeant at Bn HQ. He had gone off souvenir hunting, and one of the Japanese was not sufficiently dead.

We also managed to get the food dropped which the Colonel had been so anxious about. This was a magnificent effort by the DC3s responsible, in view of the high mountains on either side of the river. Although quite a few of the cases and bags of rice went into the river, we rescued most of it, and all hands settled for rice and bully beef cooked native style.

About 2 December we received orders to return forthwith. I found out later that this was because the army was to take over general responsibility for the operations, so it was necessary that all marines should get back inside the perimeter. Our mission was not quite complete, however, for if we were allowed to continue I still had a job to do for Col Gerry Thomas, Chief of Staff, who told me before we left that he wanted to know if there were any Japanese troops in the area south of Mt. Austen, which was known usually as Grassy Knoll. As I knew this question was an important one, I was hoping that I would be able to provide the answer to it, as it would take us longer to go back the way we had come than it would to push on and complete our journey on the route intended. As the airmen say, we had passed the "point of no return."

Col Carlson requested Div for permission to continue instead of returning. Permission to do this was granted provided that we were back inside the perimeter within two days.

By this time tempers were short, for everyone was suffering from battle fatigue, poor rations, anxiety, etc. My own rations consisted of a cup of tea and two crackers in the morning, a bar of chocolate and a drink of water at lunchtime and a good meal of rice, bully beef and onions at night. Before we started the operation I would have said that I was perfectly fit—after the opera-

tion was completed I was surprised to realise that my waistline had dropped from 42 in. to 32 in.

On the 3rd December we crossed the Lunga River and started the climb around Mr. Austen. During the day we encountered two separate Japanese patrols, made short work of them, but lost an officer and three men in doing so. These the Colonel had buried with full military honours. That night we camped in the hills, and no water was available for the replenishment of water bottles. The doctors thereasked for water for wounded, and each man was ordered to give half of his supply to the medical section. I was surprised how few of them had anything like full water bottles, despite the fact that during the day we had crossed or passed along many streams of drinkable water and I myself had had no difficulty in finishing the day with a full bottle. From this time on we were most concerned about our wounded, and my native carriers were relieved of other burdens in order to help carry them, and took amazing care of them.

We started to descend from Mt. Austen the next day, 4 December, and Col Carlson and I had a few differences of opinion. As we were now getting near home, Col Carlson could not resist the desire to attempt to follow the more clearly defined tracks, which appeared to lead down hill and straight toward the perimeter. I knew that these could not be relied upon to continue in the right direction or to go all the way, and I wanted him to carry on as we had been doing and to follow my native guides. As he would not do so I declared that the best thing I could do was to withdraw the guides

from the head of the column and to finish the journey with them in the main body. In order words, I and the native guides would follow where he led. I confess that I had the bad manners to amplify this by drawing his attention to the fact that as he had been content to be advised on the route to be taken for the last thirty days and this had proved to be quite satisfactory, it was a pity he could not continue to trust his guides for the last day. We got about halfway down from the mountain on a track chosen by the Colonel. Then it petered out and we were completely lost apart from being aware of the track along which we had moved. The Colonel had the good grace to ignore my previous rudeness and to admit that he should have followed my advice in the first place. The only thing to do was to retrace our steps, get the native guides back to the head of the column and to follow where they would lead us along the old native track, which was quite overgrown and difficult to see. Nevertheless, I knew it would take the slope gradually and that there would be no serious barriers to our progress even if it were to wind about a good deal. Later on I was able to give some most important information regarding the condition of this track.

Col Thomas was astonished to learn that, providing the native path was followed, the engineers could prepare a jeep track to the top of Mt Austen in one day, and so make it possible to keep a battalion in that area supplied by jeep. Until that report was made, the Divisional staff, from the reports of patrols, considered that the supply difficulties made such a proposition out of the question. The absolutely vital point about all this was of course

that the Mt Austen area was well understood to be vital ground for the defence of Henderson field. From then on it was possible to keep a battalion on the mountain and supply them by jeep. Until then, two battalions would have been required in connection with supplying the unit on the mountain.

We eventually got down to the perimeter near the Matanikou River. I was lucky, and managed to get two trucks for wounded and surplus gear. I also remembered to put my two native cooks aboard with strict instructions to prepare a meal for all natives on arrival.

Then the sad trek began—fifteen miles from where we were to the area allotted to the battalion. We passed the turn-off to Div HQ about dusk, and the Colonel and I broke off to report. I am afraid I didn't do much reporting that night, for, after the General's own cook had given me a good meal, I passed out. Next day I reported to Col Thomas that the area we had covered was free of Japanese and that the road to Mt Austen was a certainty.

The Raiders had done their job and, after a good night's sleep, all the hard feelings of the previous day were forgotten. The sight of reasonable food made all ranks realise that they were now in recess.

As this has been simply an account of an operation carried out by one battalion in action for the first time, I do not propose to go to any great lengths to enlarge on the lessons learnt. Many things which may be criticized are always very difficult to prevent amongst "green" troops, and some of the things that occurred could have been avoided if prior training had been as complete as it

should have been before committing the 2nd Raider Battalion to action. If young soldiers who read this story will note carefully, the obvious mistakes that were made, and also the difficulties that were encountered, I am sure that they will find the solution for practically all of them in the basic training manuals.

I submit the following notes simply as a guide on some of the points which arose.

# 1. Knowledge of the theatre of operations.

From knowledge I have it seems clear that in issuing orders to Col Carson, Division itself did not have sufficient knowledge of the probable nature of the terrain in the coastal area. Surely if they did they would have allowed for the obvious difficulties created by the swamps when instructing the battalion to move along the coast.

#### 2. Interpretation of orders.

It seems to me that despite the object of the operation, i.e., to clear the area of Japanese, Col Carlson did not use sufficient imagination in interpreting his instructions. It was only after considerable persuasion that I was able to prevent him interpreting quite literally the order to "move along the coast."

### 3. Movement in difficult terrain.

As I have stated in the narrative, it was obvious that no one had made out a schedule of likely progress prior to the operation, with the result that much of the movement of the unit was carried out "against time." In any movement of a long

column, military experience for hundreds of years has demonstrated that progress at the most rapid rate possible at the head of the column creates great difficulty at the rear, and, in the case of marching men, causes much unnecessary fatigue. Whilst it is necessary to have a proper concentration of force when contact-with-the enemy is-expected, this is not so when the way ahead is known to be clear. A most important requirement then is to get the men over the ground with as little fatigue as possible. In this operation, as in many others, troops were always racing to keep up with those ahead, who seldom waited for When they did catch up it was quite common to encounter another obstacle in a very short time which would cause those who had been hurrying to sit down and wait whilst the first group passed slowly through or over the obstacle. With regard to movement in difficult terrain, it may be as well to draw attention again to the fact that very often it is literally impossible to pin-point one's position exactly. This of course applies more in jungle country than in any other, and my resort to hiding under clouds on the photo maps was not really the crime it may appear.

## Conduct in action and when contact is anticipated.

There will, I suppose, always be examples of "trigger-happiness" amongst troops of the kind mentioned in the narrative. I can see no effective antidote to this other than (a) efficient and confident leadership, (b) the thorough training of troops prior to action to familiarize them with fatigue, the capability of their weapons, the tactical

value of their positions, etc., and also (c) constant repetition of the fact that when on outpost duty, particularly when fatigued, too long a concentration on any particular object would almost inevitably end in its appearing to move, etc. Troops should be thoroughly trained in the small devices, such as looking away from-an-object after-noting its position and then looking back at it, closing their eyes for a second or so to rest them, and so on.

#### 5. Leadership and care of men.

These two most vital factors cannot be over-emphasized. military history shows that all acknowledged leaders had their own techniques depending to a considerable extent upon their own personality, there are nevertheless basic principles which should be absorbed by all those responsible for the care and conduct of others. is essential that leaders be properly trained in all their responsibilities, not the least of which is seeing that their men are as well fed and as comfortable as possible at all times. During an operation particularly they should be always in the company of their men, and no such occurrences as the evening social gatherings mentioned in this narrative should ever occur. If an officer is a good leader he will not have time to look after himself so far as meals. etc, are concerned. He will be failing in his duty if he is not at those times seeing that his men are fed as well as may be.

#### Training.

Unless the necessity for basic drills is explained to private soldiers it is most unlikely that they will understand the need for them. The training period must ensure that the reason for learning to set up a wireless "by numbers" is understood by all concerned, and that they do not think it is simply another way of annoying them.

I think that the full value of patrolling was not well understood when the operation was begun. The need for all ranks in infantry units to be well trained in the value and techniques of patrolling is so obvious that there seems little point in emphasizing it. But it is not uncommon to find almost a complete lack of knowledge of the art amongst troops going into action for the first time.

#### 7. Morale in battle.

Morale is so closely tied up with leadership that it is rather difficult to separate the two. However, good morale does require at least one thing which can be separated from leadership, and this is self-discipline. Apart from thorough training in tactics, the use of weapons, etc, morale in battle also depends on a soldier's appreciation of his personal responsibility, his willingness to carry on even during a prolonged operation, and his personal pride in doing his best to complete a task

which he has undertaken. On all these things, and others I have not mentioned, will depend his attitude after the first few weeks of action. By then he will either be looking for somebody else to finish what he started, or he will be prepared without question to carry on.

#### 8. Relations with native peoples.

Relations with natives is an important factor in almost all operations in primitive areas. Just as it is the responsibility of the higher command to provide units with information as to terrain, etc., it is also their responsibility to provide information regarding the natives in their area, their beliefs, habits, food and so on. If it is planned to recruit these natives to assist in the operation, then knowledge of them becomes even more important. The primitive mind is not the mind of Western man, and so far as possible the taboos and the superstitions of natives should be respected. They will be of greater help if this can be done. Certainly, if they are to be employed, they must be provided for in the manner to which they are accustomed, and it should not be assumed that they will accept any habits, etc. of the West we may think it convenient to impose upon them.

## EARLY TOWING PROBLEMS

One day, in the mid-nineteenth century, at the Ordnance Depot of the Old East India Company's Army at Kirkee Arsenal was delivered a light manual fire engine. It was of an old type, long since obsolete, by which a team of men on each side heaved up and down a long wooden

bar which operated the pump.

The fire engine was in a sorry state; it looked as if it had been attacked by a squad armed with sledgehammers. Accompanying the fire engine was a voucher from the Garrison Headquarters of Ahmednagar returning it to Ordnance as "unserviceable, due to fair wear and tear." The Ordnance officer compared this with the general condition of the fire engine which seemed to him not in the least consistent with fair wear; he therefore wrote to the Garrison Quartermaster of Ahmednagar, whom he knew, and pointed out that even between friends this was stretching it a bit;

and pointed out that even between friends this was stretching it a bit; would he at least please explain how the fire engine got into its present condition. In due course he received a reply which read:

"My dear John, as you are already aware, the garrison here includes the 103rd Siege Battery, the guns of which are drawn by elephants. Recently one of the elephants of this unit refused to tow its gun and was obviously sick, from what cause was not apparent until one of the Company's veterinary officers was called in to examine it.

"The vet, after a brief discussion with the elephant's mahout, soon apparenced that the elephant was undoubtedly suffering from severe

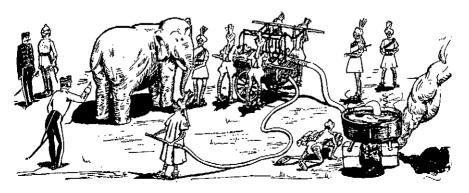
announced that the elephant was undoubtedly suffering from severe constipation; he proceeded to administer an enormous ball of medicine thickly coated with sticky brown sugar which the elephant swallowed with relish. Regrettably, however, little change in his condition resulted; stronger and bigger balls of medicine were tried without success and the state of the unfortunate animal became serious. The vet. by this time had decided that more drastic measures were called for and considered that the only remedy was to administer an enema; but how to do this and with what equipment was the problem; the East India Company's Veterinary Instructions certainly make no provision for it. This was an unusual problem calling for the unorthodox. The garrison manual fire engine was, of course, the answer!

"The vet. had this filled up with a hot and appropriate solution. After

a further medicine ball containing a soporific drug had been administered the nozzle of the fire engine hose pipe was carefully inserted into an increasingly apprehensive and suspicious elephant and the squad on the

fire engine were instructed to give a few strokes of the pump.

"The effect on the elephant was electrical, instantaneous and terrifying. With one bellow of rage and still maintaining his grip on the nozzle of the fire hose, he was off at full gallop down the main road, with twenty yards of hose pipe and the manual fire engine bouncing along behind. All I could get out of the vet. was, 'It must have been too hot for him!' and here I am with no fire engine, yours, David."



# RECONDO Patrol of Opportunity

Major Lewis L. Millett

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AT the 101st Airborne Division's Recondo School we are teaching a new concept in patrolling. It is tailored to fit the dispersion and fluidity of the atomic battlefield as well as nuclear free combat.

The two types of patrol in our current doctrine are the combat patrol and the reconnaissance patrol. A third type which we foresee being added to Army doctrine is the Recondo patrol of opportunity.

Major-General W. C. Westmoreland, 101st Airborne Division commander, named this new concept Recondo, and gave the idea wholehearted endorsement. The concept was also examined by Brigadier-General S. L. A. Marshall, who became enthusiastic. He recalled that patrols of this type were used during World War II; however, they were really reconnaissance patrols or combat patrols, which were not supposed to do any trouble shooting. General Marshall had recommended utilizing such patrols in clearing certain Pacific islands.

Recondo is dedicated to the domination of certain areas of the battlefield by small, aggressive, roving patrols of opportunity which have not been assigned a definite reconnaissance or combat mission. leader is free to travel over his assigned area in a "check route," causing as much damage to the enemy as possible. We give our troopers the usual patrol order except that the mission paragraph states: "Execute a Recondo patrol in the area bounded by (so and so), from X hours until X plus 6 hours." Using skill under trained patrol leaders, our Recondos go over their areas in a check route which the patrol leader has planned.

When the Recondo leader sights a target he quickly estimates the situation and decides on his course of action, which might range from a reconnaissance or a few rounds of well-placed harassing fire to a full-scale raid.

Why do we need this type of patrol? Among other things, Recondo has the advantage of a fast start and the ability to act as the situation demands, instead of as the mission dictates. The idea of a reconnaissance patrol returning from its mission with the information that an unprotected enemy CP is located behind Hill 609 is ridiculous. If the

CP is unprotected, why didn't the patrol destroy it? The target probably will have moved or the situation have changed before G3 can plan a combat patrol to hit it.

Sometimes combat patrols are sent out with a definite mission. On the way, a more valuable target may appear; however, the patrol cannot afford to attack, since that would jeopardize its mission. the war of the future, we need a more flexible concept, and Recondo gives us that. In the fluid or uncertain situation, the Recondo soldier is in his element. He can act on his own initiative and attack important targets of opportunity, where a more conventional type of patrol could not be planned until the situation became more clarified. Recondo is not meant to replace the combat and reconnaissance patrol, but rather to supplement them where fast action and flexibility are the keynote.

For example, as soon as a unit takes its objective, the troops reorganize. Everyone gets busy digging in, ammunition is distributed, security is established, and other chores done. During this time the enemy is disorganized by his expulsion from the objective. This is the time when a Recondo patrol sent out by the reserve could pursue and raise hell with the enemy, preventing his reorganization and hindering his counter-attack.

During defensive phases our actions are somewhat passive. Recondo is an offensive concept, and would fill the bill to patrol between our spread-out defensive positions on the modern battlefield, thereby dominating the area instead of passively defending it.

The versatile Recondo patrol can be used to screen the front of a withdrawing company. The enemy, harassed by the offensive-minded Recondos, would never guess that a company was withdrawing behind this patrol.

If a battle group is to make an approach march tomorrow, a Recondo patrol—with—a radio—can—be—sent—out today to develop the situation in the area of advance. With the Recondo patrol out there, the point of tomorrow's advance will not get the shellacking it would have. If the enemy has set up a rear slope defence on Hill 502, Recondo can act and let the group know.

A few small actions, especially at night, can cause a great deal of confusion in rear areas. During a recent division exercise. EAGLE POST, 20 of our school trainees jumped into a battle group's airhead on Recondo missions. Sixty per cent, of these troopers were captured before they could get free of their 'chutes. However, the remaining eight caused extensive havoc and confusion by cutting communications lines and sneaking in and destroying command posts and fire direction centres. The Aggressor unit never found out how many Recondos went uncaptured. sporadic actions here and caused the number to be greatly overestimated; consequently gressor had to commit his reserve unit.

Experienced non-commissioned officers who have planned and led Recondo patrols, which are now part of our training curriculum, agree that this concept fits the American soldier's mentality. The

greatest trait of our soldier is his initiative. We know that our soldier can act on his own, and we are basing our training methods on this, our greatest asset. We have found experienced non-commissioned officers very enthusiastic over the Recondo concept. It is something they would volunteer for in combat.

The leader of a Recondo patrol must be skilled in map reading and

trained in ranger (commando) type tactics. Ranger schools and others like our Recondo training are turning out this type of soldier.

The spirit of Recondo—the patrol of opportunity—is the same as that which motivated the Minute Man who harassed the enemy from Concord to Boston, and the Indian fighter who beat his opponent at his own game.

#### COMPETITION FOR AUTHORS

The Board of Review has awarded first place and the prize of £5 for the best original article published in the August issue to "Some Minor Classics of the First World War," by J. T. Laird, MA, Royal Military College, Duntroon.