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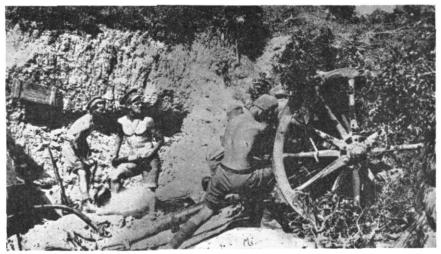


Photo: Australian War Memorial, Canberra.

GALLIPOLI

On 25 April 1917 troops of the First Australian Imperial Force participated in the landing on the Gallipoli Peninsula. The object of the operation was to force Turkey out of the war and open the Dardanelles to allied shipping in order to send supplies to Russia. After months of bitter and very close fighting the British and Australian forces failed to break the defence, and the operation was abandoned.

The picture shows an 18 pounder gun of 9 Battery, Australian Field Artillery, in action at Anzac. This battery usually fired on a Turkish position known as the "Olive Grove". When it did so another Turkish gun, strongly emplaced on a flank, fired on the 9th. The gun shown in the picture had the task of firing on the flanking Turkish gun whenever the battery engaged the "Olive Grove".

KOKODA TRAIL

TWENTY YEARS AFTER

Captain E. J. O'Donnell Royal Australian Infantry

THIS is the story of a walk across the Kokoda Trail. It is submitted to the Journal in the hope that some readers may be encouraged to undertake similar ventures. There are probably others who will be strengthened in their determination to do no such thing.

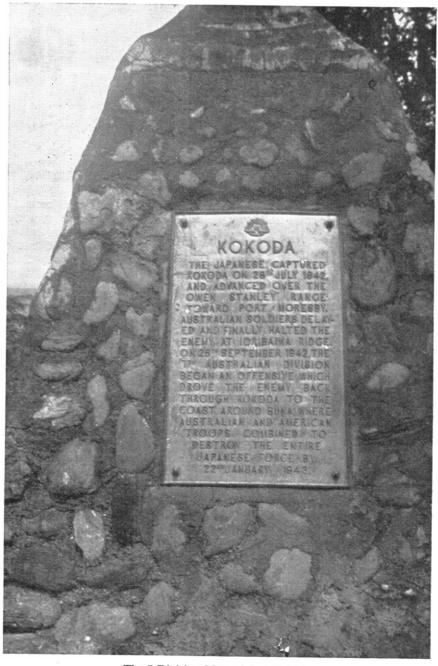
About nine months ago I wrote to an officer serving with the Pacific Islands Regiment to find out if the Trail still existed and, if so, could it be walked. His reply was only partly encouraging:—

- (a) The Trail still existed and could be walked.
- (b) At least a month's acclimatization would be necessary.
- (c) Christmas, being at the start of the wet season, would be the worst possible time to attempt it.

The general tone of his reply was that anyone who wanted to walk across the Trail needed his head examined. I wrote back that I was coming anyway, and started planning the trip.

The most difficult part of planning was getting a team together. This was not because of a lack of volunteers, but because Christmas is the annual reposting season. We finished up four in number — the others being Major Neil Macarthur-Onslow from HQ 1 Div, Captain Ian Teague, Adjutant of 1 RNSWR (Cdo) and Second Lieutenant Lindsay Bayliss from 3 RAR. Two others, helicopter pilots, were forced to withdraw at the last moment when their services were required in West New Guinea.

After the usual routine of obtaining entry permits and the appropriate needles, we flew to Port Moresby on December 15. From the time we arrived at Taurama Barracks we received every possible assistance from Pacific Islands Regiment, and I would like to thank the Commanding Officer for this. were able to examine a number of old patrol reports of the Trail, and together with track going maps these proved very useful. As guides and interpreters we obtained Pte Yayarda and Pte Tigari who both came from the Popondetta district. Pte Yayarda had been over the Trail before, so he was doubly welcome



The 7 Division Memorial at Kokoda.

On December 19 we flew by DC3 to Popondetta and then to Kokoda. The pilot very obligingly flew us over the Trail so that we were able to pick out all the creeks and villages we were to pass through later. It was a very clear morning and identification was easy. We then detoured to have a look at the Myola Lakes before resuming course to cross over the famous "Gap" in the Owen Stanleys, and then past Mt. Lamington, to Popondetta. Our pilot taxied the aircraft into a truck at Popondetta so we were delayed couple of hours while another DC3 was flown over from Port Moresby. While we were waiting we commiserated with the pilot. He said that was nothing - his last crash was much better.

Kokoda, when we eventually arrived, turned out to be unexpectedly pretty. I had always imagined it to be a place of mud and dripping jungle but this was quite wrong. It is flat and open with very green grass everywhere. Except for the people on the Yodda Estate, the Europeans live on the plateau just east of the airfield. Here there is a lawn where General Vasey held two famous paradees early in November 1942 to mark the Australian recapture of Kokoda. the edge of the lawn are now two memorials - one to the men of 7 Division, the other to the "Fuzzy Wuzzy Angels" - the native carriers. At dusk in this peaceful spot we witnessed the Retreat ceremony performed by the native police sergeant and his constables, one of whom was a very good bugler. The Last Post sounded, the police boys

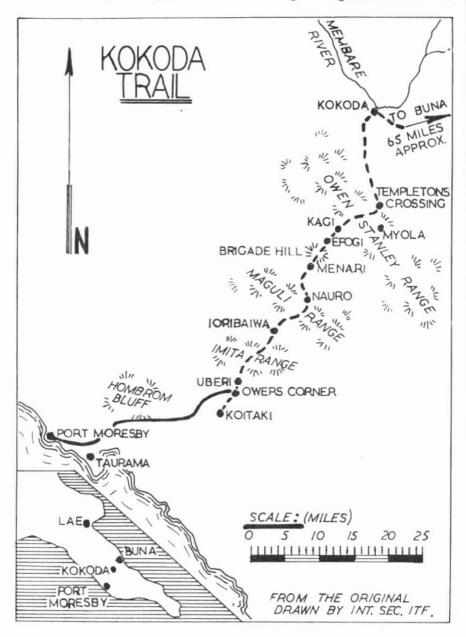
presented arms, the Australian ensign was lowered. The war of 1942 seemed a long way off. Yet it was only a few yards away that Lieutenant Colonel Owen, commanding the 39th Battalion, was mortally wounded.

Overlooking Kokoda to the south is the Owen Stanley Range and it was through here that our route lay. The Trail is 70-80 miles long and ends at Ower's Corner about 35 miles northeast of Port Moresby. It goes over the spine of Papua, crossing over the Owen Stanleys, then the Maguli Range and finally the Imita Range at altitudes varying from 1200 feet to 7500 feet.

When we left Kokoda the following morning we were accompanied for the first mile by most of the village. Pte Tigari had an uncle there who was a rubber tapper so the news of our expedition had got about. The first hour's walk was flat and easy through the rubber plantation, but it was not long before we started to climb. For the next five and half days we seemed always either to be climbing a hill or coming down the other side of one.

Trail The leads south to Isurava and Alola and crosses the fast flowing Iora Creek at the two Templeton's Crossings. Raymond Paull, in his "Retreat from Kokoda", calls the larger of the crossings a "place of perpetual mud and deluge" which was exactly as we found it. There is a long climb up to the Gap followed by a gentle downhill stretch through the beautiful moss forest. This ends above Kagi in a panoramic view that seems to include half of Papua. After a drop of a couple of major engagements of the rethousand feet it passes through treat was fought, and then on to the two Efogi villages, climbs the large village of Menari. At

Brigade Hill where one of the



Efogi there is now an air-strip — about 175 yards long with a 30 degrees dog-leg in the middle. There is only one approach which is up the valley from the north; a missed approach would put the aircraft into Brigade Hill.

Between Menari and Naoro there is very dense rain forest with six inches to a foot of sticky mud underfoot. There are also leeches and every sort of buzzing insect including the only mosquitoes we saw along the whole length of the Trail. It was with some relief, therefore, that we started to climb. After a couple of hours of steady walking we were still going up and the swamp was beginning to seem all right again. It was here that we had the interesting experience of walking through cloud so that by the time we

reached the top of the range we were actually above the cloud level.

The Trail then follows a long ridge line to Iroibaiwa which was the southern limit of the Japanese advance. From there it drops into the valley below and follows the course of the Ua-ule Creek for a few miles before climbing again to the top of the Imita Range from where it is possible to see very clearly back to Ioribaiwa. It was to Imita Ridge that 14 Field Regiment aided by 2/1 Pioneer Battalion dragged two 25 pounder guns and shelled the Japanese in the village.

The last stretch is down the famous "Golden Stairs", created by Australian engineers and now almost obliterated, into Uberi, across the Goldie River and up the hill to Ower's Corner. We



19 December 1962. The Administration Building at Kokoda.



22 December 1962. Looking from the trail to Myola Lake through the gap in the trees about 1½ miles away.

emerged rather thankfully at noon on Christmas Day and walked the next few miles down to the nearest telephone where we rang for a vehicle.

Before returning to Port Moresby we called on Mr. P. J. McDonald of the Ilolo Estate. Every Australian unit came past McDonald's Corner on its way to the Kokoda Trail. We were most hospitably received despite our grubby appearances, and were permitted to look through Mr. McDonald's fascinating scrapbook of the Trail. We arrived back at Taurama Barracks in time for the Christmas dinner in the Mess.

Along the Trail there are numerous reminders of the campaign. The telephone lines have long since rotted but insulators are still on the trees. We found

a number of 2-inch and 3-inch mortar blinds, and small arms brass lies everywhere. One advantage the soldiers of 20 years ago had over us was that they did not have to fill in their weapon pits and so they can be seen to this day very little changed. Our big find of relics was on Brigade Hill very close to the summit and the site of Brigadier Potts' headquarters during the battle. A native led us into the jungle to a spot where we found in only a few minutes ten Japanese helmets and one Australian, a leather instrument case, a few pairs of boots both Japanese and Australian, and some bones. Nearby we found also a .303 EY rifle with all the woodwork rotted away except at the yoking. We took a Japanese helmet each

and left the rest beside the track for some later passer-by.

We may have been a bit lucky with the weather. Although we had some rain every day it did not affect the track unduly or cause the creeks to rise to too high a level as might have been expected at this time of the year. We wore patrol boots rather than tropical studded boots for most of the time. If the track had been more slippery we would have had to wear the studded boots, which being much heavier, would have greater fatigue especially on the uphill grades.

For rations we used the Pacific Islands Regiment pack which is lighter than the European 24 hour pack. It consists mostly of rice - in fact we found that the 12 ounce packet of rice lasted us three days so that we were able throw away most of the rations we started with, especially as it soon became apparent that we would finish in a lot less than the nine days we had planned. From the villages we were able to obtain limitless quantities of fruit and vegetables; in fact we were generally given so much that we had to hand most of it back when we left the village.

"Was the trip worth it?" has been a common question since we returned to Australia. For me it satisfied an ambition to see this famous battlefield. We all came back with more than a little respect for the fighting qualities of both the Australian and Japanese forces engaged on the Kokoda Trail, and we sometimes wondered how the Australians would have fared if they had been as short of food as the Japanese were throughout the campaign.

The walk is hard going but any fit soldier should be able to do it without killing himself. I recommend it as a thoroughly enjoyable and memorable experience and, for those who like bush-walking, a chance to see some of the grandest country in the world.

WILD RICE AND GREEN STRANGERS

Lieutenant Colonel A. E. G. Strong Royal Australian Armoured Corps

"Success sparkles like a fierce new star Magnificent and brilliant, with light That explodes the blackness of men's ignorance: Minds orbit success without reason".

COMMUNIST Revolutionary Warfare is essentially a method of conquest operating, initially from positions of inferiority, against forces enjoying all the advantages of material. owning all sources of local production and industry, controlling all the major agencies of internal communications. favourably situated to achieve unlimited, and relatively easy, access to world industrial and armament resources. Communist Revolutionary Warfare succeeds against this apparently overwhelming structure of a national defence capacity in much the same way as weeds reduce productive paddyfields to useless, chaotic tangles.

Time is the base ingredient of success in revolutionary warfare. Time to gain a foothold in the paddyfield. Time to spread and scatter insidious seeds of dissension wherever turbulent winds of dissatisfaction stir human emotions, and time for the new seeds to take root and choke out slowly all the surviving rice plants.

Subject

The continuation of Communist Revolutionary Warfare in South East Asia is a threat to Australia's security, and it is possible that the AMF could become involved in counter-insurgency operations in South Vietnam.

Give your views on how an Australian force of one battle group should be organised, trained and equipped, if it were decided to employ such a force in counter-insurgency operations in South Vietnam. To find a parallel in history for the success of forces operating from such inferior situations as the exponents of today's revolutionary warfare, the curtains of time may need to be pulled back to the days of the onslaught of the Christian philosophy upon the materialism and absolute power of pagan Rome.

Political — Economic Background

Revolutionary warfare is an offensive type of warfare waged by forces that have initially little or no political, social or administrative responsibility in the territory of operations. It achieves, therefore, a freedom of action and thought denied to its ostensibly stronger indigenous opponents, who have probably inresponsibility herited a govern on a pattern established previously by some European power. With no responsibility to govern, it is so very much easier to undermine authority in thousand and one insidious ways than it is to behave constructively. The weaker the central control the more flamboyant can be the disregard for authority. Such a political environment is relished by Communist leaders.

Although the basic Communist doctrine from which the protagonists of revolutionary warfare draw their inspiration is quite rigid in its ideology regardless of whether is towards Moscow aligned OΓ Peking — the tactics employed to achieve the ultimate goal will probably be most unorthodox and extremely varied in character. The end will always justify the means in the conduct of revolutionary warfare. and so long as the end is the overthrow, by force if necessary, of all other forms of national or local authority and the establishment of Communist authority, surely the moral principles of the means of doing so are of little consequence?

Political preparation for revolutionary warfare is often initiated by a campaign of public contempt for responsible authority. Such campaigns take full licence, during the period of lodgement of the Communist cells, of the freedom and protection afforded by the established authority, in order to further their own growth and development.

It is also important to realise that the philosophy of revolutionary warfare is not altogether unmindful of the conditions of the local people. Wherever basal resources of human wretchedness and physical levels of bare existence prevail, the environment is proper to start civil agitation. Under such conditions anything offered, be it change or actual replacement of prevailing conditions, must material better than the current state of existence for the average local inhabitant. In these circumstances, a Communist agitator acts as a nucleus in a community saturated with human discontent and physical misery, and precipitates local support favourable to his cause.

When the political-economic climate in a region has been conditioned to a stage of at least apathetic indifference, the environment is then right for the emergence of the military wing

of the Revolutionary Movement. In most cases, and before the commencement of military political-economic action. the climate is generally one of active support for the Communists. indifference is the Apathetic very least state that must prebefore military action assumes any degree of importance.

Revolutionary Warfare is thus the military wing of a material and technical philosophy root based in humanity ignored, humanity oppressed, humanity disillusioned by the struggle to live in the deep shadows cast by privileged authority. and the systems and social archaic structures designed for some long gone age.

Despite the best will in the world, and allowing for a large dose of gullible ignorance, the broad influence and impact of Asian Communist philosophy in the lands of South East Asia must be realised and accepted by Western Nations, as an essential pre-requisite to the study of the specific measures that may have to be designed to counter and defeat the doctrines of revolutionary warfare.

It must be realised also that military measures adopted to counter revolutionary warfare do not embrace, by any means, all the counter-measures required to restore an affected nation to stability — stability representing in this context the unhindered passage of commerce and population between farm and village, town and city, supervised by effective and respected political control at all levels

from the peasant to the highest echelons of central government. The military effort in counter-revolutionary warfare, in true perspective, therefore, would only ever approximate perhaps thirty per cent of the total measures required to restore stability to a territory stricken by the worst of insurgency conditions. The majority of the measures to restore stability must be of a political and economic nature.

This, at times, may not appear the proper apportioning of effort between military and politicaleconomic resources. On the surface, to win militarily in the territory under dispute may appear paramount to any further progress in rehabilitation of the territory, both politically economically. This is true to some degree, but the military effort only appears all-embracing by virtue of the fact that all vestiges of previous political control and commercial intercourse have eroded away under the indifference, neglect, or sheer incompetence of the old regime, and have been probably taken over by the political-economic system of the exponents of revolutionary warfare. Furthermore. this replacement usually have been effected at the source of the particular territory's economic strength which. in South East Asia, is the village.

It becomes basic to success, in counter-measures designed to win areas back by military means from the control of revolutionaries, to ensure that an impartial political authority and useful economic measures, freefrom corruption and fair to vil-

lagers, accompanies military success in any region. Unless this happens, military measures will achieve only temporary relief, and the basic political-economic environment favouring revolutionary warfare will remain to foster the military wing of a persistently reviving revolutionary movement.

So as not to unduly handicap consideration of the basic military problems and military organisations required to operate effectively in a region under assault by Communist revolutionary warfare techniques, it is assumed for the further purposes of this paper that a poliand economic authority acceptable to the villagers in the zone of military operations will move parallel to the military effort, and establish an impartial and progressive civic control as the military operations proceed.

The desirability of sound civil control having been accepted as a very necessary principle to the conduct of military operations. examination detailed of the operational environment which a force must operate is a pre-requisite to determining the structure, equipment, administration, and methods of operation of any military organisation designed to counter the military methods employed in revolutionary warfare.

Battlefield Environment — General Characteristics

The military operational environment in which the forces of the revolutionary movement are operating will be high-lighted by the following characteristics:—

- The region of operations will be politically and economically aligned in favour of the revolutionary activities. This will have been achieved at the village level by a process of judicious political murdering of unsympathetic village headmen, economic penetration of the commercial structure of the village and the commerce between neighbouring villages, and by public contempt and disobedience for existing central authority.
- An effective and widespread regional intelligence network based on sympathisers and informers drawn from the indigenous people.
- A simple, but sound, regional administrative complex. longestablished and stocked food, ammunition and weapons. Concealed with painstaking thoroughness during the preceding period of political-economic penetration of this region, this administrative complex is a basic strength of the guerilla elements and the regional forces in the conduct of operations before the arrival of regular forces in the territory. The stocking of caches in a region is usually made a responsibility of local sympathisers, or is achieved by trickling in stores along secret trails over a long period of time. As the tempo of military operations increases, resupply of depleted caches is usually effected by porter train or air drop from a Communist neighbour whose territory, in effect, is an "active sanctuary" in full support politically, economically, and militarily of the revolutionary operations in the neighbouring State.

- A track-trail-road complex suitable to the movement of porters, handcarts and animal transport, and developed secretly through difficult, inhospitable regions such as jungles, swamps and mountains, for the sole movement of troops and military supplies. These concealed and secret routes are not avenues of commerce and, as such, do not attract the attention of controlling authorities. This route complex may at times include portions of the usual commercial routes between villages and towns, movement on such portions being done under darkness cover of orweather. This secret route system will be, in all cases, related to the cache complex, and the preparation of fortified villages.
- The main trunk roads of the territory and the secondary roads, the waterways, and railways if they exist, and all the usual routes of commerce will be impassable, or else will require disproportionately large forces to maintain and secure them if they are to be kept open for the use of friendly forces and the local population.
- The revolutionary combat forces, which include guerilla, regional and, at later stages, regular combat troops, will usually speak fluently the language of the territory under assault, are ethnically of the same race, and blend readily with the indigenous population. This confers an advantage not available to European troops.
- A hot, humid climate with a high incidence of tropical diseases. The revolutionary soldier

being of the region will possess a high tolerance to endemic diseases and will be used to the hot, humid, enervating climate.

In the operational environment enjoyed by insurgents the advantages inherent to such forces, in order of priority, may be listed as follows:—

- Physical characteristics and language affinity to the people in the region under assault.
- An intelligence and communications network based on sympathisers and informers amongst the local population.
- A pre-positioned supply complex providing basic military necessities such as food, small arms ammunition and weapons, also some basic medical supplies, explosives and local pattern war equipment such as spike-boards, prepared bamboo impaling sticks and crude, but effective, mines and grenades.
- The support of an "active sanctuary" to provide training assistance and administrative support in heavier types of automatic weapons and ammunition and, when necessary, security for any hard-pressed regular volunteer elements who might be faring badly in the military field.

Although all the advantages may appear to be with the insurgency forces relative to environment, one obvious weakness in the military sense, and under the conditions described, is the need for the insurgents to function, live, and move in the region in small groups, until such time as a suitable target has been manoeuvred into a defensive situation. Concentration of

superior force may then be effected. This may be a somewhat slow process when relying primarily on foot messengers to contact widespread groups in order to achieve a desired concentration of force. Such concentration will only be effected when the target selected for destruction has, for some reason or another, become immobile and has decided to remain so.

Any force organised by Western nation, including Australia, to undertake counter-insurgency operations in South East Asia can do nothing to make its forces ethnically akin to the people in the area of operations. All the European soldier can do is to achieve the respect of the local people by his proper military and moral conduct, and by scrupulous incorruptibility in all his dealings with village officials whether it concerns provisions of transport, payment for servces, accommodation, or purchase of supplies. Rendering of medical or administrative assistance as necessary must be done impartially. The European cannot be an Asian but mutual respect and understanding can develop between the two.

Likewise, the facilities afforded by a neighbouring "active sanctuary" cannot be eliminated militarily. The problem of the "active sanctuary" is political, and only enters military considerations \mathbf{at} the strategicpolitical level. The first point of assault on assistance from the "active sanctuary" is on the supply routes leading from the sanctuary into the region of insurgent activity.

Any military organisation designed to counter insurgency forces should have the capacity to deliver telling, destructive blows at the most vulnerable segments of the insurgents' military structure. The pattern of military operations, therefore, should be directed towards the following goals:—

- Physical destruction of insurgent troops, and prepared fortified villages.
- Locating and destroying all types of insurgent caches.
- Harassing of insurgent movement by day and night, and under all conditions of weather, by means of ambushes along the supply trails whether in the jungles, in the swamps, or in the mountains.
- Disrupting the spy-intelligence network by using efficient communications equipment and preserving a high degree of flexibility and mobility in cross-country movement.

One of the greatest difficulties counter - insurgency forces is the provision of a secure support area. The insurgents have this in the "active sanctuary" and secret caches. Friendly forces operating South East Asia must either establish such a base on land, or have it afloat offshore, together with the necessary transportation capacity to effect resupply and reinforcement of the troops deployed in the field,

Field Characteristics of Counter-Insurgency Forces

With a knowledge of the operational environment in which a force will fight, and

having assessed the character, strengths and weaknesses of the insurgency forces against whom the force will fight, the basic characteristics needed by counter-insurgency forces emerge. The force must possess the following characteristics and capacity:—

- Physical toughness under enervating climatic conditions.
 This demands acclimatisation under tropical conditions before entering the region of operations.
- Cross-country mobility in all types of terrain. This precludes use of motor transport on an extensive scale, and demands maintenance support based on supply aircraft, both rotary and fixed wing.
- Efficient, reliable, lightweight communications equipment in sufficient quantities to provide communications down to patrol sized forces of section strength, and capable of communicating with airborne sets. Suitable communications equipment will also permit control and co-ordination of the movement of widely dispersed groups, or concentration of groups, whenever required to destroy an insurgent strongpoint.
- A minimum endurance capacity in respect of food, small arms ammunition, grenades and explosives, and medical requirements of at least four days at patrol rates of usage.
- Assault supporting weapons must also be integral to the organisation. This implies the necessity for lightweight medium support weapons capable of

being air-lifted by rotary wing aircraft, together with a reasonable first line of ammunition. This is required to provide the weight of support desirable when assault is planned against fortified villages, or other prepared field deefnces.

- Skill in skirmishing tactics and in the conduct of hard-hitting small scale raids. This requires a high proportion of automatic weapons in the organisation, also adeptness in setting ambushes, tracking, movement by night through difficult terrain, and simple, efficient combat drills.
- The ability to interrogate and speak with village leaders and peasants in the area of operations must be provided. This means that interpreters are required right throughout the organisation.

Field Operations by Counter-Insurgency Forces

It is not envisaged that the counter-insurgency forces will attempt to clear the insurgents from a region by organising sweeps and drives in an endeavour to establish a demarcation line, or front, forward of which is still insurgent territory. and behind which insurgency has been eliminated. Such a type of operation will not succeed, and by its rigidness will invite its own eventual destruction. This type of operation is based on the seizing and control of ground.

Insurgency forces will be hardest hit if the concept of counter-operations embodies:—

- Denying the insurgent forces secure movement in the whole region. The danger of contact and ambush must constantly plague all insurgent movement by day and night and in all weathers.
- Harassing of supply routes and destruction of caches.
- Inflicting of casualties on ininsurgent personnel by frequent raids and ambushes.
- Destruction and disruption of the insurgent intelligence and spy network by patrolling and ambushing.

A climate of uncertainty, insecurity, danger, and doubt must be created by the counter-insurgency forces to destroy, or render impotent, the political-economic structure previously established, usually so painstakingly, throughout the region by the political wing of the revolutionary warfare movement.

The clearing and holding of ground by counter-insurgency forces is of little importance, apart from tactical security in day-to-day movement the throughout the region. ability to move, to fight, to break contact, to raid, ambush, dessupply caches, and demonstrate this capacity to the indigenous peoples, and all the time maintaining high ethical standards towards these people, is the keystone of success in counter-insurgency operations. From the lessons of Indo-China it is almost axiomatic that to hold ground is to dig graves. To live - stay on the move. Movement denies the insurgent a target against which to concentrate, and achieves harassment of all insurgent movement and activity throughout the region.

Operations demanding intensive movement require first-class radio communications equipment. This equipment must be in plentiful supply to permit the necessary dispersion for the harassing of insurgent activity throughout the whole of a wide zone.

Ιf the counter-insurgency force is to operate on a basis of strike - move - strike by relasmall fighting tively groups, concentrating only effect the destruction of a target requiring heavier assault capacity than that inherent in a basic patrol organisation, it is obvious that the heavier support weapons and ammunition integral to the organisation cannot be moving with the skirmishing element. However, this support must be readily available for movement to any locality required, whenever required.

Likewise, the administrative capacity of the organisation must be geared to the rapid resupply and delivery of maintenance supplies to widely scattered patrol groups. Air supply, using fixed wing aircraft, will probably meet the supply need. Rotary wing aircraft will be needed also to the recover heavier support weapons back to the support base after the action for which they were deployed has been completed.

It is to be appreciated also that the destruction of a fortified insurgent target — fortified village — need not assume urgent priority even after discovery. The target is unlikely

to move. If forces already deployed in the region are to be used in the assault, they can be concentrated over a period of Contact with the village is maintained by the patrol, or patrols, that first located it. Insurgent communications with this village are harassed continuously by these patrols, when the assault force concentration has been effected, and the heavier supporting weapons delivered, the attack can be carried out

If, by some chance, the insurgent strength in the target is greater than anticipated, or a build-up of rapid forces achieved by the enemy, anti-insurgent original force deployed for the attack then assumes a role of containment, and the assault operation passes to other forces that will obviously have to be brought in. Should other forces not be available immediately, no attack can be made at this stage. The antiinsurgent forces draw away from the target to avoid envelopment and attempt to induce the insurgents to deplete their concentration in the target area by following up the withdrawal. By ambush and attrition over the next period of some weeks, and by maintaining periodical contact by patrol with the village, the village target can be again tackled later when the balance of forces is more favourable. In the meantime attention can be given to other targets in the region of operations.

To illustrate diagrammatically at this stage both the concept of anti-insurgent operations and organisation of an anti-insurgent force, with its support, attention is invited to Figures 1 and 2.

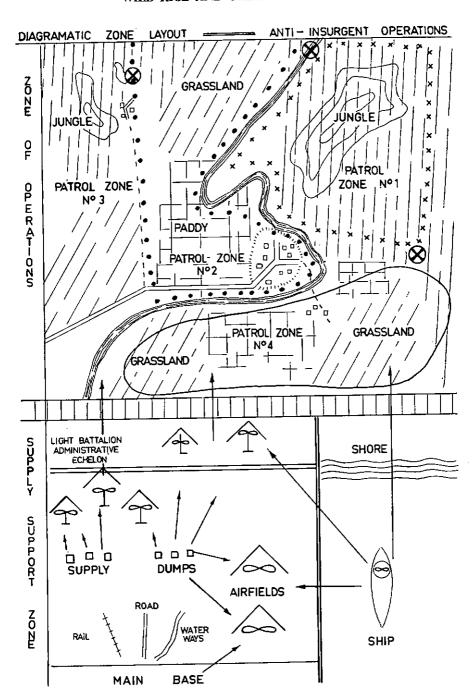
Battle Group Organisation — Existing Establishments

An Australian battle group, organised on existing establishments and assembled for anti-insurgent operations in South East Asia, would most likely comprise an Infantry Battalion, a Field Regiment, a Field Squadron, and detachments of Signals, Medical Services, Supply and Transport Services, Ordnance,

NOTES ON FIGURE I

- 1. Patrols move independently about Zone of Responsibility.
- Each patrol Zone of Responsibility may be an area ten miles by ten miles. Area will be determined by topographical characteristics of the particular patrol Zone.
- Any number of patrols may link up to deal with large targets after they have been located.
- Relief of patrols may be effected by helicopter, or by patrols returning to the Support Zone and being replaced by relief patrols moving out across country.
- Additional troops and support may be flown into the Zone of Operations as the need is indicated from the discoveries of patrols already deployed.
- 6. Information from patrols, and contact between patrols, may be achieved by a communications light aircraft, or helicopter, traversing the Zone of Operations on a regular schedule.

 This aircraft would act as a wireless relay station between patrols when in difficult terrain, or permit personal contact by the commander with his patrols even when not possible to land.
- 7. Resupply to patrols may be achieved by delivering a standard resupply pack to patrol localities from light aircraft. Security of the patrol need not be endangered if other dummy drops are made in the patrol area, or apparent deliveries are made to other localities if helicopters are being used. Unlimited opportunities for deception are presented if the technique of "dummy dropping" is exploited wisely.



Basic Echelons of a Force Organised For Anti-Insurgent Operations Light Combat Echelon

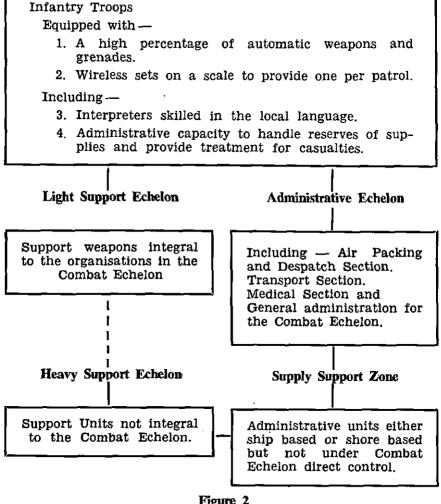


Figure 2

Mechanical and Electrical Engineers, and Light Aircraft Squadron support. Miscellaneous minor detachments such Postal, Pay and Dental Services might also be included.

This listing is by no means intended to represent an Order of Battle, but does serve to illustrate what could be the general structure of a battle group for anti-insurgent operations. It will be noted that no armoured units have been included, nor anti-tank units, as it is envisaged no tank threat will exist at the insurgency stage of revolutionary warfare. It is also accepted that insurgency control of the countryside will inhibit the effective use of all types of vehicles, both wheeled and tracked.

On the current establishments of units likely to comprise the above battle group, the transport of those units would be quite useless in the insurgent territory. However, there would be a requirement for some of the transport in the Supply Support Zone to move supplies and weapons to airstrips and landing grounds.

It will be noted also that the infantry battalion is the basic unit of the battle group, all other units in the battle group being included to support and sustain the infantry battalion in its operations.

It is not proposed to show in detail the organisation of the current infantry battalion or to dwell on what might be the weaknesses in this organisation relative to meeting the conditions likely to be encountered in counter-insurgency operations. Instead, it is intended to propose an infantry organisation capable of living and fighting in the operational environment of an insurgency situation, characteristics of this environment have been stated previously.

The supporting weapons for the proposed battalion, and other units deployed for its support, will be scaled also for the combat task with insurgency forces, and not for operations under the accepted conditions of "normal warfare", if ever such warfare is likely to be waged in South East Asia. For convenience, and to avoid confusion with the existing battalion organisation, the proposed battalion will be referred to as a "Light Infantry Battalion".

The Light Infantry Battalion

The Light Infantry Battalion will comprise essentially four groups. Elements of these groups will be reflected at all levels of the battalion structure. The basic groups are:—

- Command and Intelligence Group.
- Assault/Combat Group.
- Light Support Group.
- Administrative Group.

In operations, the Command and Intelligence Group and the Assault Group will be deployed in the Zone of Operations — Figure 1 — and the Light Support Group and Administrative Group will be located usually in a Battalion Echelon Area. It is envisaged that the Light Support Group, when its weapons are needed, will be moved into the Zone of Operations by helicopter.

Basic Sub-unit of the Light Battalion

The basic sub-unit of the Light Battalion will be the Light Independent Company. The term independent is used as it is envisaged that the companies of the battalion will be required to function widely dispersed in the

anti-insurgent role. The Independent Company will thus assume more responsibility for its operational methods and techniques, and its own administration, than it would if functioning within the tighter framework of conventional battalion operations.

The basic sub-unit of the Light Independent Company will be the platoon. The principal tasks that the platoon will be required to perform in anti-insurgent operations are:—

- Patrol extensively by day or night and in all weathers.
- Ambush.
- Destroy insurgent caches.
- Locate and report insurgent lages.
- Shadow insurgent movement, destroying when opportune insurgent men and material.
- Group, when required, with other platoons to assault larger targets — fortified villages.
- Secure areas, when required, to permit landings by helicopters, bringing re-supply or reinforcements.
- Enter the Zone of Operations by parachute or any conventional method of movement.

The proposed platoon organisation shown in Figure 3 will permit the formation of two strong fighting patrols of approximately 20 men, with two radio sets with each patrol. Further explanation of proposals on the platoon organisation illustrated, is given below:—

Grenadier

Although no grenade discharging equipment is currently in use, it is envisaged that the grenade will be used by the platoon and its patrols as a support weapon in all its operations, provided the platoon has the means of projecting the grenade beyond normal throwing ranges. Ranges of between 50 and 200 yards are required.

In this concept of operations the grenade fulfils a mortar type support role for the platoon, providing neutralisation of target areas as the assault clashes with the target. In addition, the grenade will be used in its usual functions in close fighting as a hand thrown projectile.

Radio Mechanic

The need for efficient and sufficient reliable communications equipment is self-evident in patrol type operations. The capacity to effect minor repairs to radio sets, together with the carrying of some minor replacement components for sets, is the purpose of including a radio mechanic, or someone with radio repair training in the administrative section of the platoon.

Medical Orderly

A medical orderly is required for the proper first-aid care of casualties until aero-medical evacuation is effected. Under adverse weather conditions casualties may have to be held with the platoon and treated for several days, and the additional medical capacity is necessary at the platoon level.

Platoon Organisation

P1 HQ

Pl Com — Lt — OMC 9 mm
Pl Sgt — Sgt — Rifle
Batman/
Orderly — Pte — Rifle
Wrls Op — Pte — OMC 9 mm

Adm Section

Sec Comd — Sgt — Rifle
Sec 2IC — L/Cpl — Rifle
F/Porter — Pte — Rifle
F/Porter — Pte — OMC 9mm
F/Porter — Pte — OMC 9mm

Radio/ Mechanic — L/Cpl — Rifle Medical Orderly — L/Cpl — Red X

Attached Interpreters — 3 Assault/Patrol Secs (each)

Sec Comd — Cpl — OMC 9 mm Sec 2 Ic — L/Cpl — Rifle

GPMG Nos — Pte — GPMG 60 Pte — Rifle

F/Porter — Pte — OMC 9mm Grenadier — Pte — Rifle plus F/Porter — Pte — OMC 9mm grenade discharger.

Sec Nos - Pte - OMC 9 mm

Pte — Rifle Pte — Rifle

Pte — Rifle Pte — Rifle

Grenades — All Riflemen each Four Grenades.

Communications

One ANPRC 10 type set per Section — Total six per Platoon.

1 Officer; 2 Sergeants; 4 Corporals; 7 Lance Corporals; 38 Privates — 52; Attached — 3; Total all ranks — 55.

Figure 3

The Administrative Section

The inclusion of this section in the platoon organisation is the greatest departure from the existing platoon organisation. However, during anti-insurgent operations, and to increase the

field endurance of platoons engaged in patrol type operations over extended periods, it will require greater administrative capacity to be located with the platoons than may otherwise be necessary for other types of operations.

The purpose of the additional administrative capacity in the platoon is to provide:—

- Reserves within the platoon organisation of rations, small arms ammunition, grenades, and some technical spare parts, and to sustain the platoon in intensive patrol operations.
- Greater capacity for the care
 of battle casualties; also first
 aid and the treatment of
 minor illnesses and diseases
 such as cuts, fungus diseases, splinters and minor
 digestive upsets.
- Proper preparation of casualties for aerial evacuation.
- Parties for dropping landing zone duties, such as DZ marking and collecting supplies, ammunition, the and equipment delivered by the aerial maintenance delivery system. It is envisaged that each of the fighting porters will carry a minimum of one additional first-line of small arms ammunition and grenades for each section. The load could probably be efficiently handled by using Everest type carrying an frame.

The fighting porter could be changed as required with any rifleman of the sections. The load carried by the fighting porter is essentially platoon reserve against the non-delivery of aerial resupply packs on a routine supply schedule from base. Fighting porters in the organisation do not preclude other members of sections carrying additional rations and ammunition.

The additional administrative capacity in the platoon, backed permits aerial resupply, greater flexibility in operations, and does away with the need for surface supply lines, with their disadvantages inherent guerilla territory. Further, the insurgent forces, tied for maintenance to caches and fortified villages, do not possess the same degree of operational flexibility as troops not tied to ground installations.

Interpreters

The purpose of the interpreters in the organisation is to permit proper contact with indigenous peoples, and also for the purpose of questioning prisoners.

It is envisaged that interpreters will be provided by the Civil Government being supported, probably being members of that Government's own armed forces.

Provision of sufficient interpreters is vital to this concept of operations. If not available, the ablity to gather up-to-date intelligence by patrols, to assist even their own operations and so increase their effectiveness, is drastically reduced.

The provision of three interpreters per platoon would permit one each with two patrols, and one at platoon headquarters.

The Light Independent Company — Organisation

The Light Independent Company would comprise essentially four rifle platoons. Additional sub-units in the Company organisation would be designed to provide:—

- A higher headquarters for command and co-ordination of the activities of platoons and patrols, and dissemination of intelligence.
- A heavier echelon of support capable of being airlifted into the Zone of Operations to support platoons and patrols.
- An additional administrative reserve at the company level, with the capacity to pack and despatch resupply panniers for company sub-units, and to receive air supply delivered to the company.
- A reserve of medical capacity in the way of medical orderlies and additional medical supplies. This would permit relief of orderlies in the platoons, and provide medi-

cal care for patients evacuated from platoons to the company area.

The Company Support Weapon

Each platoon engaged in antiinsurgent operations should be able to call on the support of a heavier weapon when needed.

Such a weapon needs to have sufficient range to support at least two patrols commanded by the platoon headquarters. locate such a weapon in the platoon organisation, with its heavy ammunition usage in a neutralisng fire support role, would encumber the the platoon drastically unnecessarly, and reduce mobility and flexibility of the platoon in operations. However, if a suitable support

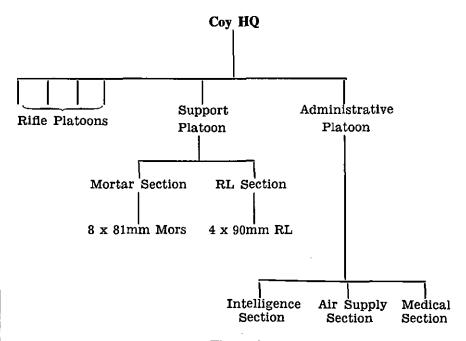


Figure 4

weapon, or weapons, could be aircraft within delivered bv reasonable time of the demand. and with all ammunition, the advantages of heavier fire support would be given to platoon, or patrol, operations without the disadvantages. encumbering When the task for which the heavier support was demanded the support completed. weapon would be air-lifted out again and back to the company area for redeployment when reawired.

The obvious weapon to choose as the company support weapon in the neutralising fire support role is a mortar. The 81 mm mortar already in service would be suitable. Provided on the scale of two mortars per rifle platoon the company complement would be eight mortars.

The need will arise frequently in anti-insurgent operations to effect destruction of insurgent installations, or to breach defensive obstacles. Therefore, a light weapon is required which will achieve this destruction. A light recoilless weapon with suitable ammunition of "squash-head" type would meet this need. A suggested scaling of four 90 mm RL weapons per Light Independent Company would be adequate.

With Support elements added, the suggested outline organisation of a Light Independent Company is given in Figure 4.

The Light Infantry Battalion — Organisation

No fixed number of Light Independent Companies will be included in the organisation of the Light Infantry Battalion. However, four to six Light Independent Companies are envisaged in the organisation, together with additional supporting and administrative elements in order to sustain the companies in prolonged patrolling operations, and to provide a heavier echelon of support for attack operations.

To support and maintain the Light Independent Companies in operations, and to provide means of command and control when two or more companies concentrated for specific operations — attack operations it is proposed that the Light Battalion Headquarters should be able to provide a command group, without disrupting the capacity of the remainder of the headquarters to function, or to be deprived of the control of the battalion commander who must always remain available to coordinate and direct the efforts of supporting arms and services

Apart from the Light Independent Companies, the remaining segments of the Light Battalion organisation are illustrated in Figure 5. Comment on each segment is given also.

Battalion Headquarters

The Battalion Headquarters is designed to enable an independent command group to be despatched to co-ordinate and control the simultaneous action of two or more Light Independent Companies. This may be required when assault on a fortified village, or some other important insurgent position, is intended, and which will require the resources of more than one

Light Battalion — Outline Organisation (Less Light Infantry Companies)

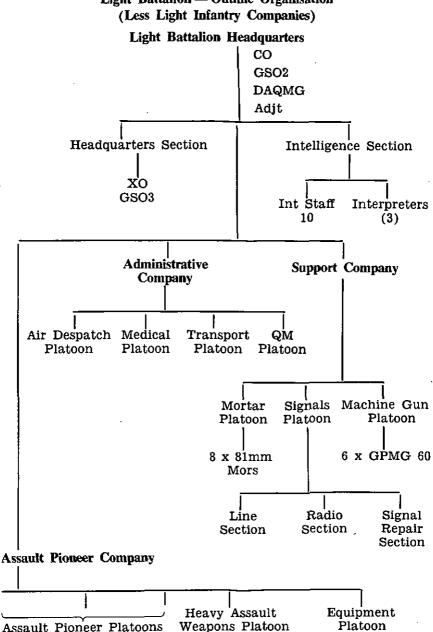


Figure 5

4 x 106mm RCL

Light Independent Company for the task.

The Intelligence Section provides the means of collating and disseminating intelligence information, aided by the interpreters, who also give additional assistance in the interrogation of local headmen, refugees, or any prisoners sent in by the companies.

The Administrative Company

The Administrative Company form the administrative echelon of the Light Infantry Battalion. As considerable administrative capacity is bodied already in the organisation of the Rifle Platoon and the Lght Independent Company, the effort of the Battalion Adminisrative Company will be directed essentially towards receipt of supplies from the Supply Support Zone dumps, repacking into patrol / platoon / company lots, and providing air despatch personnel, when delivery is being made to the forward troops by helicopter or light aircraft from the Administrative Echelon area.

It is envisaged that the Deputy Assistant Quartermaster-General will control the Administrative Echelon area, using the transport platoon, equipped with quarter ton vehicles, to collect and clear dropping zones in the area, and to deliver to landing grounds the supply packs for despatch to forward troops.

The Medical Platoon will provide RAP facilities in the area for the receipt of casualties. It will provide also a light medical team, including a medical officer, capable of despatch by aircraft to any area of intense fighting,

to supplement the medical orderlies and facilities already with companies. When the intensity of operations has eased, the light medical team would be returned to the Echelon area.

The Support Company The Mortar Platoon

This is designed to provide. additional mortar support companies as demanded. vered by air, with ammunition, to the point of battle, this additional weight of fire support for operations would company amount to a very rapid build-up of fire power in the battle zone. The battalion mortars would be withdrawn from operations as soon as the particular task for which they were deployed had been completed. Air delivery of the weapons by helicopter is essential to this concept of antiinsurgent operations, and provides a new dimension and concept of flexibility in the applicaton of mortar fire power to the which is unavailable battle. when mortars are tied to movedeployment ment and over ground routes.

The Signal Platoon

The Signal Platoon comprises three sections:—

The Line Section. The Line Section will be equipped to lay and maintain assault cable in the Echelon area, and to provide telephone service and switchboard facilities for Battalion Headquarters. Line communications to Companies will not be provided.

The Radio Section. This section will provide radio sets and operators to give radio com-

munications between Battalion Headquarters and Light Independent Companies, and to the Echelon area. When necessary to man sets in light aircraft or helicopters for airborne communications with ground stations, the operators will come from this section.

Signal Repair Section. This small section will include radio and telephone mechanics for the repair and maintenance of signal equipment at Battalion Headquarters, and to relieve or supplement radio mechanics deployed with the Light Independent Companies.

The Machine Gun Platoon

The platoon represents a reserve of automatic firepower for deployment in support of the Light Independent Companies. The platoon will be equipped with the standard GPMG 60 but the tripod and clinometer equipment will be standard scaling for all guns.

Flown to the point of battle, the additional volume of accurate small arms fire support provided may well be an important time-saving factor in the mounting of operations. Unless available, patrols with their GPMG 60 weapons may have to be withdrawn from patrolling tasks to provide an increased volume of automatic fire onto a target, or to protect a flank, or the forming up place of a company assault.

The Assault Proneer Company

This Company is perhaps the most radical suggestion in the proposed organisation of the Light Infantry Battalion.

It is envisaged in anti-insurgent operations that frequent occasions will arise when success will depend on the capacity of the assault force to breech quickly an obstacle - such as the palisade of a fortified village - or will require quantities of explosives to destroy enemy tunnel systems, caches, roads, landing to clear orgrounds for use by helicopters or light aircraft.

The ability to improvise methods of crossing obstacles, or to clear base plate positions for supporting mortars, may well determine success or failure in the ever-fluctuating, fluid battle with the insurgent.

The booby-trapping of known insurgent meeting places and trails, the mining of fords and defiles, all require specialist techniques with explosives. Such roles are well within the accepted tasks for pioneers.

The Assault Pioneer Company will be required, therefore, to undertake all the many and varied light engineer tasks which demand the use of explosives and portable power tools.

The construction of bangalore torpedoes from local materials, building a flying fox across a stream, felling timber quickly for the construction of obstacles, will all be normal tasks for the Assault Pioneer Company and its Assault Pioneer Platoons.

The Heavy Assault Weapons Platoon. This platoon is included in the pioneer organisation to provide a lightweight, airportable weapon, with a good destructive and breeching performance up to ranges of one thousand yards.

Frequently in operations against insurgent strongpoints, it will not be possible to close up to the strongpoint, obstacles. orwithin ranges suitable to the employment of other destructive or breeching methods. However, the 106 mm RCL firing HEP/T (Squash-head) ammunition will give excellent blast and destructive effect, with the pin-point accuracy necessary in breeching operations. After breeching, the weapon can continue to provide covering fire for the assault, provided a clear line of sight exists between the gun and target, and a high rate of fire is not demanded.

The Equipment Platoon. This platoon will hold the power general tools, explosives, and pioneer stores required for use by the Assault Pioneer Platoons. Tools and pioneer stores appropriate to the particular pioneer task will be drawn from the Equipment Platoon as needed. In effect, the Equipment Platoon is a small pioneer stores park, and by holding the equipment centrally, greater flexibility. efficiency, and economy in the employment of the Assault Pioneer Platoons may be achieved.

The Assault Pioneer Platoon. Only three Assault Pioneer Platoons are proposed. The employment of the platoons in support of the Light Independent Companies will be on priorities determined by Battalion Headquarters.

It is not envisaged that more than two pioneer platoons will be in support of Light Independent Companies at any one time, and then only for specific tasks. The pioneer platoons will be with-drawn to Battalion control when the specific task is completed.

It is further envisaged that the administrative requirements of the pioneer platoons will be met by the Light Independent Comdeployed. panies with which administrative Therefore, no included in platoon is Assault Pioneer Company organisation. In most respects, the Assault Pioneer proposed Platoon will be very similar to the pioneer platoon organisation of the present Australian Infantry Battalion.

Whenever the Assault Pioneer Company is concentrated, the administrative requirements of the company will be met by the Administrative Company of the Light Infantry Battalion. Suffiequipcient communications ment will be needed in Assault Pioneer Company organisation to provide reliable wirecommunications between platoon and company headquarters when concentrated, or between Assault Pioneer Platoon and the headquarters of the Light Independent Company when deployed in support. Light Battalion Signal Platoon will provide the wireless line link between Battalion Headquarters and the Assault Pioneer Company Headquarters.

The Light Battalion, and the various components, form the principal combat element of the Battle Group now evolving for employment in counter-insurgency operations.

The whole of the Light Battalion can be lifted by transport

aircraft and the majority of it, and its supporting equipment, by helicopter.

The Light Independent Companies, including the Support Platoons of the Company, should have total ability for dropping into the zone of operations by parachute. This parachute characteristic should apply, wherever possible, to all segments of the Light Infantry Battalion organisation.

The Battle Group — Other Arms and Services

In considering the other arms and services likely to be employed in a Battle Group specifically organised for counterinsurgency operations, it is only proposed to highlight certain desirable factors in each organisation.

One over-riding requirement, however, in all organisations, is the need for airtransportability for all equipments and, where possible, all equipments to be within the lift capacity of the larger H-21 type helicopter.

The Field Artillery Regiment

The equipment of the present field regiments is suitable to provide the heavier support needs of the Light Infantry Battalion, and deployment of artillery will be usually only necessary to support operations when an assault by one or more Light Independent Companies is planned.

The 105 mm pack artillery equipment, readily capable of rapid dismantling and re-assembly, would be air portable under most conditions. Likewise 4.2 inch mortar equipments would

be suitable as the heavier support weapon where the particular characteristics of mortar fire are required, or a lighter equipment is necessary for reasons of man-handling or transport.

The present two battery organisation of the field regiment does not provide sufficient battery fire units to permit the engagement of more than one battery target, with the remaining battery "on call". It is considered that a more effective fire support plan could be undertaken if the capability existed in the field regiment to engage two sizeable targets simultaneously, with a third fire unit superimposed and available for "on call" targets.

Only a regiment organised on a minimum three battery basis would provide the desired target coverage.

It is considered also that batteries may be each of six guns or mortars. Two batteries of 105 mm guns and one battery of 4. inch mortars is recommended for the support of a Battle Group in the anti-insurgent role.

The Field Engineer Squadron

The main roles envisaged for the Field Engineer Squadron are landing ground and light aircraft strip construction in the Administrative Echelon area of the Light Infantry Battalion. Track and road building, drainage, and construction of hard standing for stores and vehicles in the Administrative Echelon area would be undertaken as required.

It is not envisaged that the Field Engineer Squadron will be

deployed in the Zone of Operations, the light engineering tasks in this Zone being undertaken by the Assault Pioneer Company.

No changes are proposed in the Field Engineer Squadron equipment. However, the equipment should be as light as possible consistent with the tasks to be done, and the desirability for as high a degree of air portability as possible.

The Supply and Transport Service

The essential capacity of the Supply and Transport component supporting the Battle Group should be a high ability to effect resupply by air, or to transport troops, weapons, and stores by air. This will be achieved only if an Air Transport Platoon, using helicopters of the H-1 type, is included in the Service organisation.

The Supply and Transport organisation must have the capacity to assemble and pack all types of supplies and stores for delivery by parachute, by helicopter, or by transport aircraft. It must also have the capacity to receive all natures of supplies and stores delivered into its area by any transportation agency—air or ground.

Resupply of troops by air in the Zone of Operations raises problems. On current methods, resupply is effected on a daily basis as demanded by the fighting units. This system works well, and is economical. when surface agencies of delivery are reasonably secure and capable of being used. conditions do not apply in insurgent territory and the only logical method of delivery is by air.

Air delivery of supplies is always subject to conditions of weather. However, weather disabilities are likely to be a less inconvenience than insurgent attacks agains surface resupply routes. Also. the proposed reserves in the Rifle Platoon are designed partly to offset any non-delivery or supply by air caused primarily by adverse weather.

It is also proposed that resupply be by "standard pack" methods, rather than by the "on demand" system.

The basic standard resupply pack proposed would be designed to meet the estimated daily requirements of a patrol of 20 to 25 men. A rifle platoon would receive two packs per day. The average contents of a pack would include rations. small arms ammunition, grenades, and wireless batteries. One in every two packs delivered to a rifle platoon could contain additional items from time to time. Stationery and medical stores, such as bandages and antiseptics. maps, or even small clothing articles are some suggested additional items.

Standard packs could also be designed for the Light Independent Company Headquarters, and any supporting units deployed with the Company.

The standard pack system is designed basically to deliver only essential maintenance items to forces devoid of ground lines of communication. The system will achieve delivery right to the patrol, platoon, or company locality, whenever flying conditions permit, and does

not depend upon receipt of demands from units in the Zone of Operations. The delivery of special requirements will still be subject to unit demand.

In all resupply by air under insurgent conditions of operations, it is assumed that the enemy will not be supported by fighter aircraft. However, ground reaction against aircraft may be expected.

When supporting counter-insurgency operations, it would be desirable also if the supply delivery capacity extended into conditions of darkness or low cloud, with the ground forces possessing the capacity to "home" aircraft onto their location under all conditions, except, perhaps, in violent, cyclonic weather.

delivery of supplies is regarded frequently as a "sure give-away" of the position of ground troops. This can be offset in the very fluid conditions of insurgency warfare by patrols moving on immediately supplies are received. Furthermore, when observation conditions are good "dummy" drops can be made over a wide area, the "dummy" packs being suitably boobytrapped to discourage insurgent recovery and tampering.

Miscellaneous Services and Detachments

Other Miscellaneous Services and Detachments are not further considered. No change is envisaged in the roles or equipment of any additional minor units, and their methods of operation will be aligned to the basic requirements of the Battle Group.

Summary — Outline Organisation of an Anti-Insurgent Battle Group Infantry

Light Infantry Battalion — comprising —
Battalion Headquarters
Four to six Light Independent
Companies
Assault Pioneer Company
Support Company
Administrative Company.

Artillery

Field Artillery Regiment — comprising —
Regimental Headquarters
Two Field Batteries — 105 mm equipment
One Mortar Battery — 4.2 inch mortars.

Engineers

Field Engineer Squadron — comprising — Squadron Headquarters
Two Field Engineer Troops.

Supply and Transport

Supply and Transport Company — comprising —
Company Headquarters
One Transport Platoon —
quarter ton vehicles
One Helicopter Transport
Platoon — H-21 Helicopters
One Air Supply Platoon
One Composite Platoon

Miscellaneous Additional Units

Light Aircraft Squadron.
Medical.
Ordnance.
Electrical and Mechanical
Engineers.
Detachments of Postal, Pay,
and Dental Services.

All the above additional units would be scaled to meet the particular requirements of the Battle Group.

Training

Many facets of the training required, to prepare properly a force for operations in an insurgent environment, have been illustrated during the detailed review on particular units, However, it is strongly urged that all training of the Battle Group should be completed in Australia before the force is despatched overseas.

For instant readiness to proceed into South East Asia in an anti-insurgent role, training must produce the standards of skill and self-confidence in the soldier so necessary to the offensive spirit in a strange country, when men are apparently isolated by lack of regular surface lines of communication, and with no umbilical cord of motor transport joining them to base.

Proficiency is demanded in many skills, a few of which are high-lighted by summary:—

- Adeptness in the field techniques associated with fighting, moving, and living under patrol conditions. This requires proficiency in ambushing, navigation, skirmishing tactics such as contact drills, tracking, concealment, and all aspects of elementary field craft.
- Skill is necessary in the handling of all small arms weapons by all members under conditions of day or night, wet or dry.
- All officers and non-commissioned officers must be competent to apply and control supporting fire in support of attack operations.
- Parachute training, and training in movement by air, is required for all ranks.

- High proficiency in radio communications is a necessity.
- Physical toughness and tolerance of hot, humid conditions must be achieved.
- The capacity to move rapidly across country regardless of conditions, and by day and night, should be emphasised.
- The ability to concentrate quickly when necessary, strike hard with heavy supporting fire, and then disperse, is essential to success.
- Preparation of weapons and equipment for air transportation and a wide knowledge of the techniques for receiving air supply in difficult terrain, must be accepted as normal routine.
- A thorough briefing of all ranks on terrain characteristics, political-economic background, and military operational environment of the countries in which they are likely to operate must be given.

Proper acclimatization of all ranks, and proficiency in coordinating the functions of all segments of the Battle Group, will be achieved only by training together, and so evolving and practising the techniques it is proposed to use in operations. Climatically, this can be done only in the tropical areas of Australia, either North Queensland or the Northern Territory.

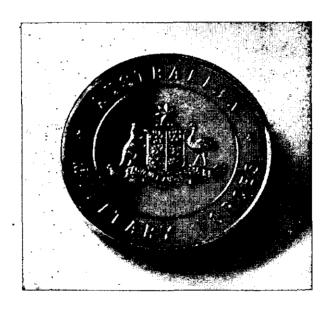
Obtaining the proposed equipment for the Battle Group is also essential, otherwise false techniques may result. The suggested equipment needed was indicated in this paper when considering each particular unit.

Conclusion

A military organisation is effective only if employed in the operational environment for which it was devised. Only under those particular operational circumstances can best advantage be made of the characteristics of the organisation.

No one military organisation, or grouping of military organisatons, is suitable to all types of warfare, even if the theatre of operations remains unchanged.

The Battle Group based on the Light Infantry Battalion is believed to be well suited to anti-insurgent operationis in South Vietnam. Employed with imagination, backed by aerial resupply, trained and physically tough, such an Australian force need never be a host of Green Strangers amidst Wild Rice.



Strategic Review

SINO - SOVIET RELATIONS

SCARCELY passes without some reference in the daily press to differences of opinion between China and Soviet Russia. the two most powerful members of the Communist bloc. These references are often accompanied by speculations as to whether the differences are so deep-seated as to constitute an opportunity for Western diplomacy to exploit for the purpose of at least securing some measure of relief from constant Communist pressure in two hemispheres,

Actually the difference opinion between the Chinese and Russians is not a new phenomenon. It goes right back to the early days of Chinese Communism, when Stalin ruled in the Kremlin and Mao Tse-tung was fighting for survival against the encircling armies of the Chinese Nationalists, Stalin took the view that Moscow was the fountain-head of Communist doctrine. the authoritative school to whose teaching all Communists should adhere. The central dogma of this school that held successful munist revolution had necessarily to be based on the organised urban proletariat, and that once the revolution was accomplished the peasants and other elements of the society could be clubbed into submission and conformity. That was how Lenin, the infallible prophet, had done it in Russia, and that was the way to do it everywhere else.

Mao was in no position to adhere strictly to the teachings of the master. In China the urban proletariat was too small in comparison to the peasantry to form a revolutionary base. Mao elected to do the trick in reverse —to win the peasantry to Communism and then tackle the small proportion of industrial workers. Whereupon wrote Mao off as a rank heretic, Consequently, throughout long struggle in China, Mao had to fight on two fronts. On the one hand he had to content with the Nationalist armies, and on the other with the orthodox Chinese Leninists whom Stalin recognised as the leaders Chinese Communism. Indeed, it was not until Mao was clearly the master of China that Mosrecognised him leader. And even then they tried to double-cross him in Manchuria and anticipate him in Korea.

This treatment can hardly have engendered love and loyalty in Mao's breast. Further, success confirmed his theory of revolution in Asia. And it also led to the belief that the wellspring of pure Communist theory and practice lay in Peking and not in Moscow.

If Mao was resilient enough to adapt revolutionary techniques to the particular circumstances prevailing in Asia, he has never deviated a hair's breadth from basic Communist dogma. For Mao any suggestion of co-existence with the capitalist world is pure heresy. Temporary retreats may be necessary from time to time, but for him the struggle, waged by means of active revolutionary warfare, is a continuing one. In the continuous prosecution of this warfare, Mao sees no reason for restraint because it might bring about a nuclear exchange. Indeed, he has categorically stated that the expansion of China cannot be checked by a nuclear war because "When it is over there will still be 300,000,000 Chinese left". Moscow simply cannot afford to follow a similar line.

In addition there are other differences over dogma to plague relations between Peking and Moscow. Chinese theorists now assert that their opposite numbers in Moscow have lost their revolutionary fervour and have adulterated the pure faith bequeathed by Marx and Lenin.

The practical result of these theoretical differences is that Mao and his henchmen have set out to make themselves the acknowledged leaders of Communism throughout Asia and Africa. We are well aware of their relentless pressure in South East Asia. In Africa their

agents have been no less active, though in a somewhat different way, in trying to win over the shaky, newly-created nations in that continent. Their recent lightning-stroke on the Indian frontier was, in the short run at any rate, a brilliantly successful move in the struggle for the leadership of Asia. It simultaneously set back the Indian claim and placed Moscow in a very embarrassing position.

The question is, will these differences lead to a wide open breach in which a shooting war between Russia and China becomes a possibility? This could, perhaps, happen, but it is practically certain not to happen for a good long time. For one thing there is no point at which the vital strategic interests of the parties are likely to collide in the immediate future. Faced with a resurgent Europe and American nuclear power in the West, Russia has enough on her hands without becoming too deeply involved in the East. On the other hand, China, although condemn-"surrender" the Russian ing over Cuba and waxing hot about Balkan deviationists, is not in a position to do much about it.

All things considered, it seems likely that the Communist world will find the solution in recognised "spheres of influence". Russia, menaced by American nuclear strength and faced with the growing power of Europe, will play a cagey game in the West, while China will vigorously pursue her aims in the East. While they might continue to argue between themselves over theoretical niceties, it is not

likely that either party will offer active opposition to the other. And it is always on the cards that changes in the respective hierarchies might bring about a rapprochement — or a widening of the breach.

From the Australian point of view, the situation could, perhaps, be just a little more difficult if there were no differences of opinion between the Communist leaders. But it would be quite unreal to suppose that the differences are in the least likely to relieve. even temporarily. China's constant southward pressure. Her pounce on the Indian frontier is a clear indication of her resolution and resourcefulness, while her revolutionary activity further to the south-east shows that her tenacity of purpose is as firm as ever.

Whichever way events shape in South Vietnam, and at the moment they do not seem to be shaping very satisfactorily, it is too much to expect that Mao will not seek to prevent the formation of Malaysia by all means short of open war. Communist parties throughout the area and their agents will certainly do their best to wreck the scheme, while at least one government, already pre-disposed to opposition, will be urged on by its powerful Communist component to active disruptive tactics.

Affairs on our near north are livening up.

- E.G.K.

COMPETITION FOR AUTHORS

The Board of Review has awarded first place and the prize of £5 for the best original article published in the February issue to "Sappers in New Guinea" by Major P. A. Stevens, Royal Australian Engineers.

NAVIGATION IN THE TROPIC ZONE

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THE soldier operating in the Tropic Zone must overcome two personal problems if he is to fight efficiently in his surroundings. He learn to live in a different, demanding environment and he must learn to move confidently by day and night through its varying types of terrain and vegetation, proper fitness adequate acclimatisation help solve the first problem. whereas the second is a matter of training which must be solved before his arrival in the theatre. The soldier must appreciate the effects that vegetation will have on map reading and the maintenance of direction, and he must know and be well practised in all aspects of planning and control of movement in dif-Above all, he ficult country. should have confidence in whatever system he uses.

The aim of this article is to describe a system of navigation suitable to the tropic zone with particular emphasis on close country or jungle.

The System

As with any other system of navigation this one is based on the fact that any point may be fixed in relation to another by knowing the bearing and the distance between the two. Bearings may be found by plotting

on a map or by reading a compass and distances measured off a map with a protractor or on the ground by pacing or some other means. These two factors can always lead quickly to an accurate estimation of present position in relation to the start point or the grid of the map. Commanders must know where they are at all times if fire support is to be accurate and safe or if information is to be reliable.

As with most other things, prior consideration of the navigation problem will lead to saving of time on patrols or movement in general. Route planning will allow difficult going to be avoided, reduce the chance of error, and ensure that a given task can be completed in the required time.

In planning a route maximum use must be made of all available aids.

Aids to Navigation

Maps have the greatest use in planning a route except in rare circumstances. The intelligent use of maps is the basis of navigation in any theatre, particularly in the tropic zone where thick vegetation will reduce visibility and the ability to read a map accurately. Since the reliability of maps of the tropic zone will vary considerably, care

must be exercised until they have been confirmed by regular use or patrolling. Map craft in the tropics must be of the highest order.

Air Photographs serve their most useful purpose in supplementing the map. To gain the most from them the soldier must know how to scale and orient them, how to compare them with maps and how to recognise important natural or artificial features and the various types of vegetation. Photomaps will sometimes be the only ones available.

The Prismatic Compass is the prime means of finding and maintaining direction when moving. Individual compass errors must be known. This requires accurate calibration to be carried out by the user with frequent checking.

In close country the compass should be held in the palm of the hand as for night marching, bearings being checked frequently and leading personnel constantly kept on course. Care must be taken to ensure that no metallic object is near when taking a bearing.

The Service Protractor is a simple instrument which cannot be used effectively without some basic knowledge of angles and scales. Constant practice in its use should be included in any course of instruction on navigation.

Distance may be measured in three ways:—

- (a) By pacing.
- (b) By means of measured lengths.

(c) With reference to time.

Pacing is the normal method of measuring distance and proves very accurate providing the following points are watched:—

- (a) Individuals must know how many paces they take per hundred yards under varying conditions.
- (b) Practice is required in all types of vegetation and terrains.
- (c) For every pacer a check pacer must be provided.
- (d) A foolproof system of counting the hundreds of paces must be devised.
- (e) Allowances are made for uphill and downhill going.

Measured Length. This is the most accurate means of measuring distance and will be used where extreme accuracy is required. A length of twine, light cable or vine of a known length is carried by two members of the navigation party, distance being measured by counting the number of times this length is fully extended as the patrol or body of troops moves. This system has certain disadvantages which may make it unacceptable for normal use because:—

- (a) The method is slow,
- (b) It does not permit normal tactical movement.
- (c) It creates unnecessary movement and excessive noise.

When measuring distance, allowance must be made for the slope of the ground and the direction of travel. This requires knowledge of the gradient and the paces per hundred yards under these conditions.

Gradient	Angle of slope	Approx pa yards ma	Yards on ground to		
(a)	(b)	Uphill (c)	Downhill (d)	yards on map (e)	
0	0	120	120	100	
1 in 5	11	122	122	102	
1 in 4	14	130	124	103	
1 in 3	18	140	126	105	
1 in 2.5	22	153	135	108	
1 in 2	27	168	149	112	
1 in 1.5	34	205	168	120	
1 in 1	45	282	212	141	
$1\frac{1}{2}$ in 1	56	540	360	180	

Table 1

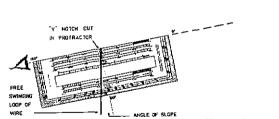
At Table 1 some average figures for various slopes are given. Using such a chart as a guide, individuals should assess and then record their own pacing characteristics under similar conditions.

It should be noted that figures in Table 1 are based on an average of 120 paces per 100 yards. These figures will tend to increase in practice due to terrain, going, loads being carried and the likelihood of contact, etc. There can be no substitute for accurate knowledge of the characteristics of the individual pacer..

Gradient may be measured in the following ways:—

- (a) Calculation from the map, by comparing vertical interval and map distances.
- (b) Estimation en route.
- (c) Measurement on the ground. This may be done by using a Service Protractor — See Fig 1.

Time taken to cover various types of terrain and vegetation can be the basis for a rough estimate of distance covered. It will be the only means available when pacing is impossible or highly inaccurate, for example in mangrove swamp. Knowledge



ESTIMATE OWN
HEIGHT ABOVE
GROUND OR SIGHT
ON HEAD OF
ANOTHER MAN.

Figure 1

of rates of movement in varying terrain and vegetation is essential if a patrol, etc, commander is to know that he can complete his task in the required time. This knowledge can only be gained through practice on the ground.

Artillery may be used to check progress in close country, where maps are non-existent. By observing smoke or flare shells fired on pre-arranged points, eg, a feature or a grid intersection to a flank, position can be checked. In extreme cases resection can be carried out on the sound of fall of shot. These tasks must be arranged when possible and it should be borne in mind that this technique may be limited by safety.

Navigation Checks using every aid available will ensure that small errors are progressively eliminated. This should be done at least every 500 yards and where possible routes should be divided into bounds which will allow this.

Planning

The first step in planning a route involves the selection of a route. Restrictions which will influence this choice may be imposed by tactical requirements, time or topography.

Tactical considerations could include location of our DF tasks, activities of other patrols, the requirement of security, etc. The time by which information is required or by which a task will be completed may govern the route to be taken. If time is short accurate route planning will in-

dicate whether distance alone will prevent the task being completed.

Consistent with local tactical considerations, the following points should be borne in mind when considering topography in route planning:—

- (a) Water courses should be avoided. Heavy growth in valley bottoms will mean slow and fatigueing going.
- (b) Be suspicious of what appears to be open going on map or air photographs. It may in fact be high grass or other similar difficult vegetation.
- (c) As far as possible keep to the high ground.
- (d) Avoid moving across the grain of the country unless required to do so.
- (e) Avoid moving up precipitous slopes. They are usually worse than the map indicates.
- (f) Plan on passing through features which will allow positive checking or progress, eg, high ground or a junction of lines, features which may sometimes be selected by visual reconnaissance before starting.
- (g) Determine what the general run of country and water-courses is.

Having selected a route with suitable bounds, data is best tabulated on a navigation data sheet (Figure 2). Care should be taken to ensure that the start point of the first leg will not reveal our own positions if the data sheet should fall into

NAVIGATION DATA SHEET

LEG	FROM	то	MAGNETIC BEARING	MAP DISTANCE YARDS	ESTIMATED DISTANCE PACES	ESTIMATED TIME MINUTES	GOING	REMARKS
(a)	(b)	(b)	(c)		(d)	(e)	(f)	(g)
		<u>. </u>						
							<u> </u>	
		<u> </u>						
							<u></u>	,

NOTES: (a) Information concerning the start point must not prejudice own security.

- (b) Use grid refences, nicknames or names of features.
- (c) Compass correction must be applied to the bearing before moving off.
- (d) Paces as estimated by the leading pacer.
- (e) Based on known performance, rate of movement etc.
- (f) Topographical information from map or air photograph.
- (g) Topographical information recorded while on patrol.
- (h) This information may be recorded in any convenient form, such as note book etc.

enemy hands. Similar care should be taken when marking maps.

Traversing

Often it will not be possible to plan a route before a patrol begins, for example when following a trail left by the enemy. Again, planning may be difficult due to the lack of maps or air photographs. In such cases the technique of traversing will allow free movement and permit rapid calculation of present position and the routeback to the start point.

The technique of traversing involves no more than recording of magnetic bearings and paces en route. This is called patrol or traversing data. At the end of the traverse this data is converted back to degrees and yards of map data. By plotting to some suitable scale present position can be found in relation to the start point. From this point a "closing" bearing back to the start point or some other point can be readily found.

The technique can be used whether a map is available or not. Its advantage lies in the flexibility it allows in departing from a planned route should the occasion arise.

The Navigation Team

The navigation team ideally consists of three men. One is responsible for direction, and two for pacing — one of whom is a check pacer. The infantry section or platoon commander is usually the person most directly concerned with navigation, be

he commanding a patrol or the leading elements of a large force. In close country a section or patrol will normally deploy two scouts forward of the section commander. Since these two soldiers are the eyes and ears of the section they must not be given navigation tasks. They must, however, make such reports concerning ground as the section commander may require.

The section commander will normally carry the compass and be responsible for the directional control of the scouts. The second scout thus becomes a vital link in controlling direction. He must cover the forward scout and also control his direction and rate of movement on the of section orders the commander. This requires constant vigilance to his front and rear and a high standard of training in field signals.

The first pacer should be close behind the section commander. He may be a rifleman of the machine gun group but should not be the machine gunner himself for obvious reasons. The check pacer may be the section 2IC or a rifleman. He must be separated from the first pacer by at least one man but sufficiently close to speak to the section commander in a low voice if required.

Scouting can be a nerve-racking business which will call for frequent relief of the forward scouts. Pacing also demands concentration and it is advisable to share this duty as well. Thus all members of the section must be able to carry out any duties or

NAVIGATION DUTIES WITHIN AN INFANTRY SECTION

Forward Scout Report ground etc as required.

Second Scout Relay orders between Forward Scout

and Section Commander.

Section Commander Commander of navigation party and

responsible for directional control.

No duties.

First Pacer.

Possible check pager.

Relief pacer/scout. Relief pacer/scout.

Relief pacer/scout.

Figure 3

assume total responsibility for navigation in the event of casualties. (See Fig 3).

MG No 1

Rifleman

Rifleman

Section 2IC Rifleman

Rifleman of MG Group

Training

Patrolling and cross country movement is no longer the prerogative of the infantryman, the tropic zone and the expected enemy having brought threat of violence well behind the FDL's even if such things exist. One of the most effective answers in all phases of war is aggressive and constant patrolling by day and night. While this will certainly involve more non-infantrymen than before, patrolling will still remain the direct task of the junior officer. the NCO and the private soldier.

Effective patrolling or crosscountry tactical movement in jungle particularly lives or dies on accurate navigation. To the junior officer comes the problem of training himself and his men in this fundamental but important art. Such training must cover:—

- (a) Map reading.
- (b) Air photograph interpretation, orientation and scaling.

- (c) The calibration of the prismatic compass and its use in fixation, navigation and traversing.
- (d) The service protractor.
- (e) Field signals.
- (f) Pacing, under varied conditions leading to individual calibration.
- (g) Route planning.
- (h) Traversing.
- (j) Practice by day.
- (k) Practive by night.
- (1) Practice in open country.
- (m) Practice in close country.

The use of soundly constructed exercises will quickly develop an understanding of the simplicity of the navigation problem. With practice will soon come confidence in moving purposefully over terrain which demands great physical effort but which offers no sight of friendly sky or familiar landmark.

Only with the development of such skill throughout a force can commanders and their soldiers be confident that they will get to the right place at the right time. The ability to navigate accurately across country by day or night is of such vital importance that it behoves all ranks in the Army to master the basic principles of navigation. Who knows in war when the responsibility for the control of cross-country movement might be his?

As long as words a different sense will bear, And each may be his own interpreter, Our airy faith will no foundation find: The word's a weathercock for every wind.

— Dryden.