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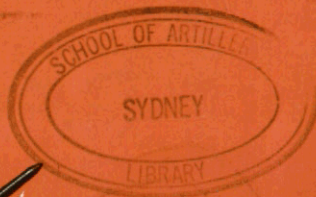
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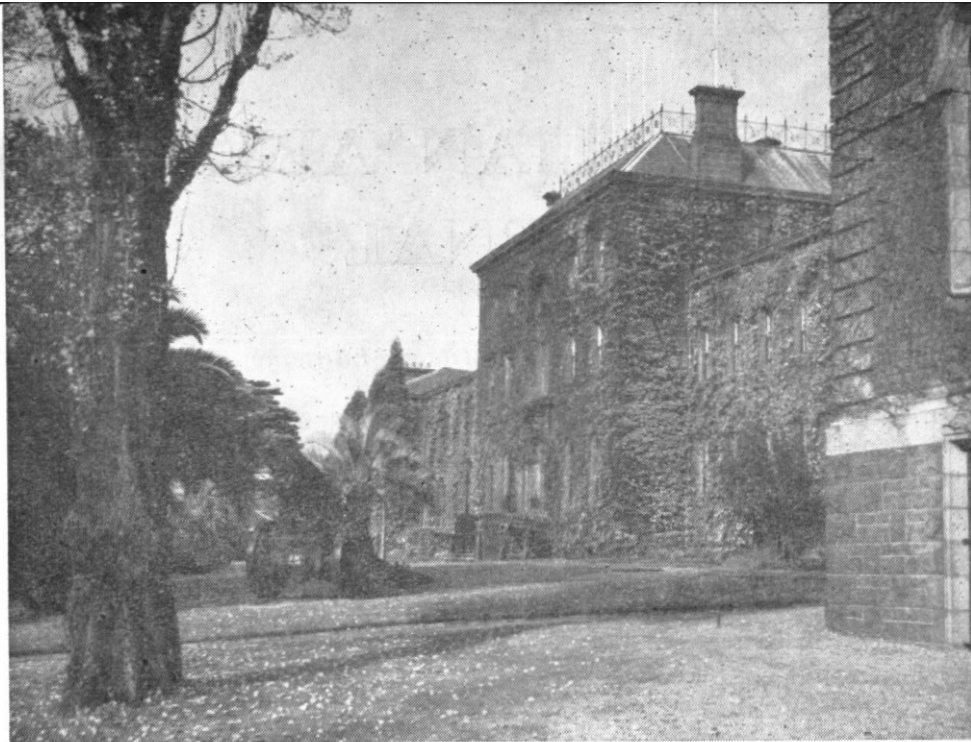
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VICTORIA BARRACKS, MELBOURNE

# AUSTRALIAN ARMY JOURNAL

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# GUERRILLA WARFARE

Major C. H. A. East,  
Royal Australian Infantry

Examine the background, characteristics, and employment of guerrilla forces, and the influence that such forces have had on those campaigns in which British or Allied forces have been engaged since 1900, with particular reference to operations in South-East Asia.

Assuming that both sides will employ weapons of mass destruction in conjunction with naval, land and air forces, discuss the value of guerrilla forces in any future war, and suggest likely roles and techniques for their organisation and employment, both by ourselves and by potential enemies, again with particular reference to South-East Asia.

*"The Assyrian came down like the wolf on the fold."*

—Lord Byron.

## Introduction

A VERY long time ago a warrior ignored the rules. Instead of meeting the enemy legions head-on in the field of battle, he ordered his men to deceive, surprise and ambush the foe . . . then run. This soldier was the father of what we now call guerrilla warfare.

Historians are not clear as to his name or nationality, for he seems to have been an embodiment of many leaders and many people; but they are sure of his legacy, one which has played a significant and decisive role in many wars in the past and one which has in this

atomic age assumed a role of even greater importance and concern.

The aim of this paper is to trace in general terms the origin of guerrilla forces and their principles of employment, thence in more detail selected guerrilla campaigns of the 20th Century with emphasis on South-East Asia. From an examination of the resultant lessons, to study the possible technique and role of similar forces in an atomic war, primarily with regard to South-East Asia.<sup>1</sup>

1. This paper was set for students attending the 1955 course at the Australian Staff College.

## Part I—Growth and Principles of Guerrilla Warfare

## Definition

The word "guerrilla" is of Spanish origin meaning "little war," and was first used in the Peninsular Wars in Spain to describe the activities of the Spanish bands which continually harassed the French forces and contributed so much to their eventual defeat.

Recently it has been more loosely used to describe various activities ranging from irregular or partisan warfare to the operation of underground or resistance movements. These terms have been generally applied to forces fighting on our own side, but recently we have encountered guerrillas fighting against us. They are not classed as patriots but as terrorists or bandits. However, in fact the word "guerrilla" covers all these factions, and today the borderline between each is finely drawn. A recently published definition, which shall be adopted as the basis for this paper, is quoted as follows:—

**"Guerrilla warfare is a method of waging war employed by men living in an area occupied or surrounded by the enemy. The guerrilla may be fighting in an area of his own country temporarily under enemy domination, or he may fight in a foreign country favourable to him, but at the time in the grip of a superior enemy."**

## History

Although the word "guerrilla" was first used in the Napoleonic

Wars, guerrilla warfare is as old as war itself. The first guerrilla war had been fought in China in 360 BC, when the Emperor Huang, by employing guerrillas finally defeated his enemy Tsi Yao. Our own British history records evidence of the guerrilla activities of the Britons led by Caractacus, who harassed the Roman legions from his mountain stronghold in South Wales. Later Hereward the Wake caused King William great trouble with his raids and ambushes. Throughout the Middle Ages and up to the mid-18th Century the Scots engaged in a series of guerrilla actions against their stronger English opponents, and were not completely subdued until 1745.

Subsequently, partisans made an appearance during the American and French Revolutions, and history credits the Russian armed peasants with considerable success during the French Grand Army's retreat from Moscow. However, it was during the American Revolution that the form of guerrilla warfare took a new turn. Until this time war had been the affair of the state, but now it became a national matter because the private citizen became involved. Armies began to find themselves opposed not only by armies but by a hostile people as well. Eighty years later a man named Karl Marx put this hitherto revolutionary theory of warfare in a nutshell by stating:

**"A nation fighting for its liberty ought not to adhere rigidly to the accepted rules of warfare. Mass uprisings, revolutionary methods, guerrilla bands everywhere; such are the only means by which a**

2. "Guerrilla Warfare," by Major J. G. Sloman, Australian Army Journal No. 64, September, 1954.

**small nation can hope to maintain itself against an adversary superior in numbers and equipment. By their use a weaker force can overcome its stronger and better organised opponents."**

Further examples of this form of warfare were evidenced by the actions of the Free Corps leaders in the American Civil War. Such men as Stuart, Mobsly, Forrest and Ashby by their ceaseless raids on isolated outposts, destruction of communications and attacks on supply areas created destruction out of all proportion to their strength. The Franc-tireurs in 1871 by their activities caused the Prussians to deploy an additional 150,000 troops to protect 250 miles of railway, their main supply line to their armies outside Paris.

Throughout the 19th Century the British Army was fighting actions all over the world, most of which could be described as guerrilla wars. Yet when the largest outbreak of all occurred in South Africa in 1899, they had learned none of the lessons. Before examining certain guerrilla campaigns of the 20th Century, however, let us first study the characteristics and method of employment of guerrilla forces.

### Characteristics

How do guerrillas operate? They never give pitched battle if it can be avoided. They always seek to obtain a local superiority, and exploit the element of surprise to the utmost. Their objective is always the weak link in their opponent's chain.

They attack suddenly, disappear and then reappear some distance away a day later. The essential

difference between guerrillas and normal ground troops can be explained in the one word *mobility*. They travel light. The rifle, sub-machine gun and grenade are their weapons. They have no "administrative tail" to encumber them.

### Method of Employment

Firstly, let us consider the aim of guerrilla warfare. It is to reduce the effectiveness of the opponent's regular forces. It is best achieved when conducted behind enemy lines to further specific large-scale operations by regular forces.

There are three main situations necessary to the conduct of guerrilla warfare. These are terrain, the political situation and national conditions. They must be taken into account in any theatre of war, both in organising our own guerrilla activities and in appreciating the probable conduct and scale of similar activities by the enemy.

### Terrain

This is ground which restricts observation and movement of regular forces, and is necessary to guerrilla operations. A general order of importance is:—

- (a) Mountains coupled with either forest or jungle.
- (b) Flat country well covered with either jungle, forest or swamp.
- (c) Mountains with sparse cover.

### Political Situation

From the outset, the guerrilla force must have the full backing of its own or an Allied Government to ensure that the necessary supplies of equipment, weapons and personnel arrive in sufficient quantities in time for operations. The

immediate political sympathies of the civilian population in the area must be in close enough relation to the guerrilla force to ensure loyalty and continuous support.

Policy at the highest military and political level must be established for the organization and direction of guerrillas during hostilities and afterwards. Guerrilla forces at the end of hostilities must not be allowed to fall into the hands of undesirable political elements and be used against the forces who created them, e.g., the MPAJA in Malaya. The surest method by which such control can be retained is to provide the trained personnel and organization from the Regular Army to establish a formal guerrilla organization when hostilities begin.

#### National Conditions

It is desirable that the civilian population should possess a strong national desire for independence and a hatred of the enemy. Hate can be stimulated by propaganda, although this characteristic should be strong in areas which have been occupied by an aggressor.

#### Tasks

Some of the major tasks carried out by guerrillas in support of regular forces are: —

- (a) *Harassing Operations.* Such action is principally in the form of raids and ambushes aimed at communication centres, supply routes, dumps, headquarters, airfields and key personnel. The aim of these operations is to draw off a disproportionate number of front line troops for the protection of the rear areas.
- (b) *Isolation of a Projected Area of Operations.* This is typified by attacks on and the demolition of important communication points.
- (c) *The Acquisition and Transmission of Intelligence.* Guerrilla forces can supply both strategic and tactical information. Information might include location of industrial establishments, items produced, location of important enemy reserves and supplies.
- (d) *Anti - Guerrilla Operations.* This is best expressed by the adage "Set a thief to catch a thief."
- (e) *Sabotage.* Sabotage targets may be classed under two headings, industrial and military targets. These might include factories as well as the utilities, transportation and communication systems which supply them; oil wells, refineries, smelters and military installations, ships, weapons and bridges.
- (f) *Escape and Evasion.* Guerrilla forces can provide guides, contacts and hideouts which are necessary in the development of escape and evasion routes.
- (g) *Seizing Minor Key Objectives.* There are periods at the beginning and towards the end of each campaign when the seizure of minor key objectives such as small bridges may be of great benefit. In these circumstances it may be necessary to assist local guerrilla forces with our own Special Forces.



## Part 2 — Review of Guerrilla Activities Since 1900

**General**

Examples of guerrilla campaigns in the 20th Century are many and varied. Space alone in this paper would not permit of even a brief outline of them all. However, the attention of Great Britain was focused on this aspect of warfare as a result of her bitter experiences with the Boer Commandos in the South African War, and valuable lessons were learned. A flagging interest in this subject was revived during the First World War by the classic example of irregular or guerrilla warfare carried out by Colonel Lawrence and his Arab Forces in the Hejaz, Palestine and Syria against the Turks.

The Irish rebels in 1922 practised this form of warfare, and in the late 1920's we see the Communist guerrillas of that great guerrilla strategist Mao-Tse-Tung waging war against the Japanese invaders. In the 1930's the Spanish Civil War produced an outbreak of guerrilla fighting, and a few years later the Abyssinians practised the art with great effect on the Italian army in Abyssinia.

The Second World War advanced this branch of warfare further. It was conducted on a gigantic scale against the invading German armies in the U.S.S.R. There were also Chinese, Yugoslav, Greek, Polish, French, Abyssinian and Filipino guerrillas, not forgetting our own Chindits in Burma. During the war our troops did not meet guerrillas, as enemies, on a large scale. Japanese, Italian and German guerrilla forces were non-existent.

Since 1945, guerrilla warfare has not ceased to be waged in some corner of the world. In Greece in 1947-49, Communist guerrilla forces threatened the existence of the Central Government. In Indo-China in 1945, guerrilla forces began to threaten the state and French rule. The Communist inspired Hukbalahaps retarded the post-war development of the Philippines and tied up large Government forces. Communist Chinese guerrillas in Malaya have interfered with the economic rehabilitation of the country and forced Great Britain to use large military and police forces to maintain order. At the end of 1949 China, the most populous nation in the world, had been seized from within by overgrown guerrilla warfare. In Palestine the activities of the Jewish Stern Gang and Irgun Zvai Leumi rendered the task of the British forces in maintaining law and order a difficult one.

The above paragraphs do not pretend to mention all the guerrilla activities since the turn of the century. However, it is proposed to select some of the more important to us, and draw from them the pattern of conduct of guerrilla operations for our future use.

**South Africa 1900-1902**

After the heavy British defeats at Colenso, Stormberg and Magersfontein the Government despatched Britain's premier soldier, Lord Roberts, to South Africa. Following on the relief of Ladysmith and Kimberley, Roberts gained a decisive victory at Paardeburg with the capture of a Boer force of 4,000

men under Cronje. The way to Bloemfontein and Pretoria was then open, and any hope of a Boer victory was gone.

However, hopeless though the prospect was, the enemy fought on under the leadership of such men as Botha, de Wet and Smuts for another two years. Those two long years of guerrilla warfare against such a past-master in the art as the Boer, taught the British soldier valuable lessons for the years to come. The Boers were extremely mobile, all possessing horses, while every man was a sharpshooter and an expert at taking cover. They did not wear a regular uniform, which permitted them to double the part, at a moment's notice, of a first-class fighting man with that of a peaceful civilian. The Boers favoured ambushes and booby traps, and they were apt to be a little careless in their use of the white flag. This taught the British soldier that he must be prepared to fight his opponent with his own weapons.

Under the British training system of the time, the accepted method of attack was by short rushes in open order, the men lying down and firing at the end of each rush. Bayonets were fixed and a charge made 350 yards from the enemy. Such methods directed against an invisible opponent merely provided him with the best target for his methods. British mobile columns, inexperienced and hampered by too much transport, tramped up and down the veldt in pursuit of a will o' the wisp opponent seemingly possessed of no encumbrances of any kind, capable of vanishing into thin air at one moment and reappearing unexpectedly

at another to cut off a party of stragglers or catch a convoy crossing a river.

The British soldier learned the hard way. The Boer taught him the importance of mobility, intelligent scouting, and skilful use of ground and cover. From him, too, he learned that it is not always desirable to attack in drill book formation, but that troops must learn to fight in small detached groups, where each man will have to think for himself. Eventually the pupil learned his lessons to the discomfiture of his teacher. In South Africa the British Army first developed the spirit of commando or guerrilla warfare, with its unconventional methods, which it was to display with advantage in Burma and Malaya some forty years later.

#### The Middle East 1915-1918

The operations of Colonel Lawrence in the Middle East are described as a classic example of the employment of irregular or guerrilla troops. Lawrence's value to us is that he helped to destroy the Turkish forces in the Middle East, and gave us new concepts of guerrilla strategy.

While the Arabs were more mobile, but less able to bear casualties than outside armies, the Turks were almost uninterested in losses of men, though not in losses of material, of which they were very short. Superb at sitting tight in a trench or firing at a directly oncoming target, they could neither adapt themselves to, nor endure, the strain of fluid operations. Lawrence seized on that weakness by destroying railroad equipment thus paralyzing Turkish movement.

To understand the working of Lawrence's plan it is necessary to understand the real weakness of the Turks in the Middle East. This weakness was based upon two factors—the restlessness of the subject peoples, especially the Arabs, and the brittle and tenuous lines of communication by which the Turkish Empire was controlled.

Lawrence and his Arabs leapt north to Wejeh and thence to Akaba, cutting the rail communications, raiding and harassing the Turks and keeping them immobilised. Allenby then made ready to strike for Damascus while Lawrence pinned down the Turks in the Hejaz. He then made his supreme contribution—a paralyzing raid out of the desert on to the rail complex at Der'a, cutting off the Turks in the Hejaz and Jordan from all aid. While Allenby pursued the main Turkish armies the Arabs turned on the Turkish VIII Corps fighting its way north along the Hejaz railway, and decimated it.

It is considered that a major achievement of Lawrence was his most successful selection of Feisal as the leader of the Northern Arab Army. Feisal was admired and trusted by the Arabs, and through him Lawrence was able to mature his plans. However, by his own magnetism and leadership he provided a focus for Arab strength and British assistance which made the Arab army a valuable adjunct to the British Campaign in Palestine. Undoubtedly Allenby had the strength to eventually drive the Turks out of Palestine, but the Arab contribution hastened the victory and lightened the cost. The supreme lesson of Lawrence's triumph was that granted mobility, outside as-

sistance, time and an idea which gained the sympathy of the civil population, victory rested with the guerrillas.

### China 1924-49

History does not reveal very much of the struggle which went on inside China from the early 1920's until 1949. The struggle began when the Communist Party broke away from the Kuomintang of Chiang Kai-shek, and retired to the interior to avoid persecution. Civil war broke out, and from 1927 the Chinese Red Army became Chiang Kai-shek's most formidable enemy within. The struggle became three-sided when Japan, with its well-trained and equipped forces struck at China in the years before the Second World War. A United Chinese Front was formed in 1937 by the Kuomintang and Chinese Communists which gave Chiang the assistance of the Red Eight Route Army, the best fighting formation in China. It owed its high reputation and success to the widespread adoption of guerrilla warfare based on the teachings and experience of the leader of the Chinese Communists, Moscow-trained Mao Tse-Tung.

The Chinese forces gave up the cities to the Japanese, but were never dispossessed of the provinces throughout the entire war. The Japanese armies were strung out along the main communications, the railroads, and in garrisons in the larger towns principally on the coast. The Chinese obtained arms and ammunition from the U.S. and from their enemies the Japanese, harassed the enemy's lengthy lines of communication, cut off and destroyed small garrisons. They de-

veloped their own mobile guerrilla industries in the interior, and they had the backing and support of the people.

Mao-Tse-Tung foresaw three stages in the war against Japan. The first stage would be Japan's advance and China's defensive retreat. In this retreat great reliance would be placed on guerrilla tactics. Once this manoeuvring was completed the second stage was to be one of watchful sparring—guerrilla units would harass the enemy twenty-four hours a day until the Japanese were forced to maintain troops all along their lines of communication and bases. Then the third stage would begin, when the mobile counter-attack would be launched after the enemy became over-extended and exhausted. Again guerrillas would come into play, continuing their harassing tactics, cutting off the enemy's retreat. All this came about as Mao forecast.

After the Japanese War the Communists returned to the task of defeating Chiang Kai-shek, using the same methods. One important factor in the final margin of victory was provided by a powerful outside supporting power. Our Soviet ally transferred to the Chinese Communists large quantities of Japanese arms surrendered in Manchuria. By 1949, the Communists by a combination of the use of guerrilla and regular forces had taken control of China.

#### Russia 1941-45

Stalin put the teachings of Mao Tse-Tung to excellent use against the Germans, and Soviet practice developed that plan of campaign formulated by the Chinese leader in

1937. The German armies in Russia suffered more damage from guerrillas than from all the modern paraphernalia of warfare. They could match each Soviet weapon with similar or superior weapons of their own, but they were almost powerless against guerrillas.

When the German armies invaded the U.S.S.R. in 1941, they did not anticipate large-scale guerrilla activity, and at first they did not in fact encounter it. However, soon the Germans found themselves fighting on two fronts—against the Soviet armies in the forward areas and against Soviet guerrillas deep behind their lines.

The Soviet guerrillas waged the most extensive and effective irregular campaign in history. In two years of this warfare in the rear of the invaders, the guerrillas killed more than 300,000 Germans. During this period 3,000 trains were derailed, thousands of road bridges were destroyed, while the number of tanks, armoured cars, guns, aeroplanes, lorries and dumps which were destroyed by the guerrillas ran into many thousands. In the summer of 1942 it was established that 144 S.S. battalions and 15 field divisions were operating solely against the guerrillas. In the spring of 1943, the Germans launched large-scale attacks against the guerrillas in the Briansk and Minsk regions, in which 70,000 troops were employed.

Guerrilla attacks on enemy communications were an outstanding factor in the Russian success. The guerrilla link with the civil population provided them with a splendid source of information on German dispositions and troop movements. Their mobility, knowledge

of the locality, use of surprise attack, the separate withdrawal of individual units from battle, were all factors in confusing and harassing the enemy.

This is the major lesson of the German-Russian campaign. Guerrilla warfare has come to stay. It has revolutionised the conception of war. A regular army with guerrillas as its auxiliaries not only has a hard-hitting fighting force, but also an outstanding intelligence service, which makes it practically impossible for the opponent to conceal his troop movements and intentions. In the post-war years all Soviet satellite states without exception have formed their own guerrilla brigades.

#### Indo-China 1945-1954

In March 1945 the Japanese decided to eliminate the French forces in Indo-China, and set up a national Government of their own choice. When this took place, various Nationalist and Communist groups organized themselves and took over large parts of Annam and Tonkin. The Allies parachuted weapons, radios and instructors into the guerrilla units, which soon gained a degree of combat strength and efficiency. The Communist groups under their Moscow-trained leader Ho Chi-Minh not only had the strength but the leadership to exploit the situation. After the fall of the first atomic bomb on Japan, Ho Chi-Minh's guerrillas became the Vietnam Liberation Army, and the new Government installed by the Japanese was overthrown by an organized Communist onslaught.

Speedy action by the French in reoccupying Indo-China at the ter-

mination of hostilities forced the Vietminh to dissolve its divisions and regiments in the south and return to guerrilla warfare. In December 1946 the Vietminh attacked French installations throughout Indo-China, and the war between France and the Vietminh had begun.

Although the French initially had great difficulty in supplying isolated garrisons and maintaining bases, General Leclerc with a judicious use of armour, parachutists and air transport relieved the pressure. However, the French forces were too weak to follow the guerrillas and defeat them in the mountains.

This stalemate proved a welcome respite to the Vietminh. The guerrillas were reorganized on a battalion basis, officer training schools were established, and the eventual victory of Mao Tse-Tung over Chiang Kai-shek brought about a welcome flow of ammunition, equipment and instructors. Soon the French were faced with 30 regular Vietminh battalions under General Giap in the north, while in the south guerrilla units cut off Saigon from the hinterland and occupied Indo-China's rice bowl.

The Vietminh then overreached themselves, Giap attacked with initial successes against the smaller French forts, but American aid, French reinforcements and the French command being assumed by General de Lattre de Tassigny, resulted in eventual defeat for the Vietminh forces. The reason for the Vietminh failure appeared to have been caused by an error in appreciating the stages of the three basic principles for Communist warfare in Asia, laid down by Mao Tse-Tung, which Giap was following.

They were:—

- (a) Yield any town or terrain you cannot hold safely.
- (b) Limit yourself to guerrilla warfare as long as the enemy has numerical superiority and better weapons.
- (c) Organise regular units and pass over to the general counter-offensive only when you are sure of the final victory.

The Vietminh high command had mistakenly underestimated French capabilities and passed prematurely from Step 2 to Step 3 with disastrous results. This mistake was not repeated, and guerrilla warfare was continued until the end of 1953 before the guerrilla forces were ready to be converted to regular forces and launch the counter-offensive, with the results that are now history.

This campaign demonstrates the importance of getting outside assistance to guerrillas. The Vietminh, apparently receiving more aid than the Malayan terrorists, made greater gains. Again, the people of Indo-China, although not all Communists, were not favourably inclined to the continuance of French rule, and desired their independence. These people, instead of aiding the French, remained neutral and aloof. Finally, the French military rigidity—the pill-box technique—in dealing with the Vietminh was inadequate. No war, and particularly no guerrilla war, can be won by remaining on the defensive. The French would have been better advised to adopt Mao Tse-Tung's advice and fight the enemy with his own weapons, i.e., the employment of anti-guerrilla or Special Forces.

#### Malaya 1948-1955

The present Malayan Races Liberation Army (MRLA) began as a British-trained guerrilla force just prior to the fall of Singapore. It was then known as the Malayan Peoples' Anti-Japanese Army (MPAJA) until it changed its name in 1948. After the surrender of Japan the Malayan Communist Party (MCP) disbanded the guerrilla army, then numbering 8,000 men, but retained the nucleus of the military organization and possession of dumps of weapons and ammunition concealed in the jungle. In June 1948 the MCP had provoked terrorism and murder through propaganda and industrial strife, and the Emergency was declared.

Malaya had a narrow escape. The country was unprepared for war. Its police force was untrained and ill-equipped to combat large-scale internal hostilities. The MRLA possessed every initial advantage an army could desire. Its total strength was unknown. It could launch attacks on any rubber estate, tin mine, police station, village or town at any time with complete success. Unlike the defenders, it had plenty of arms and ammunition. Its leaders were experienced guerrillas, particularly Chen Ping, the present Secretary-General of the MCP, who has a genius for Communist organization.

The guerrilla activities of the MRLA failed. They failed because their forces lacked the equipment for special, modern guerrilla warfare, such as radio communications and transport. Then terrorism and murder alienated the people whose support would have won greater victories for the Communists. An-



**A Sakai (Malayan Aborigine) Family**

other important reason was the stand made by the producers of rubber and tin, who fought back. General Briggs and General Temples struck a crippling blow at the guerrillas' supply organization—the Min Yuen or Peoples' Movement. This was composed of civilian supporters of the MRLA, who provided food, money and information and were living in "squatter" areas at the edge of the jungle. The ad-

ministration had them moved and resettled in completely new villages, which were wired and the outskirts cleared. These villages were guarded by police or army units. The guerrillas were thus cut off from their regular sources of supply.

The MRLA, who have now retired into the deep jungle of Perak, Pahang and Kelantan, have one last trump card. They have bribed

and forced the Sakai—the aboriginal people of Malaya—to perform the same function as did the Min Yuen earlier. The task of destroying the guerrillas in their jungle fastnesses will be facilitated by the winning over to our side of the Sakai.

The guerrillas are training and regrouping in different hidden bases in the jungle. They are short of arms and recruits, but they know that time is on their side. They maintain that China will come to their aid either via Indo-China or by direct assault on Malaya. The comrades are also reminded that Mao Tse-Tung and his men "lived in the Chinese jungle" for thirty years before they won China. "What he did," they say, "we can do."

#### Burma 1943-44

We have seen how the Russian guerrillas operated against the German Army. Similar aims were achieved by British forces in Burma, although these forces were on a different plane. There, General Wingate's forces operated behind the Japanese lines, but with the difference that they were composed of organized and disciplined military units of the Regular Forces. No study of modern guerrilla warfare is complete without examining the work of the Special Forces, as they are generally known, whose aim is the same as that of local guerrilla units.

In February 1943, Wingate led a force of 3,000 men with mules and bullocks across the Chindwin and Irrawaddy Rivers into the rear of the Japanese area of operations in Burma. He proceeded on a campaign of harrying Japanese communications, sabotaging dumps and

generally diverting the Japanese from their main efforts to concentrate and plan for the invasion of India. His Long Range Penetration Group—known more familiarly as Chindits—were supplied by air and retained radio communication with Delhi. Over 2,000 of the force returned to India at the end of May, leaving approximately 500 prisoners with the Japanese and 500 casualties.

What had this first expedition achieved? In enemy killed, territory captured, liberty restored they had accomplished little, but in its importance to the future for that type of military operation its achievement was great. Advantages gained from this campaign were:—

- (a) The conviction of senior officers that this new theory of warfare would work.
- (b) Increased knowledge of the Japanese methods and reactions.
- (c) The cessation of the Japanese campaign against the Kachin Levies.
- (d) The projected Japanese infiltration beyond the Chindwin did not eventuate.
- (e) The serious interruption of enemy plans, and confusion throughout Burma which the penetration caused, prevented the development of Japanese offensive intentions at that time.

The operation in 1949 was less successful. The Chindits, now raised to a force of 20,000 men with the largest air force seen in the Far East theatre supplied by the U.S., were to open the road from North Burma to the Chinese border down which General Stilwell was to advance. The 14th Army was to move





**General Stilwell and Staff Cross a Stream in North Burma**

from the west and the Japanese armies would be trapped between both forces.

Wingate's plan was to introduce the force into the area of the triangle Indaw-Mogaung-Bhamo, 250 miles behind the Japanese front. Two brigades were to fly in by glider and transport aircraft, and one brigade would march. The force was to hold an enclave into which two ordinary divisions were to be flown. Then after establishing bases, columns would strike against Japanese garrisons, communications and supply routes.

### **Part 3 — Future Guerrilla Warfare**

#### **Summary of Lessons**

Guerrilla warfare has been developed to near perfection by the Communists, and in any future war we will have to fight against guer-

The plan eventually had to be modified as a result of the Japanese offensive at Kohima and Imphal. Four brigades finally entered the objective area, three by air and one on foot, and in August 1944, after capturing Mogaung, linked up with Stilwell at Myitkyina. The war in North Burma was over.

Limited though the final role of the Chindits was, one overwhelming lesson emerged from the campaign—the value of air transport in launching and maintaining a force of this character and size.

rillas in our midst. Because guerrillas were generally encountered fighting for us in the last war, the implications of this form of warfare have not been fully understood by us. We encountered guerrillas

or bandits in post-war Malaya and Kenya, the experience of which, though inconclusive, should convince us that we must waste no time in closing the gap of knowledge and experience of this form of warfare, between ourselves and our potential enemies.

This is the major lesson from the past; more specific lessons which have emerged are:—

- (a) The need for training the Regular Army in both guerrilla and anti-guerrilla measures now.
- (b) The preparation and planning in peace of an organization to control, equip and support guerrillas before hostilities commence, so that guerrilla forces can go into action at the outset.
- (c) Co-ordination of the activities of guerrilla units so that their efforts are directed to the attainment of the aim of the regular forces' commander.
- (d) The necessity for ensuring the loyalty and support of the civil population for the guerrillas; and a corollary in the case of enemy occupied territory, not to involve the civil population directly in case of reprisals against them.
- (e) The value of air support in delivery and evacuation of guerrillas and the maintenance of forces.

#### Effects of the Atom Weapon

Undoubtedly great importance will be attached to the need for dispersion in any future war which includes the employment of atomic

weapons. This will apply not only to formations and units but to supply installations, dumps, base areas, industries, ports, etc. In addition to this dispersal, units and facilities will be reduced in size to offer a less attractive atomic target.

The destruction of facilities and sources of supply in rear areas is an important role of guerrilla troops. This dispersal in area, and subsequent increase in number of installations by subdivision into smaller targets, will force the defender to deploy troops more thinly on the ground to perform this task, or compel him to increase the number of protective troops. Either case ensures the success of the guerrillas' aim.

Guerrilla forces were rarely a target for enemy artillery during the last war. This was because of their method of employment—operating in small bands, taking advantage of cover provided by terrain and darkness, so that no worthwhile target was presented. If such methods continue to be followed, there will be no direct threat to guerrilla forces from atomic weapons. This safety will be even more accentuated in the protective jungles of South-East Asia. Although atomic weapons are unlikely to be employed against guerrillas, the destruction and devastation caused by such weapons could be exploited to a great degree by guerrillas.

The need for early warning by regular commanders of the enemys' intention to employ atomic weapons is more vital than in the past. The operation of guerrillas in rear areas as a reliable and speedy source of information will be of great assistance in this regard.

It is not too fantastic to imagine that if these weapons are used in any great quantity the entire regular armies of either side will be forced to break up into small groups and operate in much the same way as the guerrillas are forced to do. The guerrilla forces method of operation referred to above constitutes the best means of protection against atomic attack. It is therefore logical to assume that guerrilla forces will operate in a future atomic war, and South-East Asia with its dense tropical jungle will afford particular scope for guerrilla employment.

### Enemy Guerrilla Employment

At the outset of a future war, it is almost certain that enemy guerrilla activity will be directed at the free countries from within their borders before a shot is fired against enemy regular forces. If the U.S.S.R. or Communist China are opposing us, the Communist Party will organize guerrilla movements for the fight against the armies of their own countries. Initially, it is anticipated that their efforts would be directed to sabotage of industrial and service installations, the fomentation of civil and industrial strife resulting in a dislocation of our war effort, and an attack on the morale of the people through these methods allied to propaganda. In Australia, as in the other free countries, the Communist Party have their organization already in position to turn to this role when their masters in Moscow and Peking order them. Subsequently, if the invader came to Australia we would have to contend with the enemy guerrilla brigades operating behind

our lines. Allied with our own renegade Communists they would form the Communist Sixth Column.

At same stage our regular forces will be operating against the enemy in the South-East Asian theatre. There the pattern of Communist guerrilla activity is already established. We have had practical experience of it in Malaya, but it is no good relying on our recent experience there entirely. There, guerrillas fought on their own, and had no national army behind them. In any future war, enemy guerrillas will act as auxiliaries to their regular army, as they did in the Russian campaign and more latterly in Indo-China with specific tactics and techniques peculiar to a supporting force.

To the Communists, all means are justified by the end. We would have to be on our guard to prevent assassination of our leaders, both military and political. As occurred in Russia, the poisoning of water facilities can be carried out by one guerrilla; a small atomic bomb can be planted by guerrillas in crowded cities, busy ports, important factories. We have been warned by Stalin himself, who announced to the world at large in 1934: "It would be the most dangerous war for the bourgeoisie," he said, "because such a war would be waged not only at the fronts but also in the rear of the enemy. The bourgeoisie need have no doubt that the numerous friends of the working class in the USSR, in Europe and Asia will be sure to strike a blow in the rear of their oppressors."

These "numerous friends of the working class of the USSR" are otherwise known as Partisans of

Peace. They are a species of the sadly familiar collaborator type. Signor Terracini, Communist member of the Italian Senate, said in 1951 of the Partisans of Peace: "They will strike a blow against the rear of their own countrymen, they will instigate civil war, they will form national-revolutionary guerrilla unity, they will wage war on the home front; in short, as partisans of war in defence of freedom, they know what is their duty."

The writing is clearly inscribed on the wall. Let us take warning and act before it is too late.

#### Friendly Guerrilla Action

There are two sides to guerrilla warfare: there is the use of guerrillas by us and the action necessary to combat guerrillas operating against us. Let us first discuss the latter case.

#### Anti-guerrilla

If we act before the outbreak of hostilities, the anti-guerrilla preliminary stages fall outside the task of the armed forces. The Security Service must have a detailed knowledge of the Communist organization throughout the country and be able to apprehend any member at any time. Thus the Government can seize immediately those agents or traitors who could so easily pave the way for the invader. Secondly, by our own use of propaganda, the civilian population may be educated to appreciate the dangers from the renegades within their midst, and the harm caused to the war effort by their actions as unwitting dupes in staging industrial unrest.

The enemy guerrilla force has to be contended with after hostilities have been joined. It is essential

that the army should be trained to combat guerrillas based on a study of their methods, and equipped accordingly. There is no need for special anti-guerrilla units. With well-trained combatant troops, mobile, with good communications, a good intelligence service, and air facilities, the enemy guerrillas can be defeated. To carry out this role, however, the army needs to be trained in this function and a manual of guerrilla warfare should be written, from which the army can train and operate.

#### Friendly Guerrillas

Again this subject can be divided into two parts: the employment of regular units as guerrillas, and the organization of local guerrillas in either Australia or South-East Asia.

In the latter case with regard to South-East Asia planning and preparation must be long range and detailed. The following steps must be taken:—

- (a) The countries of South-East Asia must be wooed politically and convinced of our friendliness. If necessary, our immigration laws must be suitably modified.
- (b) An unceasing propaganda programme, mainly produced by Radio Australia, must be directed to the Asian countries. Our missions in these countries must encourage knowledge of Australia and convince the Asian people of our desire to co-operate on an equal basis with them.
- (c) With the ground prepared by action in (a) and (b), exchange visits must be arranged by political, industrial,

agricultural and service leaders. This would give the services the opportunity to study the people and customs, and to establish contact with opposite numbers.

- (d) Selected officers of the services to undertake language courses—Malayan, Cantonese, Urdu, etc. This should be a requirement for all newly commissioned officers.
- (e) Train selected officers to eventually enter South-East Asian countries with the task of organizing and co-ordinating guerrilla forces recruited from indigenous political or nationalist elements.

With regard to local guerrilla units in Australia a lesson could possibly be taken from the South Africans. In that country, a semi-military force known as Rifle Commandos exists, who are trained in the area of their homes and districts in rifle shooting, field craft and limited minor tactics. The emphasis is on shooting and scouting. A similar organization could be built up here under the guise of Rifle Clubs, with the programme slightly extended to cater for the conversion of these members to guerrillas in the event of invasion.

### Special Forces

Regular units have been employed in the past in this role, e.g., Wingate with his Chindits in Burma, and before that in Ethiopia, Long Range Penetration Groups in North Africa, and nearer Australia, independent companies in New Guinea and Timor. There will frequently be a need for regular forces to fill this role, particularly during the

early stages of a war when our national effort has not been fully geared to the extent of offensive action with large-scale forces; or again to supplement or encourage local guerrilla forces.

However, the formation of special units for this task is both unnecessary and uneconomical. By the end of the war in Burma, every member of the British 14 Army was trained to the Chindit standard, and we can do the same with our own army. The aim should be to train the combatant arms to the standard whereby a short indoctrination course on local requirements for the particular operation scheduled is all that is necessary.

To meet the enemy guerrilla on even terms, however, our organization must be streamlined. The force with its supporting weapons must be able to be flown into the jungle. A small nucleus will require parachute training to clear jungles for subsequent use by helicopters with the main force. The force must be trained to operate from air supply, radio communications must be completely reliable, and the success of the operation will then be dependent on the training and leadership of the force.

### Conclusion

From the foregoing, it should be evident that guerrilla warfare is an important adjunct to the Communist overall plan of waging war. From the theories of Mao Tse-Tung published in 1937, Stalin perfected the employment of this branch of warfare against the Germans, and the success attendant on this experiment has resulted in the wholesale adoption of guerrilla units and

methods by Communist countries and satellites in the post-war years.

Modern dictators have the habit of writing their future plans and having them published. The classical example was that of Hitler, when in 1923 in *Mein Kampf* he warned the world of his plans and intentions. The Japanese were equally explicit, and in 1927 announced their intention of conquering the Far East. This literary output includes prophecies from such well-known Communists as Marx, Lenin, Stalin and Mao Tse-Tung, and their warning is just as precise and ominous to the free world.

There is an urgent necessity for the free nations to plan to meet the threat of guerrillas in any future war. A training manual should be prepared in order that the Army—not only those of the Commonwealth, but the armies of all the free nations—should go into a future war prepared to deal with the guerrilla menace, and to use guerrillas for their own purposes.

Let us take note of the lessons of recent history, and the contemptuous avowals of our potential enemies, and act now—tomorrow will be too late.

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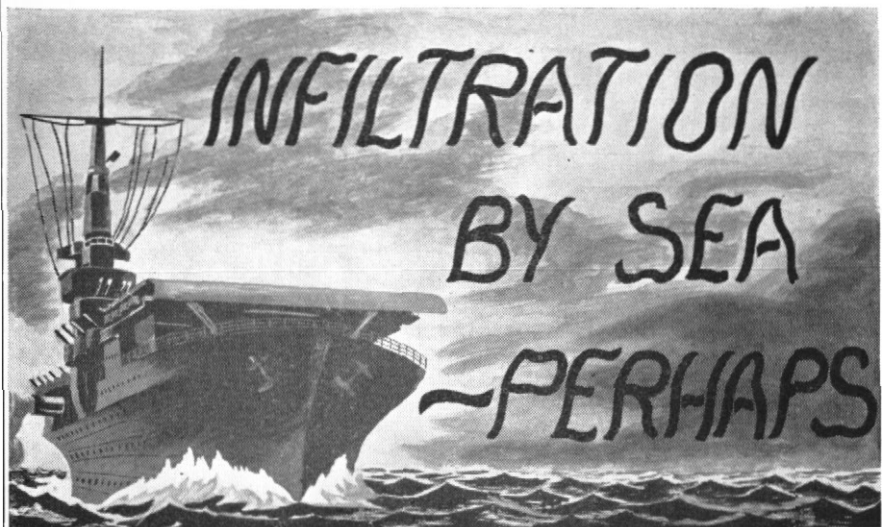
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**T**HE Navy has a staunch, if non-academic, supporter in Commander Millar. In his article in the June 56 issue of the Australian Army Journal Commander Millar concludes with the following statement: "The combination of sea transport to the general area and the use of naval air to the specific area, can, perhaps, provide the most efficient method of infiltration." The key word in Commander Millar's case is "perhaps."

It is obvious that, subject to the necessary technical progress, there is no reason why the naval air arm should not attain the same capabilities as land-based aircraft, but its ultimate performance is completely dependent on its parent navy hav-

ing control of the sea, and the naval air arm does not appear to have made any attempts to develop a troop-carrying command.

Commander Millar suggests that the author spent too little time looking at his atlas, and therefore failed to appreciate the vulnerability of the area to sea attack, yet, in his article in the January 56 issue of the Australian Army Journal the author stated that landings by sea were feasible, and he must therefore have appreciated that there was a coastline to S.E. Asia. However, the atlas does not itself give a complete picture of operations in the area in event of a world war. For this we must turn to some recent military history, viz., the campaign on S.E. Asia in World War II.

In this campaign naval support of operations was conspicuous by its absence. This was no fault of the navy's but rather the result of the global strategy followed by the Allies. The main effort in World War II was in Europe, yet even here in 1944, when industry was fully geared for war, the combined allied navies could not provide sufficient support for simultaneous landings in Northern and Southern France.

There was no naval support available for S.E. Asia. Indeed, the correct strategy of an amphibious attack against Southern Burma had to be abandoned. Burma had to be reconquered from the north and this was to a large extent dependent on air support. In 1942 not only were naval craft not available, the navy could not even supply officers and men to man the ships collected by General (now Field Marshal) Sir William Slim.

One of the early lessons learned in this campaign was that no matter how powerful the units of a fleet may be, they are inviting destruction if they cannot, at least, provide themselves with local air superiority. The *Repulse* and the *Prince of Wales* were destroyed by enemy aircraft.

From the preparations already made by the Western Powers it is reasonable to assume that the main effort in any future World War will again be in Europe. The mainland of America may also be under attack and the Western navies will be fully employed in these areas. There will be little or no direct naval support left for operations in S.E. Asia. We must therefore find another solution, and air power appears to be the answer we seek.

Let us now look at the case when we have complete control of the sea round S.E. Asia. Again the claim that the navy can supply the best means of transportation is rather sweeping.

The Navy can undoubtedly give highly efficient fire support, but it cannot land troops *anywhere* along the coast. It must take into account the various coastal hazards such as shoals, currents, tides, etc. These tend to restrict naval operations.

Long range penetration is not a tip and run affair. Its aim is to provide a more or less permanent force behind the enemy lines raiding his communications, and thus tie down large bodies of troops in attempts to eradicate the raiders.

The raiders operate from a base in the most impenetrable country available. Supply by sea, unless helicopters are available, would result in the same drawbacks as infiltration by foot. The raiders would have to march to their base area and transport all stores from the beaches to the base each time resupply was needed. This would cut down the time available for operations. By air the raiders can drop or land directly in the area chosen as the base for operations, and supplies can similarly be dropped directly to the base, thus saving undue wear and tear on personnel.

The claim that permanent airfields will be amongst the first targets to be liquidated is perfectly sound, but a floating airfield is no safer, being subject to under sea, seaborne and air attack. The paucity of airfields is a problem but it was demonstrated in the last world war it is not insurmountable. It



would appear therefore that the Navy would be of more use in:—

- (a) Giving direct support by air and naval gunfire to raiding forces.
- (b) Evacuating raiding forces whose task has been completed or who are due for reliefs.

In conclusion, it would appear that subject to the necessary control of the sea, which depends on much more than a degree of air control, the navy can give valuable

support to raiding forces by supplying naval and air bombardment and evacuation. It is doubtful if naval forces can be of much use in the infiltration phase. There are sound reasons for assuming that the Navy will not be available in sufficient strength to control the seas round S.E. Asia, and in such case little help could be expected from them. The alternative solution is supplied by using the Air Force and infiltration by air would still appear to be the best means of introducing raiders.

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If there is one thing of which I, as an Historian, am certain, it is this: History never happens. It is brought about by the free decisions of men to be courageous or cowardly in the face of tomorrow. Moral decisions are more fatefully necessary now than in simpler ages.

—Arnold Toynbee.

# SMALL THINGS HAVE BIG APPLICATIONS

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IN agriculture small laboratory and field trials often point the way to the large-scale application of new techniques. Similarly, in the Services, important lessons for the future may come from minor incidents—if we can draw the right inference from them.

There are three examples from the past, each of which provided a test tube demonstration of the shape of things to come. I might point out that at the time, and for long afterwards, no one paid any attention to the lessons to be learnt.

At the battle of Maida in Sicily in 1806 a British army met and defeated a French army. In this engagement the British *line* formation defeated the French *column* formation, as it did regularly from then on to the close of the Napoleonic wars at the battle of Waterloo in 1815.

Napoleon assumed that the French defeats were due to bad generalship, and failed to realize that the real cause lay in the fact that French tactics had become out

of date, an assumption that led to his final downfall.

An analysis of Maida should have led to the conclusion that in anything like equal conditions of manpower and equipment, troops in line would defeat troops in column, for the simple reason that the former could develop enormously greater fire power than the latter. Napoleon never found a tactical answer to the problem of British line formations and reverse slope positions.

At the battle of Omdurman in 1898 Winston Churchill participated in the famous charge of the 21st Lancers. They were opposed by dervishes, many of whom were armed only with spears.

If ever the "arme blanche" was going to be successful, this should have been the occasion. However, the unfortunate fact remains that a count the next morning revealed that there were more dead British troopers on the field than dead dervishes.

If this happened when the opponents were only primitively

armed Africans, what could happen if cavalry charged European troops armed with magazine rifles, let alone machine-guns?

The lesson was confirmed in the Russo-Japanese war of 1904-5. General Sir Ian Hamilton, who was there as an observer, reported: "The best use the Japanese can make of their cavalry is to use the men to carry rice up to the infantry. Cavalry has no more role in warfare today than the elephants of Porus."

The lesson was there for all to read, but throughout World War 1 (1914-18) both sides maintained in France large cavalry forces which in general achieved nothing at all. As late as 1918 General Haig wanted to reduce the small Tank force to provide more infantry, but refused to consider weakening the cavalry.

In Russia the huge cavalry forces clogged the railways with fodder and denuded the farms of tractive power to an extent which contributed heavily to the Russian military collapse.

Despite all this evidence, despite the enormous increase in the fire power of modern armies, Australia, because of minor cavalry successes in the Palestine campaign, armed her two mounted divisions with swords after the war.

Britain had been at war with the Mad Mullah in Somaliland for some 20 years. Millions had been spent in inconclusive and more than once disastrous fighting.

At selected points the Mullah had built strong stone forts. The War Office considered that nothing less than two or three divisions, supported by a railway, would meet the case.

The Secretary of State for the Colonies, Mr. L. S. Amery, approached Winston Churchill, who was then Secretary of State for Air as well as War, and said that he would polish off the Mullah if he could have the loan of an air squadron from Egypt for two or three weeks. It is said that the General Staff scouted the idea as fantastic. Nevertheless it was tried.

A force of one Indian battalion, one battalion of the King's West African Rifles, a camel corps 500 strong and a tribal levy of some 1500 men was assembled.

Twelve aircraft joined the force, and on 21 January 1921 began bombing the Mullah's main camp at Medishi and his fort at Jidali. The Camel Corps occupied Jidali on the 28th and the Mullah was in full retreat. Well bombed on the way, and harassed by the tribal levies, he took refuge in his main fort at Tale. The fort was captured on 9 February after some preliminary bombing. The Mullah escaped with a handful of followers, and as a solitary refugee reached Ethiopia, where he was soon killed.

The lesson was not that aircraft had made ground forces unnecessary, but that a ground force without anti-aircraft weapons and without air support would suffer severely if opposed by a force with air support. Twenty years later the lesson was painfully re-learned.

It behoves every soldier, then, to thoroughly analyze events and deduce the correct lessons from them, and to endeavour to forecast the military implications of new inventions and techniques.

# PHYSICAL TRAINING FOR TROPICAL WARFARE

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**I**F the aim of every future technical exercise with troops was "to teach the troops to maintain themselves fit to fight under tropical conditions," our efforts would be directed towards solving the main problem to be encountered by the AMF in any future conflict in which we are likely to be involved.

Physical well-being, involving good health, physical endurance, and the mental capacity to cope with the many minor irritations which are aggravated by tropical conditions, can be maintained in the tropics—many people spend their whole lives in tropical areas and live to a ripe old age. However, they do not spend their lives fighting and would require to strengthen their "tropic proofing" if they were to do so.

Medical advances during and since World War II have solved most of the problems associated with keeping healthy in climates where diseases flourish and every insect seems to carry a threat to efficiency.

Good discipline is the answer, to ensure that the means of protection available are used by EVERYONE. A simple "check-list" of precautions to be taken against malaria, dysentery, scrub-typhus and the many and varied skin complaints should be background knowledge for every soldier.

However, physical conditioning is a problem which cannot be solved easily or quickly. The high standard of endurance required in sustained operations under tropical conditions is not acquired in a month or so of physical training tables—physical conditioning for tropical warfare must become part of the life of every ARA, National Service and CMF soldier from the commencement of his training.

Physical and recreational training in the AMF should be viewed in the light of what it is to produce in combat efficiency for tropical warfare. For a start, recreational training concerns itself with the soldier's enjoyment of his service and should be regarded as performing an im-

portant but entirely separate function in the Army. Whatever benefits accrue in the form of teamwork or endurance training can be taken as a bonus, but not as a substitute for systematic physical and mental conditioning of troops for arduous jungle operations.

Physical training should aim at producing a soldier who can carry a considerable man-load over long distances and difficult terrain, in excessive heat followed perhaps within a few hours by extreme cold depending upon the elevation, with the route strewn with every conceivable frustration in the form of fallen logs, slippery slopes, water obstacles, bogs and undergrowth, with mosquitoes, mites, ants, centipedes, scorpions and leeches as aids to discomfort. *And still the soldier must be prepared to fight on the instant.*

For a start then, the soldier's personal weapon must become part of his very life. It is his first concern on waking, his constant companion, and feel of it his comfort on falling asleep.

At the School of Infantry recently, "Shoot to Kill" exercises were re-introduced on two long courses. The exercises were conducted for 15 minutes each morning at Reveille by the Course Duty NCOs and students were questioned periodically on their reactions. It was not possible to gauge the effect this daily practice had upon results on the classification range, but at least it could do no harm and probably did some good. The most interesting reaction from the students was that they enjoyed the exercises once they had learned them.

Physical training at Reveille then should consist of "Shoot to Kill" exercises conducted by duty numbers,

with the aim of "marrying up" the soldier with his personal weapon on the instant he awakens. Every ARA, CMF or NS soldier, irrespective of Arm or Service, should now regard daily "Shoot to Kill" exercises carried out at Reveille or the commencement of home training parades, as part of a soldier's life.

Experiments elsewhere have proved the value of these exercises as an aid to good shooting, but they have their place also as part of the physical and mental preparation for tropical warfare. They lose their value unless they are carried out every day that a soldier is in uniform.

Endurance training also must be just as much a matter of background to a soldier's life. The answer can never lie in physical training tables conducted for several periods weekly during National Service or CMF camp training. For a start, nobody can ever make soldiers like them, and nobody will ever devise a safeguard against enthusiastic officers and NCOs cutting into the few precious periods allocated to PT Instructors by handing over their troops late for PT periods. Nor will any number of trained PT instructors compensate for the lack of time available for endurance training. In any case the men to lead the troops during endurance training are the officers and NCOs who will lead them during all other forms of training.

The few PT instructors we are likely to have can better be employed in:—

- (a) Teaching officers and NCOs how to conduct "Shoot to Kill" exercises.
- (b) Organizing and maintaining endurance training equipment.

- (c) Teaching troops physical training tables which they can do in their own time as a means of improving their physical performance.
- (d) Organizing recreational training, including facilities, and teaching games, e.g., basketball. The PT instructors must provide the means, the guidance and the stimulus, and the officers and NCOs the leadership.

The first requirement in endurance training is a daily physical test to stand as a permanent background to all other forms of training, whether in ARA units, NS battalions or CMF camps or parades. The answer lies in a standard confidence course on a company basis throughout the AMF, through which all troops pass on the way to and from all other training.

A standard confidence course calling for an acceptable minimum standard of physical performance is easily constructed and maintained. Moreover, it is cheap compared with gymnasium equipment, it can be erected in the open from local materials anywhere and requires no training to operate. In fact the cost is negligible if bush timbers are used.

It has no value if used once or twice weekly, but if on proceeding to and from training areas the troops are led through the course by their officers and NCOs, several times daily for the duration of their training, it builds into the soldier a recognition of the importance of endurance training—and half the battle is won. Once the soldier realises that his physical performance is inadequate and he has someone to teach him how to improve it, his pride is likely to do the rest.

An important feature is to have facilities in unit lines which a soldier can use in his own time. We can never afford training time for what is likely to prove one of the most important requirements, but with sufficient leadership soldiers will devote spare time to improving THEMSELVES physically.

Standardization of such equipment is also most important, as this ensures that endurance training can be competitive between sub-units or even units, and also permits a check to be kept upon training progress by reports.

Battle efficiency tests also play a part in training for tropical warfare. It is quite obvious, however, that whatever value they may have in assessing the physical efficiency of troops, very few troops can ever be given the progressive training to bring them to the required standard. In fact, only regular units can hope to achieve a high percentage of passes. Even so, every soldier must know the standards required of a soldier physically prepared for tropical warfare. For this reason, lower standards—which must be recognized as lower standards by the troops—should be devised and all NS troops put through during the eighth week of training. It is a matter of troops recognizing the standard required and influencing them to meet them by their own efforts in their own time.

So far there has been no mention of gymnasiums and associated equipment, and for a very good reason indeed. No amount of gymnasium equipment provided to the ARA or CMF will produce the type of physical conditioning required for tropical warfare, nor will any amount of training given to any number of

PT instructors to improve their gymnastic performance bring large numbers of troops into the gymnasium. Trying to resurrect this form of training or to make it pay dividends is flogging a dead horse—too few can really be trained, too many instructors are required, and too much time, and the equipment and its housing is too expensive.

More time and effort can be devoted to providing sporting facilities and *teaching* troops how to play games and sports. The teaching is lacking all too frequently, and yet this is the main reason why it is so difficult to get more troops to play sport.

Fifteen months ago a further experiment was tried at the School of Infantry. Instead of making up "scratch" teams to play volley-ball and basket-ball during P and RT periods for courses, as a matter of policy, all students on every course were taught to play basket-ball during their stay at the School. By concentrating on the one game and setting out to TEACH the students how to play it, large numbers of students have left the School having made a positive gain from their P & RT periods. And if one or two basket-ball teams have been formed somewhere in the Commonwealth as a result, the experiment has been worth while. *Recreational training is not dead running, it must be made to pay dividends.*

However, it has always been found that students are ill-equipped for P & RT. If troops are to play games, they should be able to look the part and not turn up in nondescript PT shoes of an unsatisfactory pattern, and clothing which varies from khaki slacks and singlet to gaily-coloured bathing trunks.

Part of every soldier's equipment should be a pair of blue shorts and gymnasium boots of a standard pattern which will not ruin his feet after half an hour on the basket-ball court. A suitably equipped soldier is more likely to want to play sport whilst off duty than one who knows he will look anything but athletic.

The lead in all physical training for tropical warfare must come from the officers and NCOs who will lead the troops in war. Whatever physical training staff we are likely to have in the future will barely be adequate for the limited tasks mentioned earlier. In peacetime, anyway, officers and NCOs are given all too few opportunities to display leadership qualities with troops, and they should not miss the opportunity given in meeting the challenge offered in physical conditioning for tropical warfare.

### Summary

Lack of training time and facilities hamper the physical conditioning of troops for the conditions they will encounter in tropical warfare.

A practical solution is to make "Shoot to Kill" exercises and endurance training an essential background to all military training for the ARA, NS, and CMF troops, with any trained physical training staff available to teach troops how they can improve themselves physically in their own time, and to organise the necessary equipment.

More value will be gained from recreational training if troops are taught how to play games and are given shorts and satisfactory gymnasium boots.

Standard confidence courses should be devised, preferably provided by sub-unit efforts to offset the lack of finance likely to be available.

## THE MILITARY MIND

AS members of the Australian Army Educational Corps we must obviously be interested in the "military mind," and yet it is doubtful if many of us have ever seriously considered just what is implied by the term. Usually it is used in the derogatory sense of a mentality that lacks flexibility and imagination, but because the common concept of the term is inaccurate there is no reason for us to avoid consideration of its true meaning.

A man cannot remain a member of any large-scale organization that governs his life and training without acquiring habits of thought that tend to separate him from members of other societies. To this extent there is undoubtedly among professional soldiers a pattern of thinking that may be truly regarded as constituting the "military mind." Whether a man feels flattered or humiliated by being told that he possesses a "military mind" depends upon whether he has a true appreciation of the term or shares the common misapprehension.

The true appreciation takes into account the characteristics of the "military mind" produced by our present training, which are:

- (a) The ability to think clearly which is developed by practically all military exercises and is implicit in the formalised method of the military appreciation, and demonstrated in the framing of orders.
- (b) The ability to think under stress which is essential in military operations.
- (c) The ability to receive new ideas, to exercise initiative, and to adapt to new circumstances.

Given these characteristics, the mind is well equipped to meet the stress and strain of our rapidly changing civilization, whether in the competitive struggle of civil life or the supremely fierce test of modern war.

Our own part in military training must be to encourage and feed the endless curiosity of the questioning mind, which will always seek experience beyond the narrow limits of mere professional competence.

—Australian Army Education  
Corps Newsletter, September, 1956.



# THE MOTOR CYCLE and MILITARY TRAINING

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**The Motor Cycle has uses other than for D.R. and M.P. Work**

**A**N excellent article published in Australian Army Journal No. 82, dated March, 1956, discussed the sport of gliding, and has prompted some thought towards a more practical and economical character building sport — Motor Cycling.

Since its inception, the motor cycle has enjoyed an invaluable place in military life by virtue of its dependability, speed and great manoeuvrability for the passage of despatches, etc. It is also capable of fulfilling another worthwhile position, and perhaps more attention should be given to the motor cycle's use for both physical and mental training of NCOs and officers. The British Army has realised that as a sport motor cycling is invaluable for character building and physical training.

The type of motor cycle sport which the British Army most encourages is one-day reliability trials. The high degree of skill

needed to negotiate the difficult country which forms trials sections certainly improves the standard of every-day riding, while the element of danger offers a useful peacetime method of proving courage.

Major David Goode, a well-known British Army motor cyclist, recently wrote in a magazine article: "The Army is a risky profession, and there is no room in it for a man who is not prepared to take risks when the occasion arises. The problem in peacetime training is to provide conditions which will test a man's courage and nerves in an interesting manner. Motor cycle trials riding is one way, because it demands high co-ordination of mind and body, physical fitness, a cool head, and calculated courage; all are essential military qualities."

The sporting side of Army motor cycling activities is organized by its own non-territorial club, the Army Motor Cycling Association, which is affiliated to the Auto Cycling Union (ACU).



Officer Timing Departure of a Member of the A.M.C.A. from a Check Point

The Trials are conducted under ACU regulations, and the courses are set across natural country, encountering farmland, water splashes, mud, unmade roads and rocks (the type of country likely to be traversed in war), with certain parts marked off as "observed sections." Competitors must ride

through these observed sections without touching the ground with their feet or stopping their engines, and they are debited with marks for each error. A cool head and steady hands are essential. Do not confuse Trials with road racing or "scrambles," which are tests of speed and the winner is the first

man past the line. In Trials, pure speed is not the criterion. Emphasis is placed on map reading, skill, timing and absolute dependability of both machine and rider. In short, being at the right place at the right time—and we all know the importance of this in warfare.

The Trials provide both interesting and practical training with a certain amount of nerve strengthening risk. Due to the very low speeds involved, the only injuries resulting from a fall are usually suffered by the rider's dignity, but as in every form of worthwhile sport it is possible for more serious injuries to eventuate. It is also possible to be injured in war, and the sooner soldiers' minds are attuned to possible danger the better their reactions will be when they are confronted by hostile fire.

Similarly, damage to machines is negligible, but the interest aroused assists to stir some life into a lethargic peacetime army and sets the red blood flowing through the chair-borne types who administer its affairs. The machines used in Army Trials must be standard, but the A.M.C.A. allows Army riders to compete in certain civilian trials, notably the International Six Days Trial, which is acknowledged as the Blue Riband of the motor cycling world. In this event teams representing the Army as a whole are entered, and, because standard service motor cycles would stand little chance of success against the highly developed machines used by national teams, "specials" are obtained for the Army riders from the leading manufacturers. In 1954 three teams of three, mounted on BSA, Matchless and Triumph machines,

won eight gold medals and one silver medal.

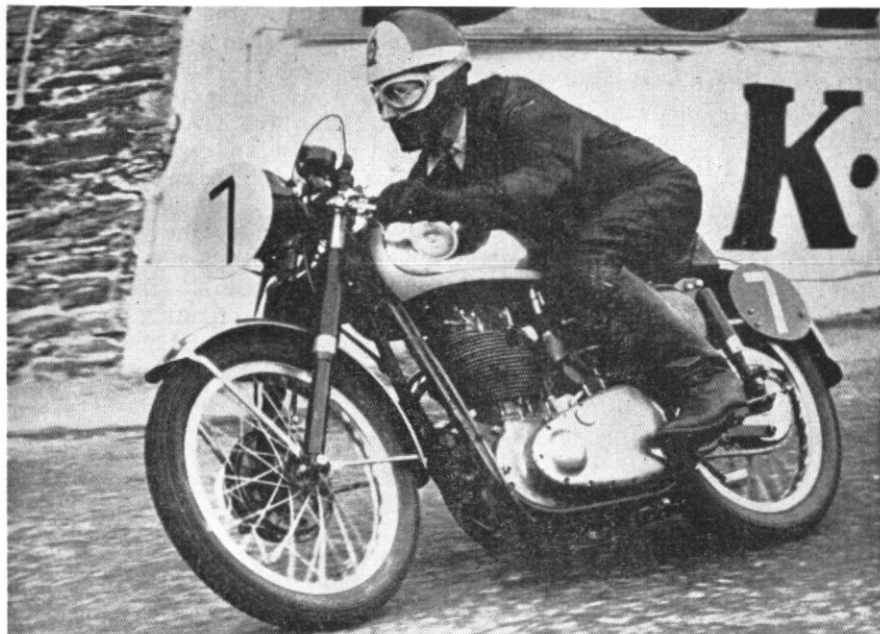
Teamwork and mutual co-operation can quickly be developed with sidecar trials and inter-unit team competitions. In fact, the competitions are even more widespread in Europe, where international army teams meet regularly in friendly events.

Although road racing is not supported by the A.M.C.A., many important successes have been annexed by Army riders in these civilian events. Although he has now left the Army, Captain E. W. Dow, RASC, is probably the best example of these, because he was an all-rounder of great ability. In 1955 he won the Senior Clubman's T.T. in the Isle of Man on his own 500 c.c. B.S.A. Gold Star; he was then already well-known for his participation, as a member of successful Army teams, in the ISDT, in which he had three gold medals to his credit.

The knowledge and experience gained in these trials finds practical application in warfare. Apart from the DR and MP angle, let us consider some of the transport problems which could be relieved by more widespread use of motor cycles in the jungle. Jungle has been chosen because the transport problem is often one of the most serious difficulties confronting a commander in these areas. No doubt many other factors are involved, but these will serve as a thought starter.

1. Basically the motor cycle would be used for transportation of essential personnel who are required frequently to attend conferences and undertake reconnaissance, etc.





**Captain E. W. Dow Winning Senior Clubman's T.T. in the Isle of Man**

By using the motor cycles, junior staff officers and commanders at lower levels would release badly needed four-wheeled vehicles for carriage of wounded and supplies, etc. Therefore, available transport is used to the best advantage, but it is obvious that senior NCOs and officers must be proficient in handling their machines under adverse conditions.

2. The motor cycle is cheap to purchase and maintain and does not have a heavy petrol consumption even in very difficult going.

3. It requires considerably less shipping space than other forms of motorised transport, and can be more readily dropped from planes with parachute assistance.

4. Motor cycles will not cause further damage to poor road surfaces through continued use.

5. In the hands of a rider with previous experience it will cover areas which are completely impassable even to jeeps. Admittedly the "mud baths" encountered in the Pacific areas during the last war are an appalling prospect, but it is truly amazing what a motor cycle will do when handled by a rider with experience in such matters.

It should be emphasised, however, that the American type of machine seen in current Australian service is often more difficult to handle than the lighter British W.D. machines. This is due primarily to excessive weight and the type of clutch and gear operation employed. It can be seen, therefore, that trials provide the essential prior training for practical application in warfare, and in addition can foster greatly

the qualities of leadership and dependability.

The continued reference to dependability is unavoidable, as dependability is synonymous with motor cycle trials. Similarly, with military forces, it is far preferable to have dependable commanders and troops rather than a few "stars" carrying the remainder. The dependable Army will probably win fewer medals but will win more battles.

In Australia, the civilian Motor Cycle Clubs hold regular trials of this type, and provided suitable machines were made available most Army Units (both ARA and CMF) could practise and eventually enter teams in the trials with considerable success.

Some idea of the importance which the British Army attaches to motor cycling can be gained from the fact that a recruiting stand was a feature of the last London Motor Cycle Show at Earls Court!

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#### COMPETITION FOR AUTHORS

The Board of Review has awarded first place and the prize of £5 for the best original articles published in the August and September issues as follows:—

August—"Maintenance—Yesterday and Tomorrow," by Major J. A. Munro, Royal Australian Army Ordnance Corps.

September—"British Commonwealth Integration—an Australian Viewpoint," by Brigadier M. F. Brogan, Australian Staff Corps.

# TO SHOOT OR NOT TO SHOOT



Lieutenant-Colonel Allan W. Mitchell, Artillery, and  
Lieutenant-Colonel Richard T. Knowles, Artillery, USA Army

**W**ORLD War I commanders demanded preparations that would destroy all life. They sought to permit the infantry to "advance to the attack with pipe in mouth." The length of preparations was measured in days—6, 8, or even 16 days. Despite the stupendous expenditure of ammunition and the horrendous staff effort in preparing target dossiers and kindred data, the subsequent infantry attacks achieved only limited

success, for these lengthy serenades indicated to even the dullest enemy mind the location of the attack. Thus forewarned, the enemy discreetly assembled corps, and in some cases armies, and disposed these units in defensive positions beyond the range of the preparations. After advancing through the target area, the attacking force suddenly was confronted with prepared positions as formidable as the first ones. In the closing stages of the war, lengthy preparations gave way to short violent preparations and in

—From *Military Review*, USA.

some instances attacks were launched without any preparations. These methods enjoyed success primarily because they achieved surprise.

Between the two great wars the short preparation continued to be viewed with favour. In a text prepared in 1936 at the Command and General Staff College, entitled "Tactical Employment of Field Artillery," it was stated that preparations would seldom exceed 6 hours and might be as short as 15 minutes. In the same year Soviet Field Service Regulations advocated a 90-minute to a 2-hour preparation. Both documents recommended the short violent approach because the enemy's ability to react and the total loss of surprise militated against lengthy preparations. In general, all adversaries in World War II adhered to the principle of short violent preparations or none at all.

Current trends favour short preparations. New weapons systems, higher yield ammunition, and electronic gadgets to assist in computing data will permit an attacking force to accomplish the desired results of a preparation in a shorter period of time. Improvements in mobility, communications, and intelligence gathering devices will permit a defender to react even faster than in the past—these predictions substantiate the short, violent concept.

What is a preparation? According to the book it is that heavy volume of fire delivered prior to the initiation of the attack. It includes any or all of the following:—Artillery, missiles, other ground-support weapons, air strikes, and naval gunfire. There is a movement

under way to change this definition as far as the time element is concerned; this would have the preparation extending past H-hour and terminating some time prior to the assault phase of the attack. This approach has considerable merit in that any heavy volume of fire initiated prior to H-hour seldom stops at that time, but generally continues until the attacking force breaches the hostile position or actually starts the final assault on the selected objective.

Be that as it may, the official definition, the one used by our allies and most of the powers in the world today, and the one used throughout this article is this: A preparation is that heavy volume of fire delivered prior to the initiation of the attack. Stated another way, it is a heavy volume of fire delivered prior to H-hour.

#### Neutralization Versus Destruction

Before getting into the purposes of a preparation it is well to settle the old argument of whether we should seek neutralization or destruction of hostile personnel, equipment, and installations on the battlefield.

Non-atomic projectiles require a titanic effort in time, weapons, and munitions to *destroy* targets. A general idea of the effort involved is indicated in this example:

In one engagement on a narrow sector of the Soviet front in July 1944, the Soviets brought up 130 trainloads of artillery and nearly 1,000 carloads of shells for an attack. As a part of this battle, the Soviets massed 1,000 guns on a 6-kilometre front, against 272 targets which included 40 gun batteries.



The Soviets claim to have disabled 203 targets, including all 40 German batteries. This example is not an isolated case, for frequently the Soviets massed their artillery to the tune of 250 to 350 guns per kilometre; all this because they were leaning toward destruction in a short period of time.

Another facet of the problem to consider is the time required to replace any given piece of equipment on the battlefield. In World War II it was common practice for supporting elements to deliver such items as tanks to front-line units in less than 24 hours to replace battle losses.

Considering all available means except atomic weapons, normally it is not sound to seek destruction of equipment on the battlefield from the standpoint of time and logistics. Furthermore, from a tactical point of view destruction is not necessary. An experienced attack force commander will be delighted if the fire support agencies can neutralize hostile artillery, other ground-support weapons, and selected hostile positions as well as isolating the battle area. If reasonable means are available, neutralization can be achieved quickly and economically.

The purposes of a preparation are to:

*Gain ascendancy over hostile artillery.*—Better that we attack his artillery before he attacks ours. Also it is better to neutralize his artillery before he can mass effectively on our forces that may be assembling or moving up for the attack. Counter-battery fires are the most vital part of any contemplated preparation. In World War I gas shells

were used effectively to accomplish the desired neutralization of enemy artillery.

*Neutralize infantry weapons.*—If all hostile weapons are located and neutralized prior to H-hour, it will certainly facilitate the accomplishment of the mission of attacking forces. Counter-mortar operations are a must.

*Disrupt hostile command agencies,* thereby reducing the enemy's ability to effectively command and control his defending forces, as well as making it difficult for him to properly time and launch counter-attacks.

*Neutralize enemy observation.*—This will make it difficult for the enemy to conduct effective fire with any supporting weapons that were not located and/or neutralized; it will also detract from his intelligence effort.

*Destroy camouflage* in order to expose personnel and equipment, thereby assisting in effective neutralization of these targets.

*Isolate the battlefield* by preventing movement of reserves. Once an enemy has been found and fixed, and we are ready for the kill, all appropriate steps must be taken to prevent the arrival of reinforcements that might change the entire picture.

*Demoralize the defenders* in the main battle position. If ascendancy is gained over hostile artillery and enemy infantry weapons are neutralized, it will normally produce this purpose as a by-product, the value of which is obvious.

*The over-all purpose of a preparation is to facilitate the subsequent advance of the attacking force.*

### Factors to Consider

The decision to fire a preparation is the responsibility of the force commander. To arrive at a sound decision to shoot or not to shoot, the commander and his staff must consider, very carefully, these factors: targets, means available, effect sought and surprise. Let us analyze each of these factors separately but note their interdependence in particular.

### Targets

In conducting any operation against hostile forces targets are always present—the problem is to find them. In any future conflict an attacking force must accelerate its intelligence effort and every possible device and agency must be zealously used in target acquisition. Firing data can and must be computed as fast as targets are acquired. If only a few located targets exist, a preparation may not necessarily be in order. However, when a large number of targets are definitely located, a preparation is indicated when only the factor of targets is considered. Any condition between few known targets and many known targets would tend to decrease the value of the target factor in arriving at a decision.

An interesting technique employed by the Soviets in World War II, when target information was scanty, was their use of a preparation feint. It was a false preparation, using only enough artillery to make it realistic with the infantry launching an attack with limited forces. The object was to make the Germans open up with their defensive fires and to move local reserves. A considerable number of observers were used in order to

cover the entire front. As soon as sufficient targets were located and the information converted to firing data, a real preparation was fired and the attacking force advanced rapidly to prevent the Germans from relocating their forces.

Promiscuous firing on suspected targets may look very effective on the staff officer's charts and may sound emphatic, but they seldom achieve the desired results. It is sometimes worth while to fire on a few carefully selected, suspected targets that are based on a detailed study of the enemy and his habits. In the long run it is better to fire at definitely located targets and do a good job than it is to "plough the desert" firing at suspected targets.

### Means Available

All fire support means available to the force must be considered as well as ammunition supply problems. Moreover, an estimate must be made of the fire power needed for the three phases of an attack: the preparation, the attack and seizure of the objective, and the consolidation of that objective.

Unless the force is engaged in an unusual type of operation, it should have the wherewithal to conduct a successful attack. Therefore, this factor by itself has very little significance in determining whether to shoot or not to shoot. However, it is vital in determining the duration of any contemplated preparation. This point will be covered later.

The advent of missiles provides the opportunity to the ground commander to extend his preparation far deeper into enemy territory. With his own organic means he can direct a more penetrating interdiction programme and attack targets

such as reserves, communication centres, control facilities, and logistical installations located in areas heretofore accessible only by air.

### Effect Sought

Can the desired neutralization be accomplished before the enemy can change his tactical disposition? An analysis of the targets that will be fired on and the fire support means at our disposal will determine the duration of the contemplated preparation. This duration must then be compared to the time it will take the enemy to change his tactical dispositions. As has been pointed out, our doctrine stresses short violent preparations so that an enemy cannot redispense his general reserves in time to affect the action. As for local reserves, the preparation should, if properly planned so as not to reveal the "when," "where," or "how" of the attack, prohibit any significant movement of these forces. Well-planned interdiction fires, to include tactical air, give added assurance of keeping reserves out of the picture.

If the targets selected cannot be neutralized within reasonable time limits with the means available, then every effort should be made to obtain additional assistance or consideration should be given to attacking without a preparation, particularly if surprise can be achieved.

### Surprise

Surprise is an essential element of any successful attack. It usually reduces logistic expenditures, lowers the casualty rate, and may offer an opportunity for obtaining decisive results. So the successful military

leader, like any competitor, looks for an opportunity to gain surprise. A strong, alert enemy in a well-prepared position on good terrain, with fair to good observation, will be difficult to surprise. A situation such as this generally favours a preparation. If an aggressor is fairly weak, poorly organized, and not dug in, an unexpected attack without a preparation may give spectacular results.

The real trick is to balance the chance for surprise against the risk involved. If we attempt an operation without a preparation, how much damage can the enemy do to us when he discovers our attack? Adequate intelligence regarding the hostile fire-power capability, particularly his atomic and artillery capability, and his counter-preparation technique is essential to answer this question. Troops moving forward, assembling and out in the open preparing for an attack are especially vulnerable and will probably suffer heavy casualties if caught in any hostile counter-preparation. Even if the enemy's firepower is relatively weak, he can still cause considerable damage with well-planned concentrations on troops in the open. The commander who elects to attack without a preparation can partially negate the effects of the enemy counter-preparation by having pre-planned fires for all contingencies available for instant execution when the attack is discovered. Finally, on the one side the commander must consider the risk involved if an attempt is made to achieve surprise by not firing a preparation; on the other side he must consider what will be accomplished by firing a preparation.

Remember this old expression: "You can't have your cake and eat it, too." The commander may be able to eat his cake and have it too; he may be able to fire a preparation and still enjoy a considerable degree of surprise. For example, there is the preparation feint. By firing false preparations in sectors where no attack is contemplated, it may be possible to divert the enemy's attention, his firepower, and even his reserves in that direction. If this is followed by a short violent preparation in the area selected for the attack, the enemy can be confused and surprised. Another technique is to have the fire support agencies conduct heavy firing at a designated time, say beginning morning nautical twilight (BMNT) for several days. Initially, the enemy will be alerted for an attack each day, but eventually he may come to expect no attack. Then, when the day arrives for the attack a preparation at BMNT followed immediately by an attack may well achieve a certain degree of surprise. Many interesting patterns can be developed by varying the time, place, duration and volume of fire of the false preparation to include the use of atomic weapons in the foreseeable future.

One other facet of the problem rears its ugly head. Commanders must ensure that the patterns of the concentrations that are part of their preparations do not telegraph their punches. During World War II the Germans were able in many cases to locate American boundaries by gaps in the artillery concentrations fired and by the different schemes of fire employed in adjacent sectors. In some cases they were able to

identify units by the pattern of artillery fire, and in one case they felt that by analyzing their information they had deduced the identity of the divisions making a corps main effort—and they were right!

#### Planning Sequence

Let us now take a look at the sequence of events that normally leads to a decision to attack. First of all, the unit receives a combat order directing or implying that an attack be initiated and staff estimates are then prepared and presented to the commander. The commander makes his estimate of the situation and in the course of this process he considers the same factors that we have analyzed in discussing our preparation problem. He will certainly be intimately familiar with the fire support means available, enemy dispositions (targets), enemy capabilities and own dispositions (effect sought), and any opportunities for surprise. By the time he knows the *when*, *where*, and *how* of the attack he will also know in general terms how he wants to employ his fire support. He knows that in an attack of any significant size firepower must be employed to neutralize the enemy's forces and firepower. This must be accomplished before any element of the hostile force can endanger the friendly force unnecessarily. With this in mind the commander will then decide whether the massing of a heavy volume of fire to accomplish the desired neutralization should come before, at the same time, or after the troops cross the line of departure. A quick but careful re-examination of the four factors should then make it crystal-clear whether "to shoot or not to shoot."

### Duration

The duration of a preparation may be determined before an estimate is made to solve the shoot or not to shoot problem. For instance, a commander may well start his analysis by answering this question: "If we fire a preparation, how long should it be?" Another approach is to consider the duration question along with the basic question, to shoot or not to shoot. A third approach is to determine the duration of the preparation after arriving at a decision to fire one. In all three cases the same factors—targets, means available, effect sought, and surprise must be considered.

In simplified terms the length of a preparation is determined by the number of targets and the policy of attack. Taking the counter-battery problem for illustrative purposes, let us assume that 24 hostile batteries have been located. It takes two medium or heavy artillery battalions (preferably heavy) firing for 5 minutes to neutralize one hostile artillery battery. Thus if we have 10 battalions available to neutralize 24 hostile batteries it would take 24 minutes to complete the job.

2 battalions x 24 batteries = 48 missions.

48 missions x 5 minutes each = 240 minutes.

240 minutes ÷ 10 battalions = 24 minutes.

Allowances must be made, of course, for other type missions and other means of delivery. If atomic weapons are used, the duration of the preparation will be reduced. An estimated duration may be obtained by determining the time it would

take to neutralize those targets not affected by atomics.

Once a decision has been made to fire a preparation, the force commander should announce how the fire support means available will be employed prior to the preparation. Should lucrative targets be attacked? If so, by what means? Should these targets be kept under surveillance only, until the preparation period? Targets such as mortars and artillery, if fired on before the preparation starts, frequently move to new locations and then become difficult to find; during the attack they again reappear and cause no end of trouble. However, if kept under surveillance until the preparation commenced, they could be effectively neutralized.

### At Corps Level

As an illustration, the corps commander must decide and announce whether an active or silent counter-battery programme will be adopted prior to the preparation. Generally in World War II a silent counter-battery programme was adopted except hostile artillery was taken under attack immediately if it started to fire and if that fire was doing any damage; this was particularly true if the corps command post was taken under fire. All other fire support activities were maintained on as near a normal status as possible.

In an atomic age this consideration of what will be done prior to the preparation is of paramount importance because *the side that shoots first may at the same time be shooting last*. If the enemy possesses a potent atomic capability and indications reveal that he may use it

prior to our attack, a silent counter-battery policy by our forces may be suicidal. Should the enemy launch a devastating atomic counter-preparation *before* we fire our preparation, we may *never* have a chance to shoot.

### Phases

Preparations do not have to be conducted from H-x minutes to H-hour in all cases. It may be desirable to have a 5-minute, or more, period of silence in order to provide observation battalions and radar units an opportunity to locate hostile batteries that are new or that were not neutralized. This was frequently the practice in Europe in World War II.

Long preparations are generally broken down into phases to facilitate planning fires. A typical 3-phase preparation may be handled as follows:—

*Phase One.*—This is generally a counter-battery phase in which friendly fire support means, primarily artillery, are employed to neutralize hostile artillery.

*Phase Two.*—Neutralization of hostile artillery is maintained and long-range interdiction starts. Command posts, communication centres, observation posts, reserve units, and defensive positions are taken under fire.

*Phase Three.*—Neutralization of hostile artillery is maintained; however, the bulk of all fires is now placed on forward enemy positions with priority on known defensive elements and targets that seriously threaten the success of the attack.

There is no time gap between phases; there is merely a gradual

shifting of fires to take care of the various types of targets in a logical sequence. In very short preparations all targets are taken under fire simultaneously.

Operation orders must reflect the commander's desires regarding preparations. Current technique requires that a positive statement on preparations be included in paragraph 3a, entitled "Concept of Operation," of an Operation Order for an attack. This statement will cover one of the following four conditions:—

The attack will be preceded by a preparation (duration may be included); preparations are prohibited; preparations are optional (passing the decision to subordinate commands may be desirable in fluid type situations); preparations are restricted in time, in space, or by unit.

This will take care of the unit as a whole. In addition, if a preparation is to be fired, the duration will be included in the artillery subparagraph.

### Atomics

Atomics have been considered in general terms throughout this article. However, since the magnitude of atomic implications on future warfare is so terrific, the following thoughts have been isolated for emphasis and special consideration.

*Targets.*—Because of the comparative cost and criticality of atomics, we must select targets worthy of the expenditures. Small targets should be attacked with other means.

*Means Available.*—The number of atomic weapons available and their

respective yields should be considered in the same light as non-atomic projectiles.

*Effect Sought.*—Due to the magnitude of an atomic explosion, the effect sought can be achieved so rapidly that the enemy will have no time to change his tactical dispositions. Furthermore, the goal for the preparation can be destruction rather than neutralization, as is the case of non-atomic projectiles.

*Surprise.*—This factor is very significant, since surprise is most desirable in order to maximize the effects of atomics. If we achieve surprise and thus catch the enemy unawares with an atomic preparation, most individuals within the lethal effects radii will become casualties. With other type projectiles the first exploding shell or bomb alerts the enemy and gives many an opportunity to seek protection from the remainder of the preparation.

In general, we can assume that the factors to be considered and the planning sequence are essentially the same when considering a preparation employing atomic warheads. The duration of a preparation will probably be much shorter. The three phases of the preparation probably can be reduced to two. In the first phase we can accomplish the destruction or neutralization of enemy artillery, command posts, communication centres, observation posts, reserve units and defensive positions simultaneously. In the second phase non-atomic fires (delivered by artillery, missiles, air, or mortars) will neutralize the crevices or gaps that are not effectively covered by atomics and will augment the damage caused by the atomic

attack. The phase will be used to further confuse the enemy, delay his reorganization, interdict routes of rescue or reserve units, and disrupt his command or control facilities. For example, high explosive shells or napalm may cause many secondary fires—igniting inflammable materials scattered by the atomic attack.

#### ENEMY CONSIDERATIONS THAT:

##### *Favour a Preparation*

1. Strong force
2. Alert force
3. Good defensive position
4. Good observation
5. Behind good obstacles, river, etc.
6. Strong in firepower
7. No open flank
8. Must be attacked at night employing illumination
9. Chance for surprise is good but risk to own force is great if detected.

##### *May Favour No Preparation*

Weak force  
 Non-alert force  
 Poor position  
 Poor observation  
 Behind no obstacle  
 Weak in firepower  
 Open flank  
 When a night attack without illumination is feasible  
 Chance for surprise is good and risk is negligible.

A final interesting point to consider is that it is possible to provide flank security for a considerable period of time with a preparation using atomic projectiles. In situations where the flanks contain considerable wooded area, atomics dropped there during the preparation can create such blowdown as

to virtually secure the flank for the duration of the attack.

In order to be sure we have a "feeling" of the problem the chart is presented. It can be used *in conjunction* with an analysis of the four factors to reach a decision regarding a preparation.

Situations can be visualized which dictate that a preparation must be fired, but it is difficult to think of any situation in which a preparation *must not* be fired. A good motto for an aggressive commander might well be "*In case of doubt—shoot.*"

#### Summary

Unless atomic weapons are employed, neutralization is the effect sought and not destruction.

The over-all purpose of a preparation is to facilitate the subsequent advance of the attacking force.

The decision to shoot or not to shoot a preparation is the responsibility of the force commander, and is based on a consideration of *targets, means available, effect sought, and surprise.*

In general, it is better to fire at definitely located targets and to do a good job than it is to "plough the desert," firing at suspected targets.

In an atomic war *the side that shoots first may at the same time be shooting last.*

A positive statement regarding preparations must be included in every attack order.

*In case of doubt—Shoot.*

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