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Editor:

COLONEL E. G. KEOGH, MBE, ED, (RL).

Assistant Editor:

MAJOR W. C. NEWMAN, ED

Staff Artist:

MR. G. M. CAPPER.

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Photo: Australian War Memorial, Canberra.

CAPE ENDAIADERE, 1942

After their successful counter-offensive on the Kokoda Trail the Australian troops were joined by the American 32 Division in the Buna-Gona area where the Japanese had established themselves in a strongly fortified beach head.

Early attempts to capture the beach head failed, and it was finally reduced sector by sector after many weeks of bitter hand-to-hand fighting. Since it was almost impossible to knock out the Japanese bunkers with the scant artillery available, a regiment of the Royal Australian Armoured Corps, equipped with light "General Stuart" tanks was brought round by sea from Milne Bay. Although these tanks, the only ones available at the time, were underpowered and too lightly armoured for the task, the lose support they gave the infantry at the cost of heavy casualties contributed very materially to the ultimate clearance of the beach head.

The picture shows an infantry officer passing a note to a tank crew while the tank fires on a Japanese bunker in the Cape Endaiadere area.

DEFEAT IN THE EAST

"Soixante"

Reprinted with permission from the August 1961 issue of the Journal of the Royal United Service Institution, London.

"We aim at peace not only in one country, but also throughout the world. In order to achieve this object we must wage a life and death war. The sacrifice may be great and the time long, but there already lies clearly before us a new world of permanent peace and permanent light."

Mao Tse-tung.

THE VICTORS came in sand-shoes, trudging through the mud with ammunition slung on bamboo poles, signals wire in tricycles, despatch-riders on push bikes. The vanquished went in tanks and armoured cars and half-tracks and lorries, trailing their howitzers and other weapons of conventional war. And all the while the rains the French had prayed for to save Dien Bien Phu splashed down cheerlessly on their retreat from Hanoi, a melancholy ending to an inglorious war.

"There was no honour in defeat here, only humiliation. In total manpower the French and the Vietminh had been almost equal. Technologically, the balance was heavily against the Vietminh. In all the eight years of the war they did not have a single plane. The flights of bombers and fighters that passed over the jungles and rice-fields each day were always French. So were the streams of transports, the Dakotas and Flying Box Cars, rushing supplies to every battle-front. The French had hundreds of artillery pieces; the Vietminh comparatively few."[1] Worse still, the French had been defeated in open combat on ground of their own choosing.

After 1950 the Vietminh fought a war in which every political and military move was a calculated and often predictable step towards victory. Although the strategy and tactics were unorthodox, the details had been announced in speeches and communiques by various Asian communist leaders well before 1950. In spite of this, the great majority of French commanders did not understand these new doctrines of war and thus all their great efforts were in vain. Dien Bien Phu was the final payment for this lack of understanding.

Although this defeat shocked the Western world, it has had

[1] "Out of the Gun", by Dennis Warner. (Hutchinson.)

little effect on British Military thought. Few military leaders understand the doctrines adopted by the Vietminh; even fewer have learned any lessons from this defeat of the most experienced army of the West.

The aim of this paper is to trace the development of the Asian communists' politico-military doctrine that led to the French defeat at Dien Bien Phu. It is not intended to suggest counter-strategy and tactics, but it is hoped that an understanding of this doctrine and of the French defeat will lead the reader to form ideas of his own.

There is an imperative need for the development of such ideas. Our predecessors failed to find a counter to the Japanese tactics in Burma and Malaya before 1942, with the result that many thousands of them died in prison camps. Similarly, many thousands of French soldiers died unnecessarily because their leaders had no counter to Vietminh tactics. Our turn may also come unless a solution is found.

Prelude

The Vietminh rebellion began in 1945, but made little headway against the French until the beginning of 1950. Up to this time the French claimed that one good battalion, supported by air, could move anywhere with impunity. In March, 1950, several regiments of Vietminh troops launched heavy attacks on French posts along a 50-mile stretch of road south-west of Saigon. They destroyed 20 French block-houses, captured 500 arms, and inflicted 1,000 casualties. When a French mobile brigade rushed to counter-attack, the enemy had vanished.

Some weeks later, General Giap, C-in-C Vietminh forces, revealed the "new" tactics employed in this action. In a communique published in Rangoon on 14th April, 1950, he said: "Mobile warfare is characterised by big concentrations of troops of the central units, supported by local military formations and militiamen, who agree on uniting their forces for one fixed battle, after which they should disperse immediately in order to avoid being followed by the enemy. The victorious outcome of the battle must in most cases be guaranteed beforehand. With the adoption of mobile tactics, the need for close co-operation between the troops and the civilians is now more transparent than ever before. The people must give a helpful hand to the troops in the repair of roads in the transport of food and eventually of war booties. In order to save time and labour and to avoid superfluous transport of supplies, the people are also asked to build up local reservoirs of padi and cereals and, as a prerequisite to this, to take part in the nation-wide 'grow more food' campaign. The people can help the Army in other activities too, such as intelligence and liaison, and with militia units which are formed by civilians occasionally fighting alongside the Regular Army. The phrase 'peoples' war' assumes its full meaning with the picture now being drawn in Vietnam both by the Army and the ordinary citizen of the Demo-

cratic Republic. The first battle fought along the lines of mobile warfare has been crowned with complete success. Undoubtedly the days to come will record more resounding victories which will lead to the final triumph of the forces of freedom over colonialism and servitude."

The adoption of these "new" tactics were of special significance. These were the tactics evolved by Mao Tse-tung which led to the final defeat of Chiang Kai-Shek on the mainland of China in 1949. It should not have been too difficult for the French to have realised this. Ho Chi-Minh, the leader of the Vietminh, and General Giap were both ardent Communists. Communist China recognised Ho in January, 1950, and despatched a military mission to Giap's headquarters. From this moment onwards the war followed the classic pattern so clearly illustrated in Mao Tse-tung's writings.

The story of the French defeat at Dien Bien Phu began, therefore, in 1926 when Mao Tse-tung led 1,000 ragged survivors of the disastrous "Autumn Harvest" uprising to the mountains of Hunan and Kiangsi in south China. Out of the struggle for survival in these mountains came a new politico-military science that has twice won overwhelming victories in near-major wars against superior forces. Its achievements were based on rigid rules and on conditions that prevail through much of Asia — and Africa. Strategy and tactics were evolved during the five campaigns against Chiang Kai-Shek between 1930 and 1934. They were developed in Shensi in north-west China after the "Long March" of 1934-35, and were perfected against the Japanese after 1937. Whereas the Chinese Nationalists tried to halt the Japanese advance with disastrous positional battles, losing thousands of lives and enormous quantities of equipment, Mao spurned the positional battle. His combination of mobile and guerilla war resulted in the Communists controlling 100,000,000 people in 19 liberated areas at the time of the Japanese collapse. His tactics finally bore fruit in 1949, when the Kuomintang was destroyed and Communist China was born.

Mao's Apprenticeship —

The Five Annihilation Campaigns

The First Annihilation Campaign

The first campaign began late in 1930 when Chiang Kai-Shek sent 100,000 troops, deployed in eight columns, into the Kiangsi hills. Mao had 30,000 effective troops, but he had completed their political indoctrination and had established a network of guerillas to harass the enemy and gain information. The population had been indoctrinated and were ready for revolution. Mao's tactic was to avoid a positional battle and to wait for an opportunity. "Our strategy is one against ten," he said, "our tactic ten against one." Mao fought a series of minor dispersed actions until his opportunity came. He then concentrated and struck at the principal Kuomintang force at night. He achieved complete surprise and destroyed the Field Commander

and his Staff, a divisional H.Q., and two brigades. "Not a man or a horse escaped," Mao boasted. Five days later, with another Kuomintang division decimated, Chiang Kai-Shek's first annihilation campaign ended in a rout.

The Second Annihilation Campaign

When planning the second annihilation campaign, Chiang Kai-Shek felt that there were two possible courses of action; either to concentrate in one striking force and probably never catch a glimpse of the Red Army or to enfold the Communists by blocking all exits and advancing towards the centre. He chose the latter course. Nearly a month went by before the Red Army moved. Mao wanted to be absolutely sure of victory. "We should strike only when we are positively sure that the enemy's situation, the terrain, the people, and other conditions are all favourable to us and unfavourable to the enemy. There will always be opportunities and we should not rashly accept battle," said Mao. His small force was now surrounded by the Kuomintang Army, but his moment had come. He struck at the 5th Route Army, whose morale was low and who had left themselves open to attack on terms which Mao considered satisfactory. He destroyed them, and in the next 15 days covered over 200 miles on foot through the hills, during which time he fought and won five battles against the encircling divisions. He captured more than 20,000 rifles and then withdrew to rest and regroup deeper in the mountains.

The Third Annihilation Campaign

Chiang Kai-Shek took personal command of the Kuomintang forces in the third annihilation campaign. With 300,000 men, including 100,000 of his elite personal troops, he renewed the attack within a month. His plan was to drive straight into the Red Army's territory and force Mao to make a stand with his back against the Kan River. Mao and his general, Chu-Teh, just managed to escape from the trap. They then seized the initiative and in five days attacked five different columns. They moved fast by night, feinting here and attacking there. Chiang's forces fought blindly and fruitlessly. They were misled, by repeated attacks from guerillas and regional troops, into believing that they were engaging the Red Army when in fact Mao and Chu-Teh were miles away. At the end of three and a half months Chiang withdrew, leaving behind 35,000 deserters and vast quantities of equipment.

The Fourth Annihilation Campaign

In much the same way, and with constant application of the prime principles of mobility, surprise, and concentration of force at the vital point with economy of effort elsewhere, Mao broke the fourth annihilation campaign and captured a further 10,000 rifles for the now fairly elaborately equipped Red Army.

The Fifth Annihilation Campaign

Chiang massed nearly 1,000,000 troops for the fifth annihilation campaign. Meanwhile the Red Army has been built up to 100,000

effective troops. Mao felt ready to pass from the strategic defensive into a full strategic offensive. He planned to carry the war away from the Soviet zones and Kuomintang strongposts and to sweep through Kiangsu, Anhwei, and Kiangsi, using all his remarkable powers of mobility, concentration, and surprise in an offensive that would have linked up with the rebellious Kuomintang groups at Fukien. He then planned to strike Chiang off balance by threatening now at Hangchow, then at Soochow, at Nanking, Nuhu, Nanchang, and Foochow. It was a bold scheme, often skilfully copied years later in Indo-China, where the bewildered French forces in the Campaigns of 1953-54 never knew where next the Vietminh Regular forces might appear. But the Chinese Communist Party was not prepared to accept such an ambitious plan. They felt that the Red Army was strong enough to fight a superior enemy at its own game; positional warfare. Mao was overruled, and under Party pressure the Red Army abandoned the tactics of concentration and manoeuvre. The campaign began in October, 1933, and a year later half of the Red Army had been destroyed. The survivors, under Mao, managed to break through the Kuomintang forces and the *6,000-mile "Long March"* began. Only 20,000 reached their destination in Northern Shensi in 1935.[2]

Development of Mao's Politico-Military Science

Introduction

From the end of 1935 until *1945, Mao developed his politico-*military science on the lessons learned from the past and in the war against Japan. In his speech on "Problems of War and Strategy," Mao said: "Communists must contend for military power for the Party and for the people . . . Every Communist must grasp the truth. Political power grows out of the barrel of the gun . . . Everything in Yenan has been built up by means of the gun. Anything can grow out of the barrel of a gun . . . Whoever wants to seize the political power of the State and to maintain it must have a strong army . . ."

With this aim clearly before him, Mao developed his theories of war. The theories cover the strategy of guerilla war and the evolution of guerilla troops to Regular forces able to engage in mobile warfare. These doctrines *show how a commander* can build a force from a small cadre, capable of destroying a superior enemy. As far as possible, direct quotations from Mao's speeches are used, edited to cut out repetition and factors that have only a local bearing.[3]

"Guerilla war steps out of the bounds of tactics and knocks at the door of strategy, demanding that problems of guerilla warfare be considered from a strategic viewpoint. What deserves our particular attention is that such an extensive as well as protracted guerilla war is a quite new thing in the whole history of

[2] For further details of these campaigns, including sketches of battles, see "Mao Tse-tung", by Robert Payne. (Secker & Warburg.)

[3] "Selected Works of Mao Tse-tung" (Lawrence and Wishart).

war. If our enemy neglects to take this into account, he will certainly come to grief. Guerilla warfare is distinguished from regular warfare and has its own characteristics, hence its strategic problems present quite a number of peculiarities.

"All guiding principles for military operations proceed without exception from one basic principle, i.e. to strive as far as possible to preserve one's own strength and annihilate that of the enemy. The directives or principles that should be adopted in order to attain this aim are as follows:—

(1) On our own initiative, with flexibility and according to plan, carry out offensives in a defensive war, battles of quick decision in a protracted war, and exterior-line operations within interior-line operations;
(2) Co-ordinate with regular warfare;
(3) Establish base areas;
(4) Develop into mobile warfare.

"These items constitute the strategic programme in the entire guerilla war and serve as the necessary means for preserving and expanding our forces, annihilating or ousting the enemy, and co-ordinating with regular warfare to win the final victory.

"Guerilla warfare is different from regular warfare only in degree and in the form of manifestation. Offensives in guerilla warfare generally take the form of surprise attacks. In regular warfare, although surprise attacks should and can be adopted, there are relatively few cases of catching the enemy unprepared. In guerilla warfare there is a great demand for quick decision. This distinguishes it from regular warfare. Thus it can be seen that in guerilla operations, concentration of the biggest possible force, secret and swift actions, surprise attacks on the enemy, and quick decision in battles are required.

"Of course there is in guerilla warfare not only strategic defensive but tactical defensive which includes, among other things, containing and picketing action during a battle; the dispositions for resistance at narrow passes, strategic points, along rivers, or in villages to inflict attrition on the enemy and to wear him out; and rear-guard dispositions during withdrawal. But the basic principle of guerilla warfare must be one of offensive, and its offensive character is even more pronounced than that of regular warfare. Because of its dispersed nature, guerilla warfare can be spread wide, and the principle of dividing up the forces applies in many of its tasks, such as in harassing, containing, and disrupting the enemy, and in mass work, however, when a guerilla detachment or corps is performing the task of annihilating the enemy, and particularly when it is striving to smash an enemy offensive, its main forces must be concentrated. 'Gather a big force to strike at a small enemy segment' remains one of the principles for field operations in guerilla warfare. We must concentrate a preponderant force in every battle and adopt exterior-

line operations to encircle and annihilate the enemy. We must encircle a part of the enemy and annihilate a part of the encircled, if not the whole, and inflict heavy casualties upon them; because to rout ten of the enemy's dvisions is not so effective as to annihilate one of them. It is only by the cumulative effect of many such battles of annihilation that we can change the situation between the enemy and ourselves. However, final results are to be achieved mainly through regular warfare, while guerilla warfare only makes a secondary contribution. Regular warfare and guerilla warfare have one point in common, namely, to add up many minor victories into a major victory."

Initiative, Flexibility and Planning

"In every war the opponents strive with each other for the initiative, since it means freedom of action for an army. The initiatve results from correct estimations of the situation (of both the enemy and ourselves) as well as correct military and political dispositions. The initiative is not the natural gift of genius, but something achieved by an intelligent leader who studies with a receptive mind and makes correct estimations of objective conditions and correct military and political dispositions. Therefore, it is something to be consciously striven for, not something ready-made. The initiative can be finally gained only after success has been scored in an offensive. The offensive is the only means of annihilating the enemy as well as the principal means of preserving oneself, while pure defence and withdrawal can play only a temporary and partial role in preserving oneself and are utterly useless in annihilating the enemy. This principle is basically the same for both regular warfare and guerilla warfare, with only a difference in degree in their forms on manifestation.

"Flexibility is a concrete manifestation of initiative. The directors of guerilla warfare must understand that the flexible employment of forces is the most important means of changing the situation between the enemy and ourselves and gaining the initiative. The chief ways of employing the forces consist in dispersing, concentrating, and shifting them. In employing the guerilla units, the director of guerilla war is like a fisherman casting a net which he should be able to spread out as well as draw in. When a fisherman spreads out his net, he must first find out the depth of the water, the spread of the current, and the presence or absence of obstruction; similarly, when the guerilla units are dispersed we must also be careful not to incur losses through an ignorance of the situation and mistakes in actions. A fisherman, in order to draw in his net, must hold fast the end of the cord; in employing guerilla forces, it is also necessary to maintain liaison and communication and to keep an adequate portion of the main force to hand. As a fisherman must frequently change his place, so guerillas should constantly shift their positions. Generally speaking, the disper-

sion of guerilla units, i.e. 'breaking up the whole into parts' is employed mainly in the following circumstances.

(1) When we threaten the enemy with a wide frontal attack because he is on the defensive and we are still unable to mass our forces to engage him.

(2) When we widely harass and disrupt the enemy in an area where his forces are weak.

(3) When, unable to break through the enemy's encirclement, we try to disperse his attention in order to get away from him.

(4) When we are restricted by the condition of terrain or in matters of supply.

(5) When we carry on work among the population over a vast area.

"But in dispersed actions under any circumstances, attention should be paid to the following:

(1) No absolutely even dispersion of forces should be made, but a larger part of the forces should be kept at a place conveniently situated for its flexible employment, so that any possible exigency can be readily met and the dispersed units can be used to fulfil the main tasks.

(2) The dispersed units should be assigned clearly defined tasks, fields of operation, specific time limits and rendezvous, and ways and means of liaison.

"Concentration of forces, i.e., the method of 'gathering parts into a whole', is adopted largely for the annihilation of an enemy on the offensive, although it is sometimes adopted for the annihilation of certain stationary forces of the enemy when he is on the defensive. Concentration of forces does not mean absolute concentration, but the massing of the main forces in a certain important direction while retaining or despatching a part of the forces in other directions for tasks mentioned.

"Although dispersion and concentration of forces in accordance with circumstances is the principal method in guerilla warfare, we must also know how to shift (or transfer) our forces flexibly. When the enemy feels seriously threatened by the guerillas he will send troops to suppress or attack them. Hence guerilla units should ponder over the circumstances they are in; if it is possible for them to fight, they should fight right on the spot; if not, they should not miss the opportunity to shift themselves swiftly to some other direction. Sometimes the guerillas, for the purpose of smashing the enemy units separately, may, after annihilating an enemy force in one place, shift themselves immediately to another direction to wipe out another enemy force; sometimes the guerillas, finding it inadvisable to fight in one place, may have to disengage themselves immediately from the enemy there and engage him in another direction. If the enemy's forces at a place are particularly strong, the guerilla units should not stay there long, but should shift their positions as speedily as a

torrent or a whirlwind. In general, the shifting of forces should be done secretly and swiftly. Ingenious devices, such as making a noise in the east while attacking in the west, appearing now in the south and now in the north, hit-and-run, and night action, should be constantly employed to mislead, entice, and confuse the enemy. This wisdom in foreseeing changes and right timing is not easy to acquire except for those who study with a receptive mind and take pains to investigate and think things over. In order that flexibility may not become reckless action, a careful consideration of the circumstances is necessary.

"Without planning, it is impossible to win victory in a guerilla war. The operations in a guerilla area as a whole or the operations of a single guerilla detachment must be preceded by the most comprehensive planning possible, which is the preparatory work for all kinds of activities. Questions of how to grasp the situation, to define the tasks, to dispose the forces, to carry out military and political training, to procure supplies, to make arrangements for equipment, to secure the help of the people, etc., should all be carefully considered and thoroughly worked out by guerilla leaders and the results should be checked. Without this there could be no initiative, flexibility, or offensive. The plan for the first battle must be the prelude in the plan for the whole campaign and form an organic part of it. Without a good plan for the whole campaign it is absolutely impossible to fight a really successful first battle. If the battle prejudices the entire campaign rather than benefits it, then victory in such a battle can only be considered a defeat.

"The above points serve to illustrate the first problem concerning the strategic principles of guerilla warfare. Once this problem is solved, guerilla warfare will find in its military leadership a major guarantee of victory.

Co-ordination with Regular Warfare

"The second strategic problem in guerilla warfare is its co-ordination with regular warfare. There are three kinds of co-ordination; in strategy, in campaigns, and in battles. The roles played by the guerillas behind the enemy's rear; i.e., crippling and containing the enemy, disrupting his supply line, and raising the spirits of both the Regular armies and the people of the whole nation, all point to its strategic co-ordination with regular warfare. The great role of strategic co-ordination played by guerilla warfare should not be overlooked. The leaders of the guerilla units and the Regular armies should clearly grasp its significance.

"Guerilla warfare also performs the function of co-ordination in campaigns. For example, in the campaign at Sinkow, north of Taiyuan, the guerillas played a remarkable co-ordinating role both north and south of the Yenmen Pass in wrecking the Tatung-Puchow

railway and the motor roads running through Pinghsing Pass and Yangfang Pass. If each guerilla area or guerilla unit fights all by itself and neglects co-ordination in campaign operations, the role it can still play in the general strategic operations would naturally be reduced in significance.

"Finally, co-ordination in battle is the task of all guerilla units in the neighbourhood of the battlefield on the interior line. In such a case, the guerilla units should take up the tasks assigned by the commander of the Regular force, usually tasks to contain part of the enemy, disrupt his transport, spy on him, and act as guides.

The Establishment of Base Areas

"The third strategic problem of the guerilla war is the establishment of base areas. We must spread a guerilla war throughout the enemy-occupied area, converting the enemy's rear into his front and forcing him to fight ceaselessly. In order to safeguard his interests in his occupied areas, the enemy will certainly intensify every day his activities against the guerillas, and he wll certainly begin his relentless suppression of the guerillas. Thus, it is impossible to sustain guerilla war in the enemy's rear without base areas. The following problems must be understood and solved in the course of actually establishing them; types of base areas, the difference between guerilla areas and guerilla base areas, conditions for the establishment of base areas, consolidation and expansion of base areas.

"In a guerilla war conducted in the enemy's rear, guerilla areas must be distinguished from guerilla base areas. Areas which are surrounded by the enemy but whose central parts are not occupied by him are ready-made base areas where the guerilla units can conveniently develop guerilla warfare. Areas which guerillas could not completely occupy but could only constantly harass and attack are not yet guerilla base areas but only guerilla areas. Such guerilla areas will be transformed into base areas when they have gone through the necessary processes in a guerilla war, that is, when a large number of enemy troops have been annihilated or defeated, the puppet regime destroyed, the activity of the people called forth, popular organisations formed, the people's armed forces developed, and political power established. To convert a guerilla area into a base area is therefore a painstaking process of creation, for whether a guerilla area has been transformed into a base area depends on how far the enemy is annihilated and the masses of the people are aroused. Any of the enemy - occupied territories therefore falls into one of the following three categories: first, guerilla base areas controlled by our guerilla units and our organs of political power; secondly, areas in the grip of imperialism and the puppet regime; and thirdly, intermediate zones contested by both sides, i.e., guerilla areas. The duty of the leaders of guerilla war is to exert their utmost to expand the territories of the first and third kinds and to

reduce the territories of the second kind. This is a strategic task of guerilla warfare.

"The basic condition for the establishment of base areas is that there should be an armed force employed to defeat the enemy and to arouse the people into action. Leaders must exert their utmost to build up one or several guerilla units and, in the course of the struggle, develop them gradually into a guerilla corps and eventually into Regular units and corps. The second condition is that the armed forces should be employed in co-ordination with the masses of the people to defeat the enemy. All power, including the armed forces, should be employed to arouse the people. In the course of such struggles we must arm the people, organise self-defence corps and guerilla units. In the course of such struggles we must form mass organisations; workers, peasants, youth, women, children, merchants, and members of the free professions, according to the degree of their political consciousness. In the course of such struggles we must proceed with the elimination of the forces of collaborators in the open or under cover. Furthermore, the economic conditions should be pointed out. The economic policy for the guerilla base areas must be based on the principles of reasonable distribution of the financial burden and protection of commerce; neither the local political power nor the guerilla units must violate these principles, for otherwise the establishment of base areas and the effort to keep up the guerilla war will be adversely affected.

"Consolidation (i.e. organising the people and training the troops) is necessary for keeping up the war as well as expanding, for without consolidation no vigorous expansion is possible. If we only attend to expansion and forget about consolidation in guerilla warfare, we cannot withstand the enemy's attacks, and the result is that not only is the territory gained in the course of expansion lost, but the very existence of the base areas is endangered.

Development into Mobile Warfare

"The fourth strategic problem in the guerilla war is its development into mobile war. For the transformation of the guerilla units now engaged in a guerilla war into a Regular army which can wage a mobile war, two conditions are required: increase in their numbers and improvement in their quality. For the former we can adopt the method of amalgamating small units; the latter depends on steeling the fighters and improving their armaments in the course of the war.

"The development of guerilla warfare into mobile warfare does not mean the abandonment of guerilla warfare, but the gradual formation, in the midst of an extensively developed guerilla warfare, of a main force capable of conducting a mobile war, round which there should still be numerous guerilla forces carrying on extensive guerilla operations. These numerous guerilla forces add powerful wings to the main force and also serve as an in-

exhaustible reserve for its continuous expansion.

"To raise the quality of the guerilla units we must improve them politically and organisationally along the lines of their equipment, military training, tactics, and discipline; gradually remoulding them in the pattern of the Regular Army and reducing their guerilla style in work. Politically, it is imperative to make both the commanders and the rank and file realise the necessity of raising the guerilla units to the level of the Regular Army, and to guarantee its realisation by means of political work. Organisationally, it is imperative to establish, step by step, Regular military and political units and to acquire such a regular system of supply and medical service as are required of a Regular corps. In the matter of equipment it is imperative to improve its quality, acquire new types of arms, and increase the indispensable means of communication. In the matter of discipline it is imperative to raise the guerilla units to a point where uniform standards are observed, where every order and requisition is fulfilled without fail, and where all laxity and unbridled independence are done away with. It is comparatively easy to reach this goal in places where there are detachments or cadres despatched from the Regular armies. Hence all Regular armies have the responsibility of assisting the guerilla units in their development into Regular armed units.

Mobile War

"The strategy should be that of employing our main forces in mobile warfare, over an extended, shifting, and indefinite front; a strategy depending for success on a high degree of mobility and featured by swift attack and withdrawal, swift concentration and dispersal. The concentration of force we advocate is based on the principle of guaranteeing an absolute or relative superiority on the battlefield. To conduct operations on a front of vital importance we must have an absolutely superior force (e.g., a force of 40,000 was massed to beat Chiang Hui-Tsan's 9,000). In dealing with a weaker foe on a front of no importance, a relatively superior force is sufficient (e.g., 10,000 were employed to beat Liu Ho-Tin's Division of 7,000 in Kienning). We must use large-scale mobile warfare rather than the simple positional war of extensive trench-work, deep-massed lines, and heavy fortifications. This does not mean the abandonment of vital strategic points, which can be defended by positional warfare as long as profitable, but the pivotal strategy must be mobile warfare. Fortified warfare must be utilised, but it will be of auxiliary and secondary strategic importance. Geographically the theatre of the war is so vast that it is possible for us to pursue mobile warfare with the utmost efficiency and with a telling effect on a ponderous, slow-moving war-machine like Japan's."

The War in Vietnam

In his statement of policy written to commemorate the 28th anniversary of the Communist Party of China, Mao Tse-tung

said: "Externally we must unite in a common struggle with the peoples of all countries and with those nations that treat us as equals. This means allying ourselves with the Soviet Union, with every new democratic country, and with the proletariat and broad masses in all other countries. This means forming an international united front. Our dictatorship must unite with all international revolutionary forces. This, then, is our formula, our main experience, our main programme." On 2nd September, 1945, Ho Chi-Minh, an old and experienced revolutionary, proclaimed the new Democratic Republic of Vietnam. Severe fighting broke out in Hanoi in December, 1946.

The person often accused of engineering the events which led to the outbreak of war in December, 1946, was Vo Nguyen Giap. He had been a successful guerilla leader in northern Tongking against the Japanese from 1943 until the end of the second World War. Under his tireless leadership and undeviating adherence to Mao's theories, one man in every three in the Vietminh Regular Army became a member of the Communist Party. The political commisar system was extended to the section level, and Marx and Mao became the troops' daily catechism. Enlistment in the Army became the highest form of patriotic service. Recruits were blooded as village guards, and graduated through militia units and guerilla units to the Regular Army and the Communist Party. Giap coupled Mao's passion for indoctrination with infinite care for detail and rehearsal. He planned to the last shot in a battle, and although this resulted in rigidity in action, it also led to victory.

At the end of 1949 the war was still purely guerilla. The Vietminh forces, scattered indiscriminately over a thousand miles, lacked the essential main striking force and the supporting civil columns that are essential for victory according to Mao's theories. Within a year the adoption of Mao's strategy turned a war of attrition into one of annihilation. Guerillas remained spread throughout the country but they were now co-ordinated with politically indoctrinated militia organisations and controlled from a central headquarters. Thousands of French troops were tied down in static defence. On 15th September, 1950, the new crucial phase of the war began. Three divisions of trained Regulars struck at the whole chain of French posts guarding the strategic Tongking-China border. The first battle lasted two days, the French resisting to the end in the Dongkhe fort on the Langson-Caobang border road. Its fall split the main border garrisons and prevented both effective reinforcement and withdrawal. A French column fighting its way to Caobang, the provincial capital, was ambushed and destroyed. Caobang fell after a week. The French, long accustomed to the sniping mortar and a 20-man ambush, found that they were fighting a full-scale war in which they had lost 3,000 men in the first encounter.

The Vietminh swept south-east along the frontier road, reducing

fort after fort, and in six weeks had secured 100 vital miles of the Vietnam-Chinese border, thus establishing a direct link between China and the northern mountains of the Red River delta which was already a Vietminh sanctuary. Giap then marched south from this base for what he hoped would be the decisive battle of a short war. His target was a French force of two reinforced mobile groups near the village of Vinh Yen at the western apex of the Red River delta. It was Giap's first and only major mistake. The country around Vinh Yen is open, with undulating hills in which the French could manoeuvre. Their support fire power cut Giap's force to pieces, but they failed to win a decisive victory as Giap dispersed when he saw that the battle was lost.

This French victory had an unfortunate result. It led French officers and men to believe that they could beat the Vietminh anywhere in a set-piece battle. This outlook became so pronounced that finally the dominant French strategical theme was somehow to coax the Vietminh into such a battle. This victory thus prepared the way for Dien Bien Phu. The Vietminh lost 9,000 men at Vinh Yen. The result was that the Communist (Laobong) Party took over the leadership of the war. There was no more talk of a quick war and swift victory. Propaganda became of the "blood, sweat, and tears" variety. The first communique issued by the Laobong Party after Vinh Yen called for the abandonment of frontal assault, immediate reversion to guerilla warfare, establishment of more bases in the enemy's rear, an increase of the main forces of the local people's armies, and militia and guerillas on the Mao pattern. The Regular Army was "to be built up and conserved for major victory and not squandered on minor piecemeal, adventuristic operations that risked defeat by attrition."

Vietminh units began to infiltrate into the Red River delta. They established contact with the villagers and set up guerilla areas within the French lines. While the French built their blockhouses and planted their mines and put up barbed wire, the Vietminh went to work on the local population. Every school became a Communist breeding ground of hate always directed firmly against the United States, "whose planes the French flew, whose bombs the French dropped, and whose napalm the French used to destroy homes and villages." The Vice-Minister for Education summed up the whole education plan very aptly in a booklet called "Educational Plans in Vietnam."

"Since the August Revolution of 1945 the intellectual standard of the masses in Vietnam has been considerably raised because it has the support of the masses. No comparison can be drawn between what our people know today with what they knew before the revolution. Four years ago the number of Vietnamese who were able to handle a rifle was small, but today there is scarcely any Regular, militiaman, or guerilla who has not at one

time or other killed a French colonialist with his rifle. Today, all young women from the remotest village are acquainted with collective life and understand the more-production campaign launched by the Government. Any five-year-old boy can distinguish a French single-engined plane delivering supplies or making a reconnaissance from a fighter plane which has the only duty of killing." The peasants were not pro-Vietminh at the beginning. At first they were suspicious and reluctant to accept the new theories. They were essentially conservative and many of them were Catholics, with the result that they needed copious blood-letting and the emotional excitement of the People's Courts and other psychological paraphernalia to stir them into action on behalf of the Vietminh. Later, every peasant was required to contribute three months' service to the Army each year. The fantastic forced marches that Giap achieved with his troops were wholly dependent on this material to provide the expendable coolie chains hundreds of thousands strong. These supply columns melted into the padi fields and jungles at the first sign of French aircraft, reforming when the danger had passed.

Slowly the Vietminh built up their forces in the Red River delta. By September, 1953, they held 2,902 of the 6,492 villages in spite of the French mopping-up operations. These operations achieved little. The bulk of the French forces was dependent on the roads running through the padi. The Vietminh either cut the road into sections and dumped in in the padi, or split it with trenches, or sowed mines under the tarmac. The French spent the days rebuilding the roads and the Vietminh spent the nights destroying them again when the French had withdrawn to the security of their blockhouses. One by one the French forts outside the delta were demolished by night attacks, the Vietminh using rocket launchers and 75mm. guns at point-blank range. French troops were systematically annihilated by ambushes.

Meanwhile, Giap drew off the French forces from the delta by a number of threatening moves against Laos and central Vietnam. This resulted in a number of French airborne operations which met with initial local successes, but the Vietminh invariably faded away before a decisive victory could be gained. Attempts were made to cut the Vietminh lines of communications with China with airborne troops, but in most cases Giap managed to concentrate superior forces at the vital point. In one operation near Hoabinh the French lost over 5,000 men before being forced to withdraw, and in others they were eventually bottled up near their airheads. Again it was Mao's strategy of one against ten and tactic of ten against one. Mixed native commando groups were dropped behind the Vietminh lines in an attempt to "out-guerilla" the guerillas, but these were too weak to influence the outcome of any particular operation.

When all attempts had failed to force Giap to a decision on

ground not of his own choosing, two possible solutions remained; either to attack the enemy's main bases in the Thai Nguyen-Tuyen Quang redoubt, or to place strong forces astride the traditional invasion routes into Laos. In spite of the entreaties of General Gogny, who appeared to understand the nature of the war in Indo-China better than any other commander, General Navarre, the C-in-C, chose to defend Laos. At the same time he hoped to create a sufficiently attractive bait to draw Giap's Regular divisions to a positional battle. The bait chosen turned out to be an oblong plain, about ten miles long and six miles wide, in which the Japanese had once built an airfield. It contained the village of Dien Bien Phu and the road junction to north-western Laos, to China, and to the Porte de Chine in the north-east. The mountains rise steeply from the plain of Dien Bien Phu, giving a basin effect. The floor of the plain is flat with low knolls surrounding the airfield. Here General Navarre hoped finally to force Giap's hand and win a decisive battle in the open on conventional lines.

This plan had certain strategic advantages. A strong French base here would restrict Vietminh movement into northern Laos. It could also serve as a strong base for commando raids behind the Vietminh lines. It could strangle the flow of supplies from China, and by carrying the battle into Vietminh territory, might draw Giap's Regular units from the Red River delta. Strategically this plan was sound, but it had serious tactical disadvantages and was based on bad intelligence. Any force there would be dependent on air supply and on air support in lieu of weight of artillery. This dependence on air supply inevitably led the French to base their defences on the airstrip. In this case the strip was in a bad tactical position. It was overlooked by the surrounding mountains which were too far away to include in the defence layout, but close enough for enemy artillery observation.

The French did not consider the reliance on air supply and support a disadvantage. In November, 1952, the Vietminh had attacked the French position around the airfield at Na-San. The position was a strong one on commanding heights. The Vietminh attacked at night without the usual superiority for a major action, but succeeded in overrunning a number of French positions and were in a commanding position at daybreak. The French were saved by their artillery and by fighter-bombers that drenched the Vietminh with napalm. The Vietminh were thrown back with 1,000 casualties. General Navarre expected the same result at Dien Bien Phu, but Giap had learned some lessons from Na-San.

French intelligence credited Giap with 40 to 60 medium howitzers capable of firing 25,000 rounds. This estimate appears to have been based on Giap's attack on Na-San two years earlier and did not credit him with any improvement. French defences were constructed to withstand a similar artillery attack.

Three French parachute battalions dropped on Dien Bien Phu on 20th November, 1953, scattering a Vietminh mortar unit and several rifle companies that were training there at the time. These withdrew to the high ground around the valley and watched the French preparations. The main defences were sited on the small knolls around the airfield. There were two independent battalion positions on two small hills about a mile to the north of the main positions. Another position, containing most of the artillery was sited on flat ground two and a half miles south of the main position. The size of the plain of Dien Bien Phu prevented the French occupying the high ground surrounding the plain even with covering troops. From 20th November, 1953, until 13th March, 1954, the French built up their forces and dug, wired, and mined.

Dien Bien Phu gave Giap the chance that he had been waiting for. He planned for victory unhurriedly and methodically. Throughout the winter nights the Molotova lorries came in from China and unloaded their cases of 105mm. howitzers, 120mm. mortars and anti-aircraft guns. They were carefully dug in on the hills and camouflaged, allowing the French to prepare without interference and their planes to fly in and out unmolested. However, Giap's main problem was to get General Navarre to commit his reserves before the attack on Dien Bien Phu opened and also to distract him from the Vietminh build-up.

Giap had four divisions in the Thai highlands and in the northern part of central Vietnam, about equal distance between the Red River delta and Luang Prabang in Laos. In December, two of his regiments struck across the Annamite mountains for Thakhek and Seno. They inflicted heavy casualties on a French force sent out to intercept them, which then withdrew to the unfortified airfield at Seno. General Navarre reacted as expected. Seno, 400 miles from the main battle areas, was hurriedly fortified and a separate operational group consisting of approximately 10 battalions was formed to defend it.

Meanwhile, the Vietminh regiment heading for Seno crushed the smaller French posts strung out along the road. A French force sent to the rescue fell into a severe jungle ambush and its leading battalion was practically annihilated. Two French parachute battalions fought a valiant delaying action in front of Seno, but instead of attacking the now well fortified airhead, Giap's forces disappeared into the jungle only to reappear 200 miles south 20 days later. Another Vietminh force then appeared on the Moi Plateau and attacked the lightly defended French posts there. In northern Laos the entire 316th Vietminh Division, after taking the airhead of Lai Chau, 55 miles north of Dien Bien Phu, marched on Laung Prabang. General Navarre hurriedly airlifted ten battalions to this area to counter the threat. Giap had now succeeded in neutralising the bulk of the French reserves. At the same time Vietminh had increased

their hold on the Red River delta, and by January, 1954, held 3,266 villages to the French 1,960.

What happened next cannot be readily explained in terms of military strategy. With Dien Bien Phu threatened, central Laos invaded, northern Laos under attack, and the delta more infiltrated than ever, General Navarre launched a combined land and amphibian attack against a stretch of communist-held coast in southern central Vietnam, that had been in communist hands since 1945 and was of little military use. Yet this operation ("Atlante") diverted 22 battalions from the delta when their presence there may have made Giap think twice about attacking at Dien Bien Phu. Giap's moment had come. He gave orders for the final concentration of his forces at Dien Bien Phu. Four infantry divisions (approximately 45 battalions) and one artillery division concentrated against 12 French infantry battalions and two and a half artillery battalions. Surprise was furthered by keeping secret, until the assault, their anti-aircraft and field artillery capable of cutting off French airlanded supply.

The attack began at 1730 hrs. on 13th March, 1954, with an artillery barrage of an intensity hitherto unknown in the Indo-China war. Instead of the 40 to 60 guns expected, the Vietminh had over 300. The first attack was on one of the isolated Vietminh positions which was manned by a battalion of seasoned veterans. Six Vietminh battalions attacked at dusk under cover of the intense artillery barrage. The position was overrun and the French battalion was annihilated. The second northern battalion position was overrun the following evening, also by six Vietminh battalions. Neither of these two battalion positions was mutually supporting. The French artillery in the southern battalion position was largely neutralised. This position was unable to influence the battle and it was allowed to exist until the end. The French air power was unable to knock out the Vietminh field guns because of the Vietminh anti-aircraft guns. The field guns prevented the French using their airstrip effectively for re-supply while the anti-aircraft guns made the airdrops increasingly inaccurate.

There is little doubt that a sustained Vietminh attack would have destroyed the garrison in the first three days. The French bunkers had been built to withstand harassing mortar fire and 75mms., not the barrages the Vietminh 105mm. guns and 120 mm. mortars put down. Bunkers collapsed under the weight of the fire and casualties were high. But the losses the French inflicted against the "human wave" tactic on the northern battalion positions were severe and for the remainder of the battle Giap was more cautious with the lives of his men.

Attempts were made to create a relief column, and about 5,000 men were gathered for the operation, but the attempt was abandoned because there were insufficient reserves left for an

even chance of survival against the 40,000 Vietminh troops around Dien Bien Phu. Furthermore, the logistical problem of supplying by air a mobile force over several weeks, in addition to supplying Dien Bien Phu with the daily 200 tons needed, was beyond the capabilities of the French. The garrison was, however, reinforced by parachutists. Two battalions were dropped in after the initial Vietminh assault and further companies, platoons, sections, and individuals dropped in as the battle progressed. At the beginning of the battle the French managed to land a few aircraft by moonlight and the wounded were evacuated, but by the end of March the airfield was under machine-gun fire and this was no longer possible. Slowly but methodically the Vietminh gained ground. It now became just a matter of time.

At about 1900 hrs. on 7th May, 1954, Platoon Commander Ba The of the Vietminh planted a red flag with the gold star of the Communist-led Democratic Republic of Vietnam on top of the headquarters bunker of Dien Bien Phu. An army that had begun its existence ten years ago as a small guerilla force had annihilated in open combat the cream of a well-trained Western army equipped with nearly all the modern implements of war. It had destroyed the main fighting strength of:

1st, 2nd, 5th, 8th Colonial paratroop battalions.
1st and 2nd Foreign Legion paratroop battalion.
5th Vietnamese paratroop battalion.
1st and 3rd Battalions of the 13th Demi - Brigade of Foreign Legion.
1st Battalion of the 2nd Foreign Legion Inf. Regt.
3rd Battalion of the 3rd Algerian Tirailleurs.
1st Battalion of the 3rd Algerian Tirailleurs.
1st Battalion of the 4th Moroccan Tirailleurs.
2nd and 3rd Thai Battalions.
3rd Battalion of the 3rd Foreign Legion Regiment.
2nd Battalion of the 1st Algerian Tirailleurs.
5th Battalion of the 7th Algerian Tirailleurs.
Two and a half battalions of Artillery.
Ten independent Thai companies.
One armoured company (10 tanks).
Miscellaneous supporting arms and services.

This disaster only deprived the French of about 4 per cent. of their total military manpower in Indo China, but it broke their will to continue the war. Hostilities ended on 21st July, 1954, after a cease-fire had been negotiated at Geneva. The eight years of war had cost the French about 106,000 dead or missing.

Epilogue

It is not the intention to labour the reader with lessons or even personal conclusions, but only to leave behind a few thoughts.

It is clear that Western technical superiority does not guarantee victory in this type of warfare. Indeed, the story illustrates the limited usefulness of air superiority in such a war.

General L. M. Chassin, the former commander of the French Far Eastern Air Force, goes as far as to assert that such wars cannot even be won by a nuclear arsenal. It would seem that the only way to win is to have men trained and equipped for this type of fighting, and commanders well versed in Mao's politico-military doctrines.

The present British thought on jungle warfare is based on experience against the Japanese. However, the Japanese fought quite differently from Mao's disciples, who seldom depend on an established L of C or withdrawal route. One wonders whether the "jungle hook", cherished as the panacea to all jungle tactical problems, will be successful against this different enemy; or will Mao be right in our context when he said, "our enemy made mistakes. He refused to admit that fighting the Red Army required strategy and tactics different from fighting other forces. Relying on his superiority in various respects, he underestimated us and stuck to his old methods of warfare."

Some people may be inclined to hide behind the comforting thought of our victory over the Chinese in Korea, in the same way as the French comforted themselves with the victory at Vinh Yen. However, Korea and Vinh Yen were as contrary to Mao's doctrines as the Chinese tactics in the 5th annihilation campaign. The fact that all three led to military defeat must have amply demonstrated to them the folly of deviating from Mao's principle that it is unwise to attempt to beat the enemy in the open at his own game when the conditions necessary for a guaranteed victory are absent.

Another comfortable excuse for complacency is the thought that we defeated the Communist guerillas in Malaya before they were able to develop to the strength of those in Vietnam. This is erroneous thinking because there was little chance of such development at that time. Malaya did not have ready-made guerilla material in sufficient numbers (i.e. peasants) to form or support such a force, neither was the countryside able to provide sufficient food for a jungle force of Vietminh size. There was no neighbouring Communist State to provide the constant stream of war materials necessary for decisive operations against a Western Power. Furtheremore the Communists in Malaya had not adopted Mao's techniques. They had not carried out political indoctrination of the villagers, but had relied almost solely on intimidation. There were no militia units, no village guards, no military missions, and no secure guerilla base areas. Although at one stage the guerillas were numbered in some thousands, there was no attempt to concentrate to destroy even one British battalion. In short, they were amateurs in comparison with the Vietminh forces.

The Communist attempt to seize power by force in Malaya was premature. Mao Tse-tung was well aware of this, and in his directive that arrived in Malaya at about the same time as

General Templer, he pointed out the mistake the guerillas had made. He called for a cessation of all acts of sabotage, arson and intimidation, calculated to alienate the masses. He ordered the expansion and consolidation of the mass organisations, and the penetration of trade unions, political parties, the Home Guard, and schools. These latter activities have been reasonably successful in Singapore, and will serve as a valuable foundation should a second military attempt be necessary.

Unless the independent countries of Indo-China, supported by S.E.A.T.O., can find a counter to Mao's politico - military methods, Communist expansion into South-East Asia is inevitable. A study of the map shows that Laos is the next logical objective for Asian Communism, as it is the gateway to the remainder of Indo-China and to Burma. The same process of internal politico-military operations, backed by the external threat of the Chinese "Gun", that led to the fall of North Vietnam may also lead to the fall of Laos unless the Communists can be beaten at their own game. It may even now be too late to save Laos, as many years of political and guerilla infiltration has taken place; which is the basis of Communist success.

If Communist expansion in South-East Asia continues, S.E.A.T.O. may be forced into direct military action under Article 4 of the South-East Asia Collective Defence Treaty. Britain, as a signatory of this Treaty, may be obliged with other S.E.A.T.O. countries to face a highly developed and unorthodox mode of warfare in a region where, unlike Korea, it may well nigh be impossible to impose the conditions for the success of linear and positional war. Unless Mao's doctrines are understood and unless S.E.A.T.O. forces are geared to this mode of warfare, another disaster like Dien Bien Phu may well be inevitable. The words of Somerset Maugham are perhaps appropriate to provide a more hopeful ending: "The inevitable is only what a fool hasn't the wit to avoid."

AMPHIBIANS

Captain A. A. Nolan, BE, AMIE (Aust.)
Royal Australian Electrical and Mechanical Engineers

A NEW FAMILY of amphibians is being developed by the United States Army. Two of the family are in production and are being delivered to the various user units. One is about to start production and two are on the proposed list.

Those developed are (1) Lighter Amphibious Resupply Cargo Class 5 and (2) Barge Amphibious Resupply Cargo Class 60.

The one about to start production is the Lighter Amphibious Resupply Cargo Class 15.

Those on the proposed list are (1) High Speed Lighter Resupply Cargo Class 5 and (2) Barge Amphibious Resupply Cargo Class 300.

This article will discuss the characteristics of the two developed amphibians and provide some information on the remainder.

Lighter Amphibious Resupply Cargo Class 5 (LARC 5)

The lighter amphibious resupply cargo class 5 is a four wheeled amphibian built in aluminium, designed to carry a 5 ton load in the form of a CONEX container. It can be loaded at the ship side, carry its load ashore and be unloaded by a rough terrain fork lift. It is 35 ft. long, 10 ft. wide and 9 ft. 2 ins. high, can travel at 10 knots in the water and up to 30 mph on land. Power is supplied by a Cummins V8 diesel engine which develops 300 hp at 3000 rpm. The power train includes a retarder, converter lockup, torque converter, forward neutral reverse transmission, transfer transmission, differential transmission, output housings, right angle drives, and wheel ends.

The retarder is basically a centrifugal pump without a discharge opening. It is operated by a pedal on the left side of the steering column. When this pedal is depressed a load of oil from the torque converter is dumped into the retarder. At the same time a switch is closed which causes the converter lockup to operate so that there is a solid mechanical connection from the engine to the wheels. The retarder as it tries to pump oil against itself absorbs power from the wheels and consequently slows the vehicle. Its main purpose is to reduce wear on the disc brakes.

The converter is locked up by a set of oil operated clutch packs, the oil supply being controlled by a solenoid valve. The converter is locked up automatically when the retarder pedal is depressed, or when the vehicle is placed in marine drive. The converter may also be locked by operating a switch on the dashboard. This

switch should only be operated in high range, on good roads at speeds above 25 mph. It eliminates any slip in the torque converter and thus provides more power to the wheels.

The torque converter is a 14 inch automobile type which drives a forward neutral reverse transmission. Forward or reverse is selected by means of a lever on the dashboard which operates a valve to allow entry of oil to either the forward or reverse clutch packs. Oil at a pressure of 180 lb. per sq. in. is provided by a gear type pump to activate and hold the clutch packs. The same pump also supplies oil at 10 lb. per sq. in. for clutch pack lubrication purposes.

A propeller shaft transmits power to the transfer transmission. Clutch packs operated at 180 lb. per sq. in. are used in the transfer transmission to select high, neutral or low range for land operation or marine drive for water operation. Drive for marine operation is taken directly from the transfer transmission through a stern tube bearing and strut bearing to the propeller.

For land operation, the drive is directed to a limited slip differential which will not allow differential slip to exceed the ratio of 4:1.

On each end of the differential an output gearing changes the direction of drive through 90° and drives two propeller shafts, one for each wheel, front and rear. At the wheels the drive is again turned through 90° and drives to a planetary gear which drives the wheels.

Two disconnect levers in the cab permit disengagement of each front wheel for highway operation.

The suspension of each wheel is solid, the only articulation being that due to the flexing of the hull. Front wheel steering only is used on the LARC5.

The source of electricity for the LARC5 is an alternator with inbuilt silicon diode rectifiers. At maximum engine speed the alternator frequency is 10 kilocycles per second. This alternating current is half wave rectified with a capacitor bank in circuit to reduce ripple.

Engine cooling is achieved by fresh water which is cooled by a radiator and fan during land operations and by means of a keel cooler in the water. The fan is designed to stop automatically once marine drive is engaged.

A hydraulic system supplies oil for power assisted steering and oil to the three gear type motors which drive the bilge pumps. Each bilge pump is designed to discharge 300 gallons of water per minute.

The LARC5 has proved to be a good performer on land and in the water. When compared with the 2½ ton DUKW it carries a bigger load faster in the water but not as fast on land. The full aluminium body will keep salt water corrosion to a minimum and eliminates the need for preservative paint. It handles rough terrain ashore extremely well even though the wheels are not articulated. It must be realised, however, that the natural en-

vironment for the LARC5 and all the new family of amphibians is water.

Barge Amphibious Resupply Cargo Class 60 (BARC 60)

The barge amphibious resupply cargo class 60 is the largest of the present operative family of amphibians. It is 62 ft. 7 ins. long, 26 ft. 7 ins. wide and 19 ft. 5 ins. high. It is powered by four 671 series GM diesel engines developing 165 horse power each.

One engine drives each wheel and two engines per propeller. The engines will drive the BARC at 14 mph on land fully loaded and at 7 mph in the water. The wheels of the BARC are 10 ft. in diameter which gives good traction ashore. The normal load classification of the BARC is 60 tons but it can carry 100 tons in emergencies. This amphibian is fitted with a bow ramp for unloading ashore.

The BARC utilises four wheel steering with cab selection of either two wheel steering, four wheel track steering, or four wheel crab steering. Crab steering allows the amphibian to move sideways at angles up to 30° from the angle of attack.

The biggest problem with the BARC is shipping it overseas and unloading it at its destination. It is too big to be hold loaded and therefore must be carried as deck cargo. Ships' booms normally will not handle the 88 tons curb weight of the BARC. Several experiments have been conducted to determine whether it is possible to launch the BARC from skids on the ship. Present indications are that this can be done. Another means of transport overseas is to deck load it on an LST and launch the BARC through the bow doors.

Lighter Amphibious Resupply Cargo Class 15 (LARC 15)

The lighter amphibious resupply cargo class 15 is in many ways similar to the LARC 5 except that it is bigger and carries a bigger load. It also has been designed to accept cargo at ship side, carry it ashore and be unloaded by a rough terrain forklift. However, it is fitted with a ramp which permits wheeled vehicles to be driven off once the LARC 15 has landed. It is 45 ft. long, 14 ft. wide and 13 ft. high.

Two Cummins V8 diesel engines with forward neutral reverse transmissions of the same type as is used in the LARC 5 are used to power the LARC 15. These engines will drive the LARC 15 at 20 mph on land and at 9.7 mph in the water.

Drive from each forward neutral reverse transmission is gathered in the transfer transmission which contains the marine drive clutch pack and the high low range clutch packs. Drive through the differential transmission to the wheels is of the same type as is used on the LARC 5.

Two wheel steering, four wheel track steering or four wheel crab steering can be selected as required.

An interesting feature of the LARC 15 is the fact that the forward direction of travel in the water is with the ramp forward and the cabin to the rear, on land the forward direction of

travel is with the cabin forward. If the cabin were forward in water the natural spray caused by amphibian movement would seriously reduce visibility. To achieve this change in direction, the driver's controls and seat can be rotated through 180°.

High Speed LARC 5

This piece of equipment is in the experimental stage. A half size model has been produced for test purposes.

Under the nuclear concept of dispersion, it is thought that supply ships are likely to stand up to five miles off shore and possibly five miles apart. Transfer points could similarly be dispersed resulting in amphibian hauls of up to 25 miles. Consequently the need for a fast amphibian is thought justifiable.

The proposed model is designed with a planing hull, with retractable wheels to keep the hull lines fair and twin propellers, each driven by a 600 hp engine. The proposed speed of this amphibian in the water is 30 knots. The main disadvantage of the high speed amphibian is the high power required to drive it, viz., 1200 hp as compared with the LARC 5 travelling at 10 knots with 300 hp.

BARC 300

This piece of equipment is being considered in order to overcome the shipping problem of the BARC 60. The BARC 300 will be able to move overseas under its own power.

It will be an 8-wheeled amphibian powered by four 600 hp diesel engines, one engine for each pair of wheels and two engines per propeller. The BARC 300 will have a remarkable cargo carrying capacity. It would be able to carry ashore a troop of tanks. It will be very difficult for the BARC 300 to move overland but it should be able to get ashore onto a beach and move to the inshore edge of that beach.

Summary

It is considered that this new family of amphibians will eventually replace the current range of landing craft including the LCU. They have the advantage of being able to clear the beach area and move to an inland transfer point under cover, and thereby keep the beach line clear. Transfer points, however, must be as close to the beach as the tactical situation will allow since the amphibians can perform best in the water and lengthy overland journeys will be a misuse of the equipment.

ABCA

THE AMERICAN - BRITISH - CANADIAN - AUSTRALIAN STANDARDISATION PROGRAMME

Lieutenant Colonel Kenneth G. Groom,
United States Army

DIFFERENCES in weapons, ammunition, field equipment, procedures and doctrine often hindered battlefield performance when the United States, British, Canadian and Australian armies fought side by side in World War II. Through the American-British-Canadian-Australian (ABCA) Standardisation Programme, the four armies are resolving these differences and enhancing their ability to fight together in any future war.

Standardisation of materiel and non-materiel items has progressed significantly during the past fifteen years. Until recently, the ABCA programme involved only the armies of the United States, the United Kingdom and Canada. In January 1963, the Australian Army accepted its full membership of this alliance. It is expected that her contribution will be significant, since the experiences of the Australian Army in the South East Asia Area are unique in the annals of Allied military operations.

Under the programme, the major effort is directed toward effecting the greatest possible economies among the member armies through the use of combined technological and scientific resources. For example, exchange of information among the ABCA armies includes sharing of procedures governing tactical doctrine, organisation, intelligence, operations, administration, logistics, research and development, and the design of weapons and equipment in which there is a common interest.

The broad aim of standardisation, of course, is to ensure that there will be no operational,

Lt. Col. Kenneth G. Groom is Chief of the Standardisation Branch, International Division, Office Chief of Research and Development. His 22-year military career has included assignments as Tank Destroyer Company Commander with the 36th Inf Div in Europe; Commander of Gen MacArthur's Honour Guard in Tokyo; Weapons Instructor at Ft Benning, Georgia, and Battalion Commander, 27th Inf "Wolfhounds" in Hawaii. An Infantry Officer, he served for a year at Secretary Joint Staff, United Nations Command, Korea, prior to assignment to Washington in 1961.

materiel or technical obstacles to full co-operation and collaboration among the American, British, Canadian and Australian armies to achieve the greatest benefits at the lowest practicable cost.

Collaboration in research is directed toward solution of mutual problems of pooling knowledge and combining talents of top-ranking scientists in each of the member nations.

None of the ABCA armies is legally compelled to agree to a standard or to join in collaboration and co-ordination leading to a possible standard. Once an army has approved a standard, however, it is morally obligated to conform unless released by agreement of the other armies, or unless the standard item is replaced by a new development. Insofar as manufacturing techniques permit, ABCA materiel and non-materiel items will be identical. As a minimum, items of equipment will have interchangeable parts and assemblies.

For example, if current effort is successful, the ABCA 81mm mortar will satisfy a mutual requirement. It will have a British tube and bipod, a Canadian baseplate and sight, and US fusing for the ammunition. At this writing, Australia's interest in this item is being determined.

An example of "partial" standardisation is the development of the 7.62mm rifle cartridge, for use in different weapons of the four armies. It was adopted by the NATO countries under the Mutual Weapons Development Programme.

The US Army standard machine gun, M60, which fires the NATO 7.62mm cartridge, is undergoing tests in the United Kingdom and Canada and may be adopted as standard by these two countries. This weapon is already standard in the Australian Army.

In the materiel field, there are now over 100 active, formalised ABCA Army Standards and 45 more in the process of completion. In addition, there are over 180 specific agreements which do not require publication of a formal ABC Army Standard. The standards list includes items ranging from spark plugs to vehicles, telephone cable to radio sets, trucks to aircraft, pistol ammunition to medium gun shells, and rifles to missiles.

In the non-materiel field, approximately 100 active procedures and studies have been approved for standardisation. The procedures include such diversified items as operations orders, techniques for minefield laying and recording, adjustment of artillery fire, relief of combat troops, and military mapping. In standardisation parlance, these are called SOLOGS, an acronym used to describe operational and logistical procedures.

Standardisation of both materiel and non-materiel items requires agreement among the armies as to the need for standardisation and application of the principle of "reciprocity". The reciprocity concept among the four armies extends to funding and to the exchange of personnel, materiel, information,

visits and joint use of facilities. The principle covers, for example, the loan of equipment by one army to another for test and evaluation, on a non-reimbursable basis, even though the item loaned may be destroyed in testing.

Perhaps the keystone of the ABCA programme is the principle that a full exchange of information and opinion among the armies is effected with a minimum of formal procedure. Within the limits of national policies, information on the status of all development projects, current doctrine and tactical concepts, is made available.

Consequently, a great volume of information is moving continuously among the armies on a variety of subjects. Standardisation would be virtually impossible without this exchange. Of course, each army has agreed to safeguard classified and proprietary information received from the others in a manner comparable to that found in the originating army.

Differences over standardisation or collaboration are referred to the headquarters of the armies concerned for resolution as early as possible. Minor differences arise on occasion, but the ABCA agreement provides a suitable channel for mediation.

The ABCA Standardisation Programme is administered by the Washington Standardisation Officers (WSO), who are: the Deputy Chief of Research and Development, Headquarters, Department of the Army and the Heads of the British, Canadian and Australian Army Staffs in Washington. The Chairmanship of the WSO rotates annually. (See photograph.)

The WSO is served by a secretariat called the Primary Standardisation Office (PSO). Each country nominates an officer of Lieutenant Colonel rank to the PSO which is situated in the Office of the Chief of Research and Development. The British, Canadian and Australian members are also liaison officers in the International Division of OCRD.

The PSO works on a full-time basis to monitor activities of the Standardisation Committees. It makes arrangements for WSO meetings; reviews reports of meetings and conferences; recommends action to the WSO; records mutual arrangements; and informs the WSO of any differences which may arise among the armies.

The permanent Quadripartite Standardisation Committees, consisting of US, United Kingdom, Canadian and Australian members, meet about every six weeks to establish, maintain and review lists of all projects. The committees activate and assign materiel and non-materiel projects to armies for monitorship, foster collaboration; monitor standardisation requirements; publish Army Standards; coordinate ABCA Army standardisation matters at the working level; and recommend formation of working groups when required.

Six of the committees are involved in the standardisation of end items of materiel. They

The members of the Washington Standardisation Officers (WSO) with a former associate at a social function. Left to right: Col E. J. H. Howard, Australian Army; Maj Gen G. W. Power, US Army; Maj Gen R. E. T. St. John, British Army; Lt Gen D. E. Beach, former US Army member commanding Army Combat Developments Command; and Brig J. A. W. Bennett, Canadian Army.

are the Quadripartite Standardisation Committees for Armaments, Electronics, Engineer, CBR (Chemical-Biological-Radiological), Mobility and Quartermaster. Others are Research Co-ordination, Technical Procedures, Non-materiel, Medical and Dental Standardisation Committees.

Major areas of interest to the Research Co-ordination Committee include: human resources, operations, arctic environment, off-road ground mobility, infrared and ultraviolet, combat surveillance, mapping and medical services.

The Technical Procedures Committee is responsible for co-ordinating standardisation in the field of technical and industrial procedures such as measurement standards, design practices and component repair parts.

The Non-materiel Committee co-ordinates standardisation matters dealing with doctrine and procedures leading to publication of SOLOGS (agreed procedures previously mentioned in the administrative and logistical areas).

Liaison arrangements among the four armies are designed to effect close co-ordination and unity of effort. On the US Army side, there are three standardisation groups, each under

the operational and administrative control of the US Army Chief of Research and Development. The group in London maintains liaison with the British War Office, Ministry of Aviation, and various UK Army field agencies; it also handles NATO and Mutual Weapons Development Programme R & D and standardisation matters. The group in Ottawa provides US Army representation at Army Headquarters, the Defence Research Board and other Canadian Army field agencies. In Canberra, the US Army Senior Standardisation Representative has just established his office in Army Headquarters and is at present determining the scope of his activities and personnel requirements. The groups in London and Ottawa consist of highly qualified members of the US Army technical services as well as the combat arms.

The Tripartite Ad Hoc Working Group on Priority Standardisation Effort met in Washington in November, 1961 and attained results termed "most gratifying". The mission of this high-level group was to give added impetus to the then "ABC" Standardisation Programme. It reached prompt agreement in fostering increased collaboration in research and development in a number of significant areas. Shortly after the meeting, their recommendations were approved by the member countries with very slight modification.

An important off-shoot of the ABCA Programme is the US Army-Canadian Development Sharing Programme. Under provisions of US Army Regulations 1-25, procedures have been set up whereby: (1) qualified Canadian industry may competitively bid on contracts for US Army development projects; (2) the US Army participates in projects which have their inception in Canada; and (3) the US Army may nominate projects which, if acceptable to Canada, may be developed there, utilising Canadian funds and facilities.

Much of the activity in the US Army-Canadian Development Sharing Programme has been in the third category, wherein Canada develops items to fulfil US Army requirements and pays the R & D costs. Of course, by making this financial commitment, Canada has its sights on production of items which may result following a successful development. An important fringe benefit of this programme is that the item eventually developed by Canada may be well suited for ABCA standardisation. The US-Canadian Development Sharing agreement is being revised to further strengthen the collaborative ties existing between these two geographical neighbours.

Of equal importance to the overall ABCA effort is a recently concluded bilateral agreement between the armies of the United States and Australia. In this agreement, the two armies stated common areas of interest in both the materiel and non-materiel fields and pledged full exchange of information on a significant number of items currently standard, or under development, in each of the armies. While this

particular agreement is purely a bilateral expression of co-operation between the US and Australia, it is considered to fully complement efforts resulting from Australia's recent entry into the ABCA Programme.

In a traditional spirit of mutual trust and co-operation, the American, British, Canadian and Australian Armies are ensuring that the problems of yesterday and today will not arise on the battlefield of tomorrow. Of major interest at the moment, of course, is the degree to which the Australian Army may be expected to participate in this programme. The original ABC members agree that the day the Australian Army joined them in this effort signalled a new era of increased co-operation and collaboration among friends of many years standing.

AUSTRALIAN AID TO ASIAN COUNTRIES

The following is a summarised list of the Australian Colombo Plan experts provided up to 31st October, 1963:—

	On Assignment	Completed	Total
Brunei	–	1	1
Burma	1	13	14
Cambodia	–	11	11
Ceylon	–	57	57
India	5	24	29
Indonesia	7	44	51
Laos	–	6	6
Malaysia	24	212	236
Nepal	–	3	3
Pakistan	–	50	50
Philippines	2	24	26
Thailand	11	31	42
Viet Nam	1	19	20
Regional	–	24	24
	51	519	570*

*** This figure denotes the number of assignments undertaken by 472 experts.**

NOTE. In addition, by 31st October, 1963, Australia had provided 113 advisers to the Colombo Plan countries to undertake a total of 217 assignments. One of these advisers is still in the field.

— Current Notes on International Affairs, October, 1963.

A NATIONS APPROACH TO WAR

Captain E. D. M. Cape,
Royal Australian Artillery

SET against the backdrop of overseas events, this article is an attempt to trace the temper of Australia as she moved towards, and entered, World War II. Because time has been compressed, it has naturally followed that generalities have been made. More detailed studies of Australia's unpreparedness economically, administratively and psychologically may be read in the excellent War Memorial works, "War Economy 1939-42" by Butlin and "Government and the People" by Hasluck. The reader is particularly referred to Long's "To Benghazi" where he may read of the emasculation of a peacetime army and the consequences.

For Australia the real spirit of nationhood was born in the First World War. True, the national need had resulted in Federation in 1901, we had sent representative contingents to the Boer War and laid the framework for our place in the world. Then of course our cricketers had been fighting the English since 1876. But Australia grew in stature from that day when the ANZACs went ashore at Gallipoli and gave birth to the mystique and traditions of "the digger". No Australian has been untouched by that event; as schoolchildren we were told in the most elementary text books of the ANZAC adventure. Simpson with his donkey was a symbol, and ANZAC Day itself had an almost religious significance. The recognition won by the 300,000 volunteers who fought in the "war to end wars" was reflected upon the nation as a whole. We had arrived — at the cost of 60,000 lives and many disabled men.

The post-war years ending with the economic depression saw the national effort devoted to land settlement, migration, development of resources, building and investment. The optimistic drive of this land of apparent opportunity suffered a shattering blow when the full force of the depression hit in 1929. The years 1929-35 saw the nation experience a huge unemployment rate, one-third of the work force was affected, and export prices were less than one-third of the pre-depression level. These were

times when interest repayments and the overseas investor's assertion of his right were regarded as hostile acts. Hardship, frustrated careers and disappointment had their legacies. The "class struggle" was given new emphasis, cynicism and distrust had its corrosive effect, and the old enthusiasm along with common interest was fading. Australia's view of her place in world affairs was confused, the mood being one of introspection, and it was widely held that the country should avoid international affairs.

The effects of the depression were to linger on, and both materially and spiritually aggravate the nation during its approach and entrance to war. But what is this talk of war?

Defence Cuts

In November 1929 universal training was abolished in favour of a voluntary system. Then, as the effects of the depression grew, further economies were needed and the Department of Defence was soon under review. Service staffs were reduced, ships paid off, and economies made at the Royal Naval College and the Royal Military College.

An increase in defence expenditure was not made until 1933. This was not due to a brighter financial position as figures show that re-armament grew in advance of economic recovery. Also, some public interest in defence had been stimulated by the Japanese invasion of Northern China in 1931, and by 1933 many groups were vocal in their criticism of Australia's inadequate defences, there was even a "Citizens' Defence Committee" formed in Sydney.

Warnings

Japan was known to be ambitious and therefore a likely enemy; the invasion of China and her subsequent resignation from the League of Nations were clearly danger signals. Germany, now in Hitler's control had commenced re-arming and had also resigned from the League. Even so, one parliamentarian leader speaking in the debate on the 1933-4 Estimates was moved to say: "No country can take and hold Australia. Two hundred thousand men, the flower of the British army and the best trained soldiers in the world, tried to take South Africa from a handful of Boers and were unsuccessful." Elsewhere, some were deploring "attempts to create war hysteria" and pacifists were preaching against the evils of war.

By 1935 Japan had denounced the Washington Naval Treaty of 1922 and refused to renew the London Naval Treaty of 1930. Mussolini had entered the stage and was campaigning in Abyssinia while Hitler was having his triumphs in Europe. The British Government had entered into a naval agreement under which the aggregate strength of the German navy would be restricted to 35 per cent. of the British naval strength. The Germans were jubilant and the *Volkischer Beobachter* said, "Even French diplomacy should be able for once to examine the facts without prejudice." The French were furious and Anthony Eden was

sent to appease them and make it clear that Great Britain regarded it as a move toward a general European settlement — and it was. Germany's military strength was also being increased. In June, 350,000 men born in 1914 were conscripted and reported for medical examination. One report showed that out of 163 examined in two Berlin schoolrooms, only three were rejected; the medical history of every family was considered in the search for hereditary disability. The latter of course had sinister overtones.

It was in 1935 that pamphlets, newspaper articles and books really began to give warnings of Japanese intentions in the Pacific, often they only served to amuse the Australian public. "War in the Pacific is inevitable" said Nathaniel Peffer, author of "Japan in the Pacific". A caustic review in a popular daily poohpoohed his prophecies. His prophecies — "Japan will absorb China or it will be stopped by war." "Russia or America would oppose Japan." "If war between Russia and Japan is averted then a war between Japan and the United States must follow." He said that America would win, ". . . not because of any innate superiority, but by the weight of size, population and natural wealth." But Peffer did not mention Australia as he dismissed the chance of war between Japan and Great Britain as being too unlikely to be considered. This in fact reflected Australia's great reliance on the wider pattern of Empire defence with its emphasis on sea power. Then there was that bastion of British might — the Singapore Naval Base, which was yet to be completed. Future leaders of the A.I.F. had for some time been making official and unofficial comments on this same subject.[1]

"Billy" Hughes in a book of his own warned that security through the League of Nations was a vain hope and said that he was moved to "cold fury" by the "unctuous self-righteousness of Dominion pacifists."[2]

The weathercock of public opinion was swinging round the compass points of apathy, trepidation, desire for peace and the wish to stay away from the word's squabbles. Were these selfish attitudes? Although there is nothing to show that Australians were disinterested in world affairs, there seems to have been a lack of awareness on the part of that still undefined identity, the "average Australian". Everyday matters were far more important when breadwinners were struggling, and arguments were far more likely to occur over a football team's prospects rather than the chances of war. Are things really very different today?

War Clouds

Through 1936 and 1937 the rumblings from Europe were growing louder, Germany had occupied the Rhineland and the campaign in Japan for the "southward advance" was causing concern. By 1937 the Australian Government's Far Eastern policy was influenced by the

[1] See "Malaya 1941-42" by Colonel E. G. Keogh.

[2] W. M. Hughes, "Australia and War Today — The Price of Peace". (1935).

Japanese threat to the extent that any hope of an agreement with that nation was regarded as a chance for gaining time. The results of the Imperial Conference of 1937 saw a firmer approach to rearmament. A new three-year programme of expansion for the services and enlargement of ordnance and ammunition factories followed. In explaining the programme, Mr. Lyons, the Prime Minister, appealed to the people of Australia through the national and commercial radio stations to subscribe to, and support, a defence loan.

The public was slowly being conditioned to the likelihood of war, but 1938 saw a crisis which was to shake the world and decide, once and for all, Australia's participation in the forthcoming war.

The Munich Crisis

Australia was becoming a haven for European refugees, ugly rumours were becoming fact, and Mussolini was aping the master race: "10,000 foreign Jews have been expelled from Italy. The Italian Cabinet has created a superior council to increase the purity of the Italian race."[3] In Spain, bombing of open cities was a taste of things to come, and Hitler's ambitions in Czechoslovakia were creating world tension.

Tension was also reflected on those economic barometers, the stock markets. In New York on 16 September the market declined with a severity recalling the 1929 slump. In Auckland on the same day rumours were rife and crowds surged in the streets awaiting the latest news from Europe. On the 18th there was a clash between police and 40 demonstraters when a party from the Australian League for Peace and Democracy tried to see the German Consul General. ". . . they were refused entry by the caretaker and the party moved to Pitt Street where a genteel brawl followed."[4]

Then, while Carlton forced Collingwood into defeat on the M.C.G., an impatient Hitler forced the issue in the Sudentenland. By the 29th the Czechs were forced to evacuate the Sudenten areas under the terms of the agreement signed by Britain, France, Germany and Italy. Peace had been preserved. All stocks made a remarkable recovery.

The Result

At the outset of the crisis emergency defence measures were taken to ensure some state of readiness. Ships were concentrated, coast and anti-aircraft defences were manned, regular soldiers returned to war stations and plans were made for the strategic employment of the air force. One thing was certain. The policy followed by the Australian Government during the Munich crisis had made her entry to war inevitable. Australia had declared support for Britain in the belief that the Empire was the major world influence for peace when it spoke as one. Australia, therefore, was to share the responsibility of British policy.

[3] AAP 2nd Sep 38.
[4] Sydney Morning Herald (19 Sep 38).

Defence preparations continued quietly — too quietly. Now, at a time when a concentrated national effort was needed, there was sluggish interest; when inspiration and an urgent appeal was necessary, there was nothing.

The first months of 1939 saw public spirited citizens learning first aid and volunteering for air raid precautions. Girls' schools were co-operating to learn first aid and forming companies for the Red Cross emergency services. Organisations such as the Red Cross and the St. Johns Ambulance Brigade were carrying out intensive training within their ranks, first aid posts and ambulance facilities were under review. Pale yellow forms of regsitration for national service were appearing, and applicants were called upon to show whether they were qualified to replace males called up for the services if the need arose. State Governments were reviewing and classifying public works, emergency services and planning for the protection of the civil population during air raids.

The militia was doing its best with old and scarce equipment. At Easter, units were in camp developing their skills and this led to a clerical protest against the holding of military camps during this period. "Men are being robbed of opportunities of worship to learn how to destroy the lives of others."[5] Meanwhile, those who were not robbed of such opportunities were enjoying Easter's full sporting programme. By May, the militia had grown to 75,000.

In a broadcast in April 1939 the Prime Minister firmly announced that manpower, money, materials, economic organisation and self-sacrifice were the prime requisites for defence, not just men training for war. ". . . As taxpayers we must be prepared to pay more; the desire which exists in hundreds of thousands of Australians to be of some use in an emergency must be given full expression." His next words are of special interest in light of our present role in Pacific affairs: "I have been convinced that in the Pacific Australia must regard herself as a principal, providing herself with her own information and maintaining her own diplomatic contacts with foreign powers. I do not mean by this that we are to act in the Pacific as if we were a completely separate power; we must, of course, act as an integral part of the British Empire. We must have the fullest consultation and co-operation with Great Britain, New Zealand, South Africa and Canada. But all these consultations must be on the basis that the primary risk in the Pacific is borne by New Zealand and ourselves" . . . Again — "It is true that we are not a numerous people, but we have vigour, intelligence and resource, and I see no reason why we should not play not only an adult but an effective part in the affairs of the Pacific."

The War Book

The count down to war was now reaching small figures and both the Government and the

[5] Melb. Sun (6 Apr 39).

Opposition were agreed that Australia could not be neutral, or be treated as neutral if Great Britain went to war. A brief study of the Commonwealth War Book is an interesting digression at this point.

The War Book was modelled on the United Kingdom War Book and was prepared by a special section of the Department of Defence. Its purpose was to provide a record of all measures involved in passing from a state of peace to a state of war, and to ensure that all authorities in any way concerned with defence would know what their actions should be in any phase of the proceedings. Not designed for the actual conduct of war, it covered precautionary measures to be taken when war was imminent and the measures to be taken immediately war broke out. Each service had a companion volume, the Army's being the War Book of the AMF.

Preparatory Stage: The Dominions Office was to keep the Prime Minister informed of the sequence of events during a crisis and it was also expected that a warning telegram from the United Kingdom Government would warn Australia of imminent action. Cabinet would be called together and asked to decide whether the precautionary stage should be adopted along with action laid down in a long list. Also, certain prearranged intelligence items would then have to be dealt with — warnings to shipping, the Department of Defence, the three services and so forth. A proclamation declaring the danger of war and instituting the precautionary phase would follow which would then legally create a "time of war" under the Defence Act. If danger passed then this phase would be terminated but if it increased to the point of war then it was planned to enter the War Stage.

War Stage: Normally, this stage would be ordered on the outbreak of hostilities, but it could be ordered beforehand. A telegram from the United Kingdom Government giving notice that it had adopted a war stage would again be the signal for Australian action. A notice in the Commonwealth Gazette would tell the public of the United Kingdom's action and Cabinet would again meet to decide whether Australia should adopt a war stage. If it was so decided a proclamation of the existence of war was to be submitted to the Executive Council and published in the Commonwealth Gazette.

3-2-1 . . .

On 22 August the British Government warned Hitler that Great Britain was determined to fulfil her obligations to Poland and would act if necessary. Australia was informed and the Defence Committee met to prepare recommendations for Cabinet if necessary. Preparatory measures were authorised by Cabinet, and on the night of the 24th the Prime Minister issued a statement that although a peaceful settlement was still possible, no preparation for war could be neglected. The next evening he told the people that war could occur in the next few hours.

Plans for the protection of vital points in the industrial and economic life of New South Wales were implemented by the State Government on the 24th, and bridges, power-stations, water supply and gas services were being guarded by rather self-conscious policemen. It was rumoured in the press that German and Italian ships were heading for neutral ports. In Sydney it was reported that an ichthyologist searching for specimens on North Head was apprehended by Colonel Meredith, the CO of Coast Defences. When asked what he was doing there he replied, "Does that really matter?" Fined £1 with £2/10/- costs at Manly Court!

The people had been asked to be calm and continue their tasks as usual, but the Premier of Tasmania was anything but calm in complaining about the island's vulnerability: "The Federal Government and the military and naval authorities may think that an attack on Tasmania is unlikely, but all history showed the unreliability of military and naval advice. A large scale invasion would be tremendously costly and even impossible. A foe may rather seize an almost defenceless Tasmania and use this island state as a base for the bombing of Sydney and Melbourne."[6]

War!

It was a Friday afternoon in Australia when Berlin stations announced that German troops had crossed the Polish border. Events moved quickly. Cabinet met and by Saturday morning the precautionary stage was adopted. Australia was told that the British Ambassador had delivered an ultimatum to Hitler, the ultimatum to expire at 8 p.m. Eastern Standard Time on Sunday 3 September. When the time came, those listeners with short wave radios heard the British Prime Minister's melancholy voice announce that Great Britain was at war. But in Australia, the all-important telegram did not arrive and so the War Book plans were slightly awry — momentarily. The Naval Department in Melbourne had intercepted a British Naval Signal which contained the order "Commence hostilities at once against Germany." The Prime Minister was informed and it was decided that the broadcast could be accepted as authentic. Within one hour the Executive Council had met, approved the issue of a proclamation, and at 9.15 p.m. the Prime Minister spoke to the nation: "It is my melancholy duty to inform you . . .". Lord Gowrie, the Governor-General, signed the proclamation at 9.55 p.m. and Australia was at war.

Immediate Reactions

Special editions of the daily papers were produced immediately. There were no demonstrations. Crowds gathered, newsboys were rushed and those with papers shared them. Serious little groups discussed the prospects and motorists drew up to hear the news, then gradually the crowds thinned and only isolated groups remained. At least one man in Australia used excitement as an

[6] Melb. Sun (30 Aug 39).

excuse for his actions. When charged with having been armed with a bludgeon and with having assaulted a bricklayer employed with the Department of Defence, a hotel useful of Footscray pleaded, "I had been reading war stories and thought he was a German enemy." He claimed that he was a victim of war hysteria but was still sentenced to three months imprisonment.

The next morning, Monday, there was a continuous flow of enquiries from men eager to enlist. A system of air raid warnings was publicised in the papers and announced on the radio. German aliens regarded as dangerous were being interned whilst others were being kept under surveillance. In Kalgoorlie, eggs, tomatoes and apples were thrown at a Communist speaker when he criticised Australia's entry to war.

Many sporting bodies began to cancel their fixtures in advance. The Australian Golf Team's tour of New Zealand was cancelled as were athletes' arrangements for the Australian Games and the Olympics in Finland. International basketball, hockey and women's cricket were postponed indefinitely. A Rugby team had just landed in England and was recalled, as was the Davis Cup team which was completing the Challenge Round in America. (Australia won.) But racing just had to continue even though some curtailment of race days could possibly be expected. Racing officials anticipated that racing would continue throughout the war and anyway, a cessation of racing would only cause unemployment to thousands, while the State Governments would be deprived of valuable revenue. One Victorian football club had a special problem. St. Kilda's committee considered applying to the League for permission to change its players' colours for the semi-final against Richmond. The club colours were red, white and black — the German national colours. During the previous war the colours were changed to the red, black and yellow of Belgium.

To end this sporting interlude, here is a damning condemnation of Hitler: "It is a pity that Hitler has never played any sport because without its influence he has developed no attributes of a man. Instead he is the perfect bully."[7]

The First Shot

At 0150 hrs on 4 Sep. 39 a coast gun fired the first shot of the war across the bows of a small Bass Strait steamer which, although having passed through Port Phillip Heads, had failed to stop for examination before sailing on to Melbourne. The captain explained that he thought he could enter the bay without heaving to. Under naval regulations all ships had to stop for examination and the event relived a previous occurrence in 1914 when an interstate ship had a shot placed across its bows from the Queenscliff battery. A further coincidence was that the first shots in anger in World War I were fired at the German ship *Pfalz* when it tried to escape from Port Phillip Bay.

[7] *Melb. Sun* (5 Sep 39).

The decision to form an A.I.F. division to be called the 6th was made on 15 September, and Sydney and Melbourne stores were quick to advertise a military raincoat "specially priced at 63/- and styled with a dual buckle device obviating unnecessary buttons."

A lady was soon to write to the Melbourne *Sun* to complain: "Now that many wives are being left behind while husbands enter military camps for long periods, it would be a good idea if married men wore wedding rings, just to remind them that they have wives" — she signed herself "Nag".

The National Outlook

There was an unreal air of expectancy, fear and uncertainty mixed with a spirit of "Hanging out the Washing on the Siegfried Line." It was still a period of awakening. Except for an insignificant minority the nation accepted and indeed hailed its new role, but the war was thousands of miles away and, apart from those directly involved in the direction of the war effort, the people were generally puzzled as to how they would fight. There was no direct threat to Australia at this stage and the immediate role seemed to be to provide wool, foodstuffs and materials. This led the *Sydney Morning Herald* to say that Australia thought of "entering the war on a limited liability basis, and waging it to the last pound of butter and the last bale of wool."[8]

After the first burst of enthusiasm when men were enlisting in their thousands (actions often viewed with amazed curiosity[9]) there followed that peculiar period known as the "Phoney War". For six months the Allies were to face the Germans across the European frontiers where the weapons used were loudspeakers and the written word—a propaganda war.

Not until March 1940 did the Prime Minister lay before the people all the factors that dictated how much Australia should do and how she could do it. By then a complete programme had been drawn up involving industry, munitions production, raising of finance, local defence, equipment and supply. The "Phoney War" was not the type of war to inspire any nation, and in Australia the feeling was one of anti-climax and puzzlement. "Was there really going to be a war?" Peace movements were started and misguided people were trying to repair the peace rather than win the war.

Now, Communists distributing leaflets, prominent and responsible men signing peace manifestos, and the people showing signs of relaxing, we shall leave 1940 and examine the reasons for the mixture of attitudes which we have seen presented to us.

An Appraisal

Anti-climax, puzzlement, unawareness, intertia and division of thought, these have been explained as the picture unfolded.

[8] A parody on Fisher's words in 1914 "to the last man and the last shilling".
[9] See chapter 3 of "To Benghazi" by Gavin Long.

But on top of these factors there was still the major one — The Depression. Australia had recovered but the effects of the depression had struck deep, and the spectre still hung in the air so that caution was the key to the community's thoughts. Unemployment had to be avoided, wage levels preserved, business protected, the economy expanded, markets found overseas. Victory was placed second to the thought that all the benefits of a democracy had to be preserved. There were social problems too. The well-founded belief in "mateship" and equality had taken a tumble, unemployment — the boss — hire and fire — the dole, these had left scars. "Don't do more than you have to" was now a basic principle rather than "let's pull together", and there was a dark suspicion that certain groups were going to profit more than others in the war. Also affected were many young men who had been tainted by misguided pacificism, and the disillusionment of the depression years when so many saw, and sometimes thought they saw, their futures crumbling. It has been suggested that this was one of the reasons why the average age of the 6th Division volunteers was so high.

Firm direction and public airing of the issues involved were lacking but it must not be thought that the national attitude was completely selfish, or rather, self-centred. Australians had been deeply stirred but the confusing undercurrents were affecting her moral strength. During the first six months of the war 22,000 enlisted for overseas service in the A.I.F.; 11,000 had been accepted by the R.A.A.F. and 60,000 were on a waiting list. The 6th Division had arrived in the Middle East, ships of the R.A.N. were in the Mediterranean and R.A.A.F. aircrews had commenced training overseas.

When Germany invaded Denmark and Norway the situation was made more simple. The quick German successes in Holland, Belgium and France, the Dunkirk evacuation, the entry of Italy into the war, the bombing, the shipping losses, Britain's example to the world; these were dramatic events that strengthened the national resolve and gave purpose to a struggle that saw the leader of the Empire with her back to the wall.

But the real awakening was yet to come.

CRITICISM

"A man who blames a recruit for doing something badly should first blame himself for having failed to show him the proper way to do it."

R. C. B. Haking.

Unfortunately, everyday usage has given a one-sided twist to the meaning of the word "criticism". That is, it has come to mean "finding fault". We must of course hold people under us responsible for their actions, and when they are in the wrong we must set them right, but surely we can appreciate the good they do as we condemn the bad. We can mix praise with correction. The best way to criticise is not to blame them but to show them how to do better. Sometimes a word of encouragement, a patient listening to an explanation, or a smile when pointing out an error will work wounders.

From this a definition of criticism might be attempted — A summing up of a man's acts or attitude showing what was right and what was wrong, indicating how error can be eliminated and that which was good improved.

Those of us who are responsible for training men find that our students fall into three classes:—

(i) There are those who do less than they are told and will not try. These are hopeless — better to get rid of them; they will break an instructor's heart, but it is no use trying to bring them on by scolding. They may have a vital spark somewhere, but abuse will not bring it out.

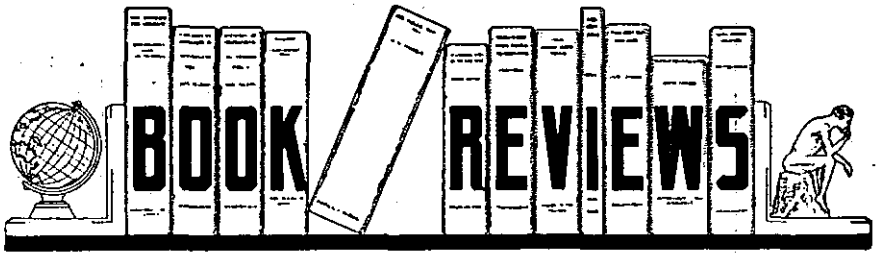
(ii) We have those who do exactly what they are told but lack the initiative to do more. Men like this can be trained up to a certain pitch, but can never climb up the ladder. The Army has use for these; they form the great mass of those members and the rank and file who will not seek promotion. Staunch, worthy troops, but not out for advancement; they can be ruined by too much destructive criticism.

(iii) We have those who are willing to do more than they are told. Sometimes too impetuous, moving beyond their capacity at the moment but men worth encouraging. These are those to be brought forward for promotion. Their enthusiasm can be killed by the cold blast of fault finding, but it can be guided by a judicious mixture of praise and blame. Praise for their initiative and energy and kindly blame for their overdone enthusiasm.

Criticism should never be given cruelly. It is a bitter thing for a man who cannot reply to have to listen to biting sarcastic remarks on his work from his superior. If the man is doing bad work deliberately, he is committing an offence and merits punishment, but if his errors are due to his failure to understand, then he does not deserve abuse, but he does need further instruction on different lines. His work should be examined, what was good commended and what was bad pointed out, and there and then he should be shown the right way.

If a man be slow or if he appears lazy, a sharp word may spur him, but a few encouraging and explanatory words are much more likely to stimulate him to a greater and more continued display of energy.

Anon.



THE MAN WHOSE NAME WAS MUD, by Gavin Casey. (William Heinemann Ltd., London and 317 Collins Street, Melbourne.)

This Australian novel has very little to say about soldiering, but it will do much to remind those of us who spend our lives in the concrete jungles of our big cities that the development of our national resources, about which we are so fond of talking, is being accomplished by men very different from those with whom we commonly associate. It is a story of people, not 9 to 5 city folk nor the dwellers in the far outback, but of the people who farm the marginal lands, who find and work our mineral resources and who run the transport services between the railheads and the new centres of production.

The story begins with an event that was all too common in the land settlement schemes for returned soldiers after World War I. Thousands of men were settled on farms that were too small or too poor to give any real prospect of returning a decent living. Some gave up the struggle in good time, others hung on until foreclosure forced them on to an over-stocked labour market to find dead-end jobs. Then the Depression came to set its seal on the whole sorry business.

At the moment when he was forced off his hopeless farm, Justin Playfield's son was born. In a fit of drunken despair he insisted on naming the boy Mud. Finding a low-paid job on the goldfields, Justin finds solace in alcohol while his courageous wife struggles to bring up the boy in some measure of decency. From there the story follows the fortunes of the boy through adolescence, young manhood, service in World War II, and his progress from a humble beginning in the road transport business to financial success.

The story accurately depicts a segment of Australian society at work and play. There is nothing stilted about these characters. Non-conformists, individualistic, they reflect the zest for life, the good-natured cynicism, the easy tolerance and respect for other people's opinions characteristic of this side of Australian life.

The book is written in the native idiom. People speak as they speak in life. If this treatment is a little startling, it is nowhere offensive. It gives life and authenticity to the story even if it does make it unsuitable for the young. It is a refreshingly natural story about our own folk.

People with memories of the South West Pacific Campaign

will get a good laugh from the satire directed at the famous communiques frequently issued by GHQ.

— E.G.K.

IN STEP WITH A GOAT, by Michael Baldwin. (Hodder and Stoughton Ltd., London and 425 Little Collins Street, Melbourne.)

This is a book about the British Territorial Army, written as a slapstick comedy but without any custard pies.

Following National Service the author is posted to a Territorial Army unit in the same manner as National Servicemen in this Country went to the CMF. In this case the unit is a Coast Defence Artillery Regiment.

The story covers various camps, ranks and weapons. It starts with a "Six inch Mark Twenty-four", passes on to "Four point Two" mortars and ends with a change to rockets which, for either security reasons or lack of space are not dealt with. During the story the author moves from gunner to commissioned rank.

The book is obviously written primarily with the object of being funny and the technicalities are glossed over in favour of the slapstick, drunkenness, obnoxious personal habits and the usual four letter words. Depending on the mentality of the reader it could be either excellent or devastating propaganda for the Territorial Army.

The title is derived from the Regimental Mascot, a goat, which heads the regiment briefly, on going to camp.

The first chapter, which is headed "Bull and Brass" does contain an excellent reason for spurring on reluctant polishers. "My boots were so well polished that by glancing down I could see the colour of her underclothes reflected in the shine of my toe caps". A variation on the system in vogue in Highland regiments to discover if men going on pass were properly dressed.

The book can be described as light reading, humourous, depending on one's taste and unlikely to give any technical lessons, not even how to get toe caps to that desirable sheen.

— G.M.C.