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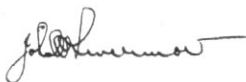
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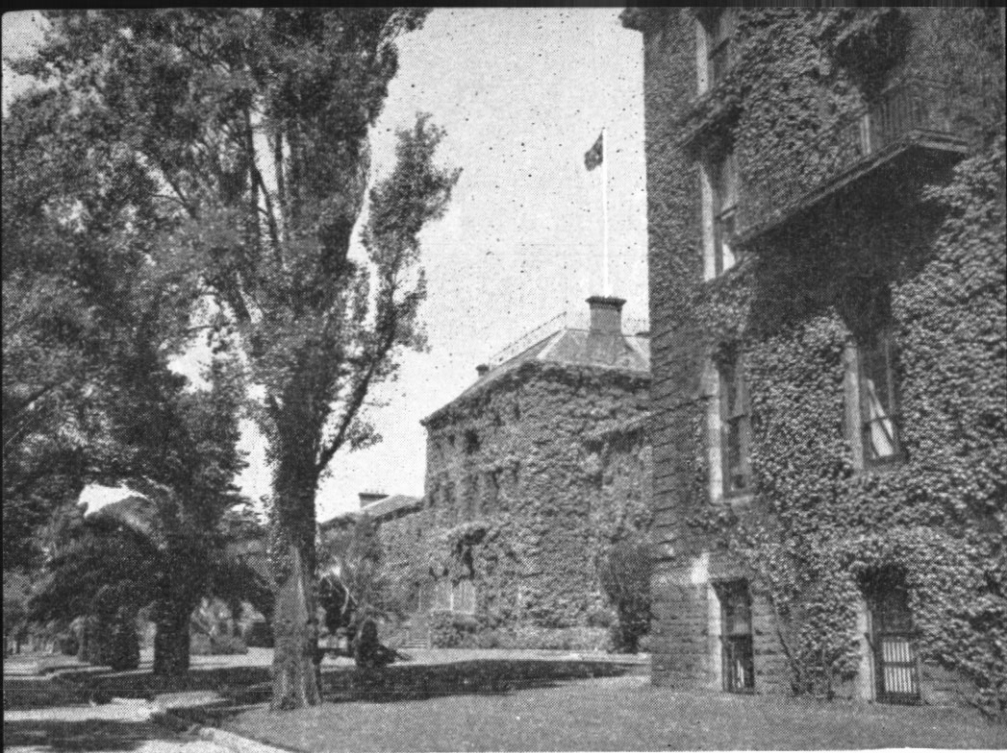
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VICTORIA BARRACKS, MELBOURNE.

# AUSTRALIAN ARMY JOURNAL

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Contributions, which should be addressed to the Director of Military Training, Army Headquarters, Melbourne, are invited from all ranks of the Army, Cadet Corps, and Reserve of Officers.

# KOREAN AMBUSH

Captain T. J. Crawford,  
Royal Australian Infantry.

*[Captain Crawford was a member of the CMF team of Observers which visited Korea towards the end of last year, and was with 3 RAR when the action he describes in this article took place.—Editor.]*

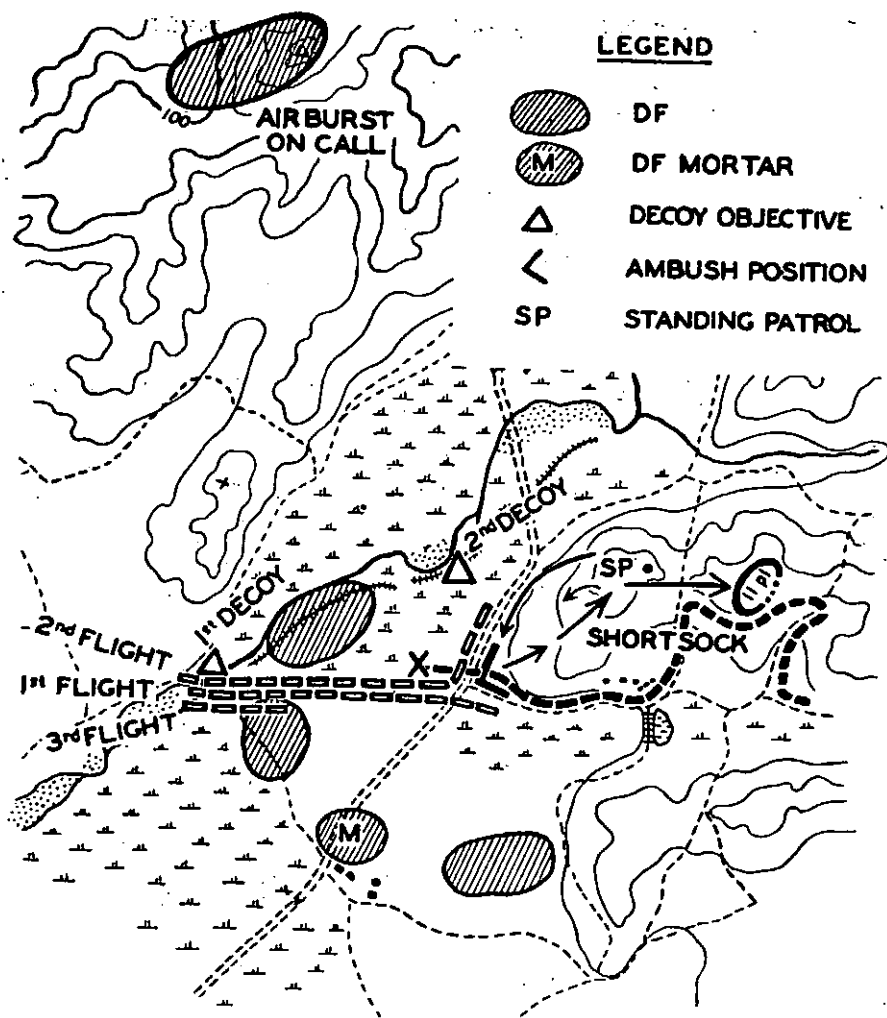
**I**N the static defence operation being conducted in Korea the security of individual battalion position depends — as always — on constant patrolling. The Chinese never relax their efforts to ferret out the weak spot and are quick to follow up with an attack in force. As a result a proportion of our fighting patrols are designed to find and eliminate the Chinese patrols, and the setting of an ambush for the same purpose is almost a nightly occurrence.

For a week or so the enemy had been paying attention to the feature Short Sock and Lieutenant-Colonel R. L. Hughes, Commanding Officer, 3 Battalion, Royal Australian Regiment, decided to place an ambush in front of the feature with the double object of denying him access and of getting a prisoner. Captain John Waterton, second in command B Company, was given the job.

He reported to the Intelligence Officer on a Sunday morning late in September, 1952, along with the

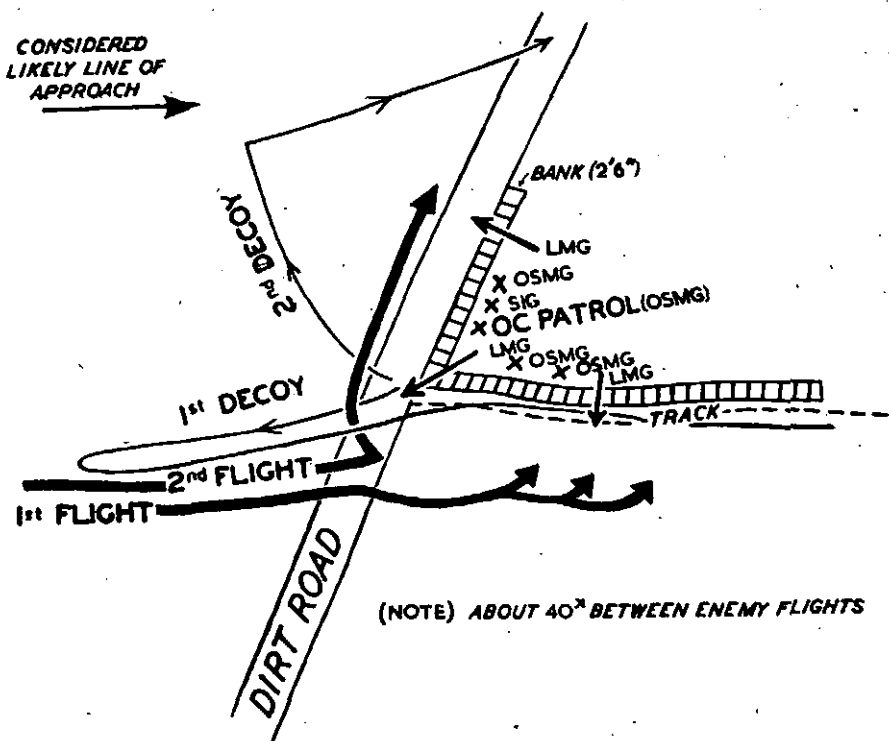
commanders of the other patrols set down for that night. He was briefed from the map and air photographs and used the photographs to select his ambush position. On his return to B Company he warned 4 Platoon, which supplied the patrol, made a reconnaissance from the Company observation post, and worked out his plan. He decided to take three Non-commissioned Officers and 11 Other Ranks and to divide the patrol into an ambush party of 1 Officer, 1 Non-commissioned Officer and 7 Other Ranks armed with 3 Light Machine Guns (Bren), and 5 Sub-machine Carbines (Owen) and one rifle and carrying a 31 wireless set, and two decoy parties each of 1 Non-commissioned Officer and 2 Other Ranks armed with 3 sub-machine carbines and carrying an 88 wireless set. Each man would carry 2 Grenades. Eight magazines would be carried for each Bren and 10 for each Owen.

He planned to occupy the junction of a dirt road and a track 350 yards south-west of Short Sock in a right angle formation on the road and track banks, which were known to be about 2 ft. 6 in. high. One Bren would be placed at the angle and one on each wing, the remaining members spreading evenly over the position.



The decoys would move to positions 600 yards west (No. 1) and 300 yards north (No. 2) of the ambush and endeavour to attract the attention of any enemy in the area. When a decoy made contact the code word "hunted" would be passed. The decoy, by a judicious rattling of magazines, coughing, etc., would lure the enemy to the ambush, and would then pass through the position to

avoid exciting suspicion by suddenly disappearing. When the ambush was tripped the unengaged wing would swing like a gate and engage the enemy from the flank. The other decoy would move out of the area to be clear of the defensive fire and would occupy a blocking position. Although a special Defensive Fire Plan was not always arranged for a patrol the Commanding Officer, at



the request of the Company Commander, agreed to allow it on this occasion. Defensive Fire "Barbara" as planned by Captain Waterton and edited by the Officer Commanding R Battery 16 New Zealand Field Regiment (Major W. Watt) consisted of three Troop concentrations in an arc 450 yards from the ambush with a 3-inch Mortar concentration on a burned-out village to fill a gap, and

was designed to isolate the battle. The village was a known enemy assembly point. 155 Millimetre Howitzers (American Corps Artillery) firing with variable time fuse were also requested to stand by to counter enemy mortars if necessary.

In the afternoon the patrol members concentrated on the rear slope of the Company position for briefing, rehearsal and issue of warm

"shower-proofed" outer clothing. Then each man fired his weapon on the company's miniature range and checked grenades. Wireless sets were netted. The briefing was done thoroughly, but quickly. All the men had been on such patrols before, and most of them had been over the ground. The rehearsal, because of lack of ground, was done in token moves from place to place, but each man's position in the patrol was laid down and pairs were made responsible for each other in the event of casualties occurring.

Just before last light the patrol moved back through the company position and out through the left flank company. It was necessary to be out early as the Chinaman has a habit of moving across the valley very quickly and catching our patrols just outside the wire.

They occupied the ambush position at 1939 hours. No. 1 decoy, under Corporal "Kanga" Saville, moved west towards its position, and No. 2 Decoy — Corporal Ray Gately — moved north.

Although it was anticipated that No. 2 decoy would make the contact Corporal Saville encountered the enemy ten minutes later at 1949 hours about 175 yards west of the ambush. His signalman, Private Ken Hutton, passed "hunted" and they commenced moving back. The enemy—approximate strength 30—followed, but kept south of the ambush halting in front of its southern wing. Corporal Saville's decoy had halted 150 yards behind the position. They made a little more coughing and rattling noise and the enemy moved towards them and so closer—diagonally—to the ambush. At this moment a second enemy party—strength 30—following the first at about 40 yards interval, turned north along the dirt road and halted

just in front of the western wing of the position. Their advent rather ruined the plan to swing the unengaged wing, so, at approximately 1957 hours, Captain Waterton tripped the ambush with a single shot from an Owen.

The Chinese were taken completely by surprise. For several seconds, while many dropped killed or wounded, the remainder stood like ducks in a shooting gallery. Then they joined the action, the southern party, however, firing at first towards Corporal Saville's decoy. Although some of the enemy had Burp guns (sub-machine carbines) the ambush was well supplied with automatic weapons. This, and the fact that they were in the lying position on the road bank, kept them in the fight at numerical odds of seven to one.

After the first exchange of shots Defensive Fire "Barbara" was called for. When it fell some 3½ minutes later screaming was heard from the south-west. It was obvious that a third enemy group had been caught by the Defensive Fire. Meanwhile the fire fight went on. Captain Waterton weighed the chances of getting as a prisoner one of the enemy wounded lying on the road, but, with twelve burp guns still firing on the western wing of the ambush, it was impossible. In addition the ambush party had received three casualties and no more could be risked from a total strength of nine if any carrying had to be done.

A situation report was passed and the Battalion Command Post ordered withdrawal. At 2012 hours the wounded were sent back up Short Sock with two members to assist them. Five minutes later Captain Waterton and the three remaining

patrol members moved out covering the withdrawal of the wounded by fire and movement.

At this stage the enemy began to mortar the area heavily, including the withdrawal route up Short Sock. Mortar reports were immediately passed from Battalion Observation Post through the Battalion Command Post to the Counter Bombardment Organisation, but, acting on a report from R Battery Observation Post on B Company position, the Battery Command immediately requested 155 millimetre "air-burst" as counter mortar. Shortly afterwards Captain Waterton passed a message from half-way up Short Sock asking for the mortars to be suppressed. Four minutes later the mortars were silenced.

The wounded arrived at the Standing Patrol on Short Sock, where Corporal Saville was waiting, at 2040 hours, and the covering party five minutes later. Magazines were taken from the wounded and distributed, while Captain Waterton requested and obtained permission to return and sweep the ambush area for enemy casualties.

At 2105 hours the patrol, now numbering nine all ranks with 3 Brens and 6 Owens, moved down Short Sock. When they reached a point 200 yards from the ambush the enemy were seen in strength moving quickly up the feature. The patrol again withdrew to the Standing Patrol and passed a situation report. Although the combined patrols in the Standing Patrol position numbered 20, with 6 Brens and 14 Owens and were surrounded by wire, ammunition was considered too low, and the Commanding Officer ordered withdrawal to 11 Platoon, 400 yards east, to enable the artillery to engage the enemy. 11 Pla-

toon was reached at 2120 hours. Here Corporal Gately's decoy rejoined the patrol at 2130 hours.

He had not reached his decoy position when Corporal Saville passed "hunted." As he moved towards his blocking position his signalman fell into a ditch and the 88 wireless set went out of action. By the time he had reassembled the set the ambush had been tripped and fire from the enemy group south of the ambush was sweeping north along the road-side blocking his way across. In addition "Barbara" was falling about 200 yards west of the ditch. The battalion command post took over control of his movement and eventually he was directed north, joining 11 Platoon from its right flank.

The patrol remained with 11 Platoon until they moved forward again just before first light to sweep the area. The enemy, however, had evacuated his casualties and a stretcher party was observed at first light rejoining their forward defended localities.

It was estimated that at least 12 enemy were killed as a result of small arms fire from the ambush. A third enemy group had certainly been caught by "Barbara." There were numerous drag marks through the paddy fields around the ambush position. Enemy casualties were undoubtedly heavy.

The enemy had evidently intended to take Short Sock with a company after his preliminary patrolling of the previous week. He received a sharp lesson instead. The value of constant patrolling was demonstrated once more. And, once more, care and planning and preparing a patrol, and vigour and intelligence in carrying it out, were amply rewarded.



# THE BURMESE CIVIL WAR

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Captain D. N. P. Brunicardi,  
Army Headquarters, Eire.

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"Do we pay and go, or do we merely go?" asked Mr. Churchill in January, 1947, in reference to the agreement just then reached regarding Burmese independence.

The Prime Minister, Mr. Atlee, was nettled by the tone and implications of the question, and replied with some asperity that his statement on the agreement just reached with the Burmese delegation "does not mean that we go." The various loans and grants to Burma for which the agreement provided were "interim finance" and concerned, he said, certain interests from loans decided on by previous governments and continued by his government for reconstruction in Burma.

It was in that atmosphere of re-primination that the British people watched Burma pass from the scene of British imperial history, and its affairs from the sphere of colonial

to that of foreign policy. The Road to Mandalay, from being a highway of trade and war, was henceforth no more than a nostalgic air for a superannuated generation of empire builders.

### Commercial Interests.

In Burma, as in many countries of Asia, a Western power had been interested for reasons of commerce. There was at first agricultural, and, later, mineral products, to be got. For the security and growth of these commercial advantages a political interest had to be developed, and for the latter, a military domination had to be achieved. The conduct of both commercial and political activity in an eastern country required, further, the training of a large body of clerical workers in countinghouse and government office. As Europeans could not be obtained in sufficient numbers, an indigenous class of clerks grew up, educated by Western standards, and from this class

has come most of the intellectual leadership of nationalism in Asia today.

In this way the western empire-builders furnished the means of their own dispossession. The Japanese occupation and their psychological, powerful slogan "Asia for the Asiatics" only brought to a head, rather more abruptly than would otherwise have happened, a movement which had everywhere taken root in the east. The result, in Burma especially, is a sensitive nationalism opposed to any foreign surveillance however benevolent or materially advantageous. In Burma there is this difference, however, that the Burman leaders of the nationalist movement were only a small section of the educated class above referred to, the bulk of the non-European administrators having been Indians, for Burma had been treated as part of India. These Indians have therefore stood aside from the national political development and constitute a minority problem on their own.

The Burmese republic was hardly begun when three main political problems became evident. First, a more extreme section within the governing group took to asserting itself by physical force, the joyous celebration of the first day of independence was soon followed by a violent crime in the assassination of the first premier U Aung San and his whole cabinet. Second, the large minority of Karen nationality not only felt themselves badly served, but also feared future victimisation at the hands of the dominant Burmans. They, likewise, took to the gun. Third, the problem which is by far the greatest menace to the continued existence of an independent Burma is the inclusion in

Burma of some of the Shan principalities.

The Shans in Burma belong to a racial group of which the bigger portion live across the frontier in China. While the Burma Shans have remained loyal to the Rangoon government, a situation such as this — a group divided by a frontier — has often been availed of by an expanding power posing as a liberatory one. Hitlerite Germany and Soviet Russia have championed the cause of subject minorities for their own ends, either by propaganda or invasion. The presence of a defeated Nationalist Chinese general in the Shan area together with thousands of troops is an added irritant to inflame an already sore spot.

While grappling with three such grave problems the successor of U Aung San, Thakin Nu (now known as U Nu), has nevertheless retained the government of Burma.

#### Four Problems.

This government is conducting an internal war on four fronts. First, it has to combat armed communist groups of varying degrees of attachment to Moscow and Peking. Second, the Karen autonomists, who are not only anti-communists, but pro-British to a degree, must be controlled, or some say, placated. Third, the Chinese Nationalist "squatter" army of General Li-Mi must be neutralised before it attracts the irate attention of Mao Tse Tung. Fourth, marauding groups of dacoits must be fought throughout the country.

In the midst of this, government, industry and commerce must be carried on, and agreements made with various minority races, particularly the Shan states, in whose territory Li-Mi's troops have established themselves.

Of the non-Indigenous population of Burma the Indians form the only considerable group with 7 per cent. of the whole. Chinese amount to only a little over 1 per cent. The remaining 92 per cent., that is the indigenous peoples, is made up of five-sixths Burmans; of the remainder almost equal numbers are Karens in the south and Shans in the north-east.

The Army which the government of Burma took over from the British consisted of 12 battalions. Of these only five were Burmese. The remaining seven were manned by the minority races, two by Karens, the remainder by hill tribes. As some of the Burmese battalions mutinied in 1948 and supported the communist and other anti-government forces, it was on the minority battalions that the government had to depend. The commander-in-chief, Lieut. - Gen. Smith Dun, was himself a Karen officer of the Indian Army educated at the Indian Military Academy. Even the Karen units were lost to the government when some of their fellow tribesmen revolted in an effort to achieve autonomy, and in the circumstances the very able commander had to be allowed to resign in January, 1949. Thakin Nu was therefore faced with the need to build up a loyal army of Burmese, helped out with the few hill battalions.

As a first step, early in 1949, he raised Socialist levies, some 13,000 Burmese in 30 battalions. These were formed with the dual purpose of giving the Socialist party its own private army and offsetting the racial composition of the regular Burma army. These units were placed under the command of Brigadier Ne Win, General Smith Dun's Burmese deputy.

Among the tasks of these non-regular formations was the suppression of the Karen uprising, but their activities greatly exasperated the Karen discontent, the insurgents accusing them of undisciplined and extra-military behaviour. The fact that they were employed at all had the effect of greatly undermining the influence of the conciliatory section of Karen opinion in trying to restrain their own extremists while pursuing negotiations with the government. British military officers returning from Burma in March, 1949, put the number of Karens at 1,500,000, saying that their forces at that time possibly outnumbered the government strength, seriously depleted as it was through desertions and indiscipline.

#### Capture of Mandalay.

On March 14 the capture of Mandalay by the Karens, with the unwelcome assistance of the communists, brought forth a government offer of amnesty for surrender, with a further offer of a separate Karen state within the union of Burma. The offer did not at that time indicate how a separate territory could be provided for the widely dispersed Karen community, but it was at least an indication of recognition of the aim which Karens had always pursued, first by negotiation and latterly by force of arms. Its effect was weakened by not having been made before the government's control of the country had been reduced to a small area of a few hundred square miles round the capital.

At the time all the country east of the Sittang river and all large towns on the Rangoon-Mandalay road were in the hands of the Karens, while most of the towns in the Irra-

TIBET

CHINA

INDIA

BURMA

YUNNAN

MANDALAY

SHAN STATES

FR. INDO-CHINA

MONGHSAT

SIAM

CHINDWIN R.

IRRAWADDY R.

SITTANG R.

SALWEEN R.

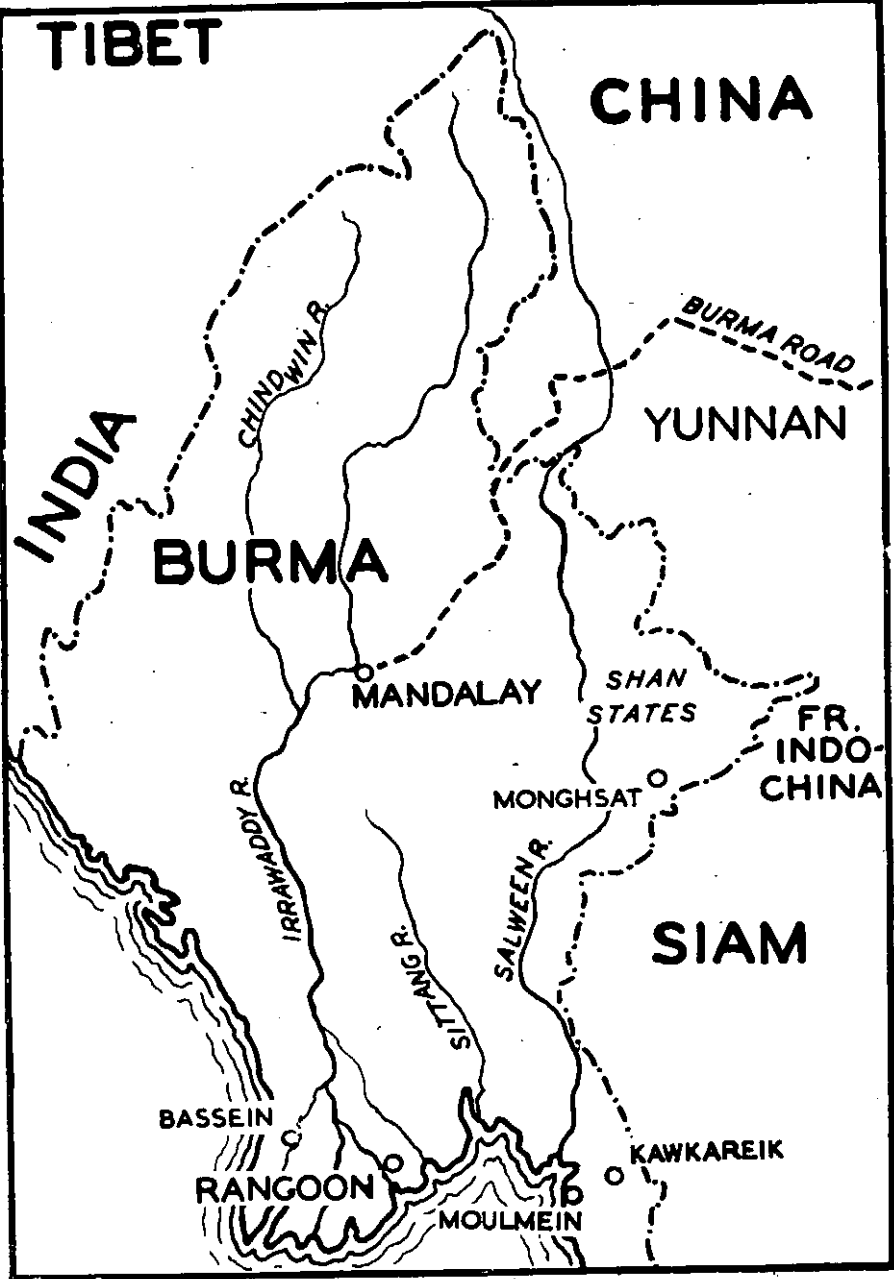
BURMA ROAD

BASSEIN

RANGOON

MOULMEIN

KAWKAREIK



waddy valley and the whole oil-producing area were in the hands of the White Band P.V.O. extreme nationalists. The communists held two main strongholds, one in Central Burma and another on the Arakan coast.

The Karens, it seems, did not immediately accept this offer and with the government's recovery and re-occupation of Mandalay in the early days of April, the insurgents sent a representative under escort to Rangoon to sign terms, whereupon the government offer was reduced to one of "elections within a month if the insurrection stopped immediately," and of an autonomy Commission to take up the question of a separate State. The President of the Karen National Union then declared: "I am giving up the fight because the Karens are getting what they want without fighting." The Karen leaders, however, failed to keep an appointment to surrender, having apparently been overruled by the younger and more intransigent fighters. Karen counter-proposals were rather summarily rejected and so the fight went on.

In those days of April, 1949, a new element entered the struggle when some 2,000 Nationalist Chinese crossed into the Shan states in the far north-east of Burma, and a large force of some 4000 Chinese communists massed in Yunnan across the frontier. The government met this threat by moving up tribal units to the frontier. There was, however, no attack from China nor any organised Chinese communist infiltration of the Malayan or Indo-Chinese kind. Up to the beginning of the monsoon, which lasts from May to October, the government forces contrived to make headway against the Karens and other opponents in the

field, so much so as to encourage Commonwealth countries to again contemplate sending aid intended for the restoration of the country's economy.

#### Foreign Tour.

In July Lt.-Gen. Ni Win, by then Minister of Defence, went on tour to London and Washington to discuss his country's defence needs, and contingents of Army cadets were sent to Sandhurst. Some of the articles Burma hoped to obtain were armoured vehicles, automatic weapons and wireless equipment. Since independence was achieved, also, Burma has had the advice of a British military mission consisting of 60 officers of the three services headed by Major-General Temple. In May, 1950, while the Burmese Premier was visiting London, the British government made a £3½ million loan available to Burma. Loans from other Commonwealth countries were to bring the total up to £6 million. Takin Nu's return from England was followed in July by a visit to Rangoon of Field Marshal Slim, then Chief of the Imperial Staff and war-time British commander in Burma. By this time the backs of two major rebellions had been broken, the communist and the Karen, and the government's position was strengthening daily.

By July, 1950, the defeat by the Burmese Army of organised insurrection had freed the towns, and the government writ ran in all important centres. Such of the Karens as were still in rebellion were confined to their mountain fastnesses east of the Salween river. The other Karen community in the delta area round Bassein had made its peace with the government and was helping to police the area. Though the death of its leader, Saw Ba U Gyi, and his

lieutenant, the Englishman Captain Vivian, deprived the Karen revolt of most of its prestige and influence, resistance was still kept up in the south-eastern part of the country. The government, however, in its increasingly strengthened position, reviewed the proposal to set up a Karen state or province in this very area and showed its goodwill by nominating a special cabinet Ministry for the Karen State.

Finally, on September 14, 1952, the authorities announced the boundaries of the separate state, an area of 5000 square miles from the Salween river to the Siam border and extending south to Kawkareik on the latitude of Moulmein. This state is expected to function, presumably in federation with Burma, as soon as the area can be cleared of rebel elements.

#### **Threat from China.**

The other great problem of the Burmese government is that of its precarious position in the shadow of communist China. Burma was the first free country to recognise the Peking government and to exchange ambassadors. Although relations have been correct and friendly, if not cordial, there are a number of circumstances which may bring about a strain. One is the lack of definition of the international boundary in the north and east. Another is the apparently Chinese-aided Burma communist revolt of Thakin Tan Tun. A third is the acceptance of US Economic Aid and the British "Empire Loan." But the most dangerous is the presence in Burmese territory of the Chinese Nationalist 93rd division of General Li-Mi.

In pre-British times the northern and eastern areas of Burma con-

sisted of a number of tribal districts or principalities which owed allegiance now to the Burmese King, now to the Emperor of China. Even when the country was fully under British control the boundaries of these "frontier areas" were never surveyed as they were not considered of any great moment to colonial enterprise, which was chiefly interested in coastlands.

A feature of the British agreement was the guarantee to the frontier areas—not indeed having Chinese aggression in mind, but in relation to the Burmese government so that the rights of these minorities would be protected. "Very definite pledges" were declared in favour of these areas, but such pledges partake of the same unreality as the pre-war pledge to Poland in being incapable of implementation, notwithstanding that the late King George himself was identified with their endorsement.

Now that China is under unified control once more, these areas, of the ancient if somewhat nebulous overlordship of the emperor, are again included in the maps published in Peking. The case of the Shan states may yet be a "casus belli," as the inhabitants are of the Thai race, who, outside Siam, are distributed between the adjacent areas of China, Burma and Laos in the ratio of 12, 2 and 1. Up to 1952, however, the Peking government has not raised the point officially.

A related matter is that of the Chinese minority in Burma. As this minority is very small—only 300,000 in a population of 16 million—it is not a political problem of anything like the same consequence as in Malaya or Siam.

#### **Guerillas.**

Since the government drive

against the communist guerillas in May, 1952, the strength of the latter is now not more than 3,000, split into four "divisions" concentrated in Central Burma, and still under the over-all command of Thakin Tan Tun, whose control dates from the communist conference of Calcutta, in February, 1948, when the general communist policy of insurrection in south-east Asia was decided on. Tangible evidence of China's help to the Burmese communists was found in the capture of rifles which can have come only from Russia and of the same pattern as those used in Korea.

The presence of a British military mission in Rangoon and the acceptance of a £6 million loan from empire governments have already been mentioned. The acceptance of an \$11 million ECA grant in September, 1950, can further be interpreted by Peking as Burmese participation in western policies. It may even possibly be made an excuse for the "liberation" of this country from an alleged capitalist expansion, no matter how vehemently the Burmese premier declares his independence and reluctance to call on western nations, and in spite of his challenge of July, 1952, to the Peking government to furnish similar economic aid.

With regard to the presence of a Chinese Nationalist force in Keng-tung state in north-east Burma, the government at Peking has made a complaint, but has otherwise not made an issue of it, even though groups of this force have made forays into China. The fully-occupied Burmese army has nevertheless found men and time to engage the Nationalists and keep them under control if not drive them away into Siam, which seems the only place they could go.

In February, 1952, the Indian Prime Minister, Mr. Nehru, referring to these troops, said that it was a matter of grave concern not only to Burma, but to the governments of Britain and the United States. "Foreign troops in a country are never tolerated," he said, "and they should be pushed out into the sea or the mountains, or somewhere else."

In October, 1951, the premier of Burma had not regarded these as a menace, because they were not organized or disciplined and were being driven out, though he did not specify in what direction. The Peking government, he stated, had given a firm assurance that their troops would not enter Burmese territory unless it was used as a base by Kuomintang troops for operations against them and he knew nothing about any foreign aid being given to these troops.

#### **Russian Allegations.**

There the matter rested until January, 1952, when Mr. Vishinsky, at the U.N. General Assembly in Paris, after a lengthy attack on United States foreign policy, particularly in the Far East, alleged that the USA was engaged in ferrying Chinese Nationalist troops from Formosa to northern Burma and Siam. The same allegation was repeated by Mr. Malik, who relied, he said, on British press reports. According to these, Kuomintang troops were passing through Siam to augment the original border refugees. He further alleged the presence of six Nationalist divisions in Burma with senior American officers as instructors. All these accusations were vehemently denied by the US and Siamese delegates. The Burmese delegate recalled the facts that as

early as the end of the Japanese war some Chinese stragglers had remained in Burma and that later, about the time that Chiang-Kai-Shek lost control of the mainland, a few thousand of these had been disarmed and interned. Others, however, apparently under orders from Formosa, had refused to allow themselves to be disarmed, and the Burmese government had been forced to take action against them.

An engagement had taken place in April, 1951, as a result of which the Kuomintang forces in Northern Burma had fled across the Chinese frontier into Yunnan. Shortly afterwards, however, these forces, after having been "badly mauled" by the Chinese communists, had re-crossed the frontier into Burma under the command of a general from Formosa, and the Burmese government was at present doing all it could to clear them out. This operation was very difficult because the Kuomintang troops, when attacked, continually retreated into the jungle or fled towards the Chinese border. The Burmese government had received, and accepted American assurances that the USA had nothing to do with these "Kuomintang stragglers," who did not appear to be aided or maintained by any other government but that of the Chinese Nationalists in Formosa. The Burmese delegate explained that his government had so far restrained from bringing the matter before the UN because "we have to fight our own battles." He declared that any attempt to turn Burma into a war base for any foreign State would be resisted, but said that UN aid might be sought if the situation deteriorated. He stressed, however, that the chances of the "Kuomintang stragglers" entering China, let alone "liberating" it, were "nil," and that

the Peking Government, though naturally concerned about the presence of these elements in a neutral country, had always shown a "most correct" attitude towards Burma.

#### Replacements.

With regard to the Russian allegations, British press reports in December, 1951, and the early months of 1952, did state that Nationalist troops based in Burma had from time to time been supplied through Siam and maintained headquarters of sorts in Bangkok. General Li-Mi was also reported in Christmas week, 1951, to have arrived in Formosa for conferences with Chiang-Kai-Shek. Siam, an area of considerable American influence, had, it was stated, allowed Li-Mi's men to use the overland route from Bangkok, placing no restrictions on their activities in that city. In January, reports were published of the reinforcement of the 93rd Division by a whole battalion from Formosa which arrived through Siam over a period, a platoon at a time. The division headquarters was at Monghsat, in Kengtung, with some 4,000 troops; at Mongnyen, almost due north, were another 2000. Some 3000 were stationed on the Chinese frontier and a similar number along the east bank of the Salween river, where several bridges had been destroyed to prevent the Burmese Army advancing to attack them. According to Rangoon reports in February, 1952, these forces were made up of 4,000 regulars and 9,000 reinforcements brought from Formosa. Near Monghsat is a 2,000 yard airfield recently completed under American supervision.

On the matter of United States aid to these troops, as alleged by the Russians, the American government denied any official participation,

denied further that there were, "to the best of official knowledge," any American citizens with these forces, and requested the Formosa government to heed the Burmese entreaty and withdraw all Nationalist troops from this area. Reports continued to be published, however, of "an Independent American agency" helping Kuomintang troops by moving reinforcements and material through Siam and that individual Americans were to be found with Li-Mi's forces as Britishers were found with the Karens.

Then in March, 1952, came a report, originating with an American lately returned from Siam—the accuracy of which was conceded by the American Embassy in Bangkok—that the Nationalist force was conducting a prosperous exchange of opium for arms to the profit of Kuomintang and Siamese officials and certain Americans.

Though occupied with other problems the Burmese have kept up pressure on these forces, and, though no notable success has been reported, such activity demonstrates the Burmese wish to expel or neutralise them and so avoid any accusation of partiality by the Peking government or the communists at home.

#### Foreign Relations.

In spite of all such embarrassments, external and internal, Burma is well established diplomatically. The prompt recognition of Communist China, and the early cautionary transfer of the ambassador from Formosa to Peking in June, 1950, may have the effect of forestalling Chinese antipathy. The *démarche* to the United States over the Nationalist "squatters" was directed to the same end.

In regard to the other powers, Burma observes the independence treaty with Britain, described by the premier as "our best friend." In March, 1951, came the first treaty signed with a foreign power in the shape of the five-year treaty of friendship with Indonesia. This was followed in July of the same year with a five-year treaty of "peace and friendship" with India, to which Burma is closest culturally. Arising out of this, subsidiary agreements were envisaged to deal with customs, communications and commercial and cultural matters. In June, 1952, a similar treaty of "perpetual peace and friendship" was signed with Burma's other western neighbour, Pakistan. In February, 1952, it was announced that continuance of American economic aid to Burma under the Mutual Security Act had been agreed on with Washington, the Burmese Premier stating that acceptance of such aid "would not affect Burmese declared foreign policy," that is, impartiality as between the great powers of east and west. This was followed in June by the Burmese government's official termination of the state of war with Japan. The draft peace treaty with the latter was disapproved of, however, and no Burmese delegation attended the San Francisco peace conference.

With all these advances in her internal and external affairs, advances truly remarkable considering the many and great difficulties and setbacks with which the infant state had to contend, it is now to be expected that this naturally favoured eastern land will play an increasingly prominent and helpful part in the affairs of the world, and particularly in its own critical area.

### Resources.

Economically, Burma has great possibilities never even moderately realised. Rice is her principal product, and the surplus crop of this under-populated region has always been available to teeming India, and, to a less extent, to China. The timber industry, for which the country has long been known, can yet be revived with the re-establishment of the road and rail system after the wars, and the oil wells of Central Burma will soon be in production with the restoration of the pipe line to the refineries on the coast. The Indo-Malayan mountain system contains the greater part of the world's tin and tungsten and though Malaya has always been more productive of tin, Burma in 1938 produced 17 per cent. of the world's total of tungsten. This element, having the highest melting point of all the metals, is essential for the manufacture of cutting tools, bearing surfaces and permanent magnets. Not being affected by organic acids and antiseptics, it is also in demand for surgical instruments. Finally, its suitability for electric lamp and radio valve filaments makes it one of

the most sought-after products of the earth.

Strategically Burma is important in being the crossroads of two difficult, though feasible, military routes—one the way from Russian Asia to the Bay of Bengal, the other the "Burma Road" between China and India. Further, Rangoon is developing as the main air junction of south-east Asia. For these strategic and economic reasons the defence of Burma may yet figure as large in the plans of the western powers as do Malaya and Indo-China at the moment.

Important as these military and productive factors may be, Burma's chief interest for the student of foreign affairs must continue to be its political and social developments. The Burma business is an absorbing experiment in patriotism. Absorbing it was to U Sung San who died for it; absorbing it is to his followers who live for it; absorbing it is finally to those who watch with keen attention this effort of Burmans to realise values rare in the materialist world of our day.

# ★ STARS ★

## and the

# NIGHT SKY

★★★★★★★★★★★★★★★★★★★★

Brigadier C. M. L. ELLIOTT, O.B.E.

PART 2.

**The Ram.**

29. The RAM is due north about 9 p.m. in December. It lies between PEGASUS and the BULL, as shown in Figure 9.

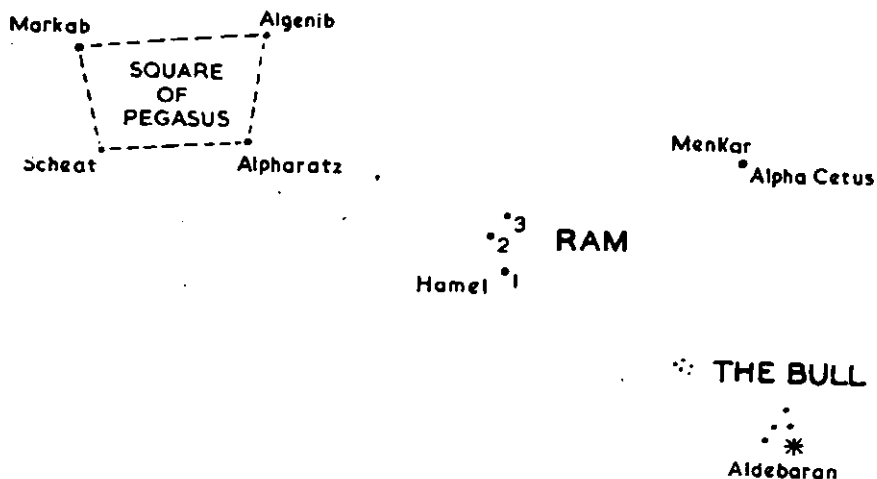


Figure 9.

## The Bull.

30. The BULL, with its bright red star ALDEBARAN, is about 60 deg. east of the SQUARE OF PEGASUS and 35 deg. east of the RAM. It has in it the famous "Seven Sisters," or Pleiades, which are Alcyone, Celoena, Electra, Maia, Merope, Asterope, and Taygeta, daughters of Atlas and Pleione. The stars in the V are called the Hyades. Figure 10 shows their appearance in November above the eastern horizon. In January the BULL is almost due north.

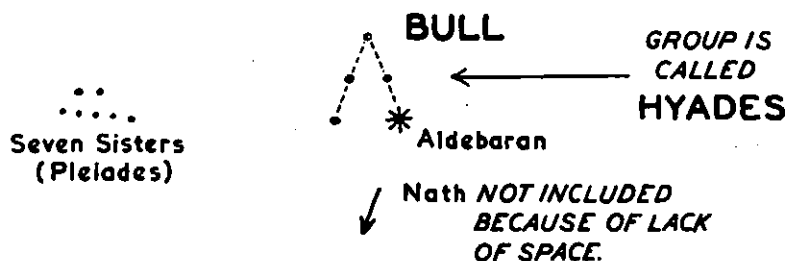


Figure 10.

## Orion.

31. In November, if you start your star gazing as soon as it is dark you will see low down on the eastern horizon one of the most famous of all constellations—ORION, which looks as shown in Figure 11.

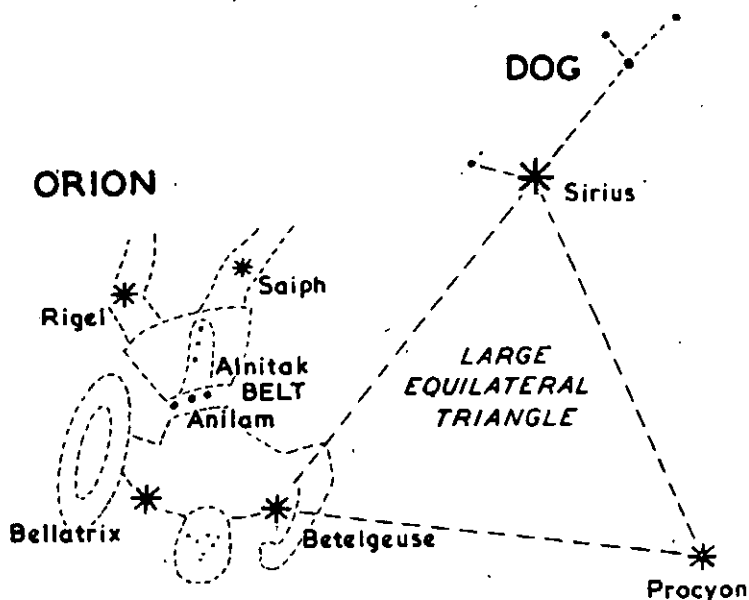


Figure 11.

ORION looks like a crude drawing of a man with broad shoulders, narrow waist encircled by jewelled belt, in which is a jewelled dagger. At the end of January ORION is north.

In his belt nearest to Bellatrix, is the only star in the heavens which rises and sets due east and west. Of course, during its transit across the sky it is of no particular value.

#### The Great Dog and Sirius.

32. In Dec.-May, join the bright star at the foot of the SOUTHERN CROSS to Canopus, and making there an angle of 135 deg., continue it on for the same distance and you will pass through a very bright star. This is Sirius, the brightest star in the sky. If the light from Sirius equals 100, then the light from Canopus, the second brightest star in the sky, only equals 52. Sirius forms a shoulder of the GREAT DOG (CANIS MAJOR), which looks rather like a child's drawing of a dog, as shown in Figure 12. A line joining Sirius to Canopus continued on for an equal distance brings you nearly to the South Celestial Pole.

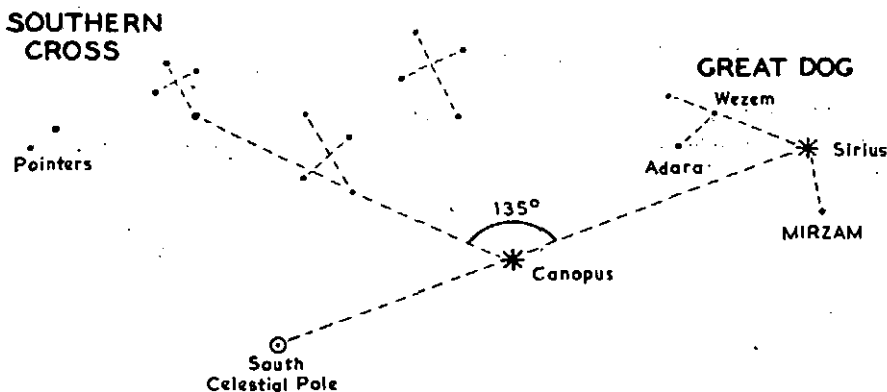


Figure 12.

#### The Twins and Capella.

33. Castor and Pollux are due north about 9 p.m. in late February. They are about the same distance apart as the two Pointers to the CROSS and are about 45 deg. east of the BULL. Procyon is above them. (See Figure 13.) About half-way between the TWINS and the RAM and 20 deg. further toward the north, i.e., lower down on the horizon, is the constellation AURIGA, the CHARIOTEER. In it, the bright star is Capella. It is highest in mid-January.

#### The Lion and Denebola.

34. In April, at 9 p.m., look due north and well up, you will see a bright star—Regulus—in the constellation of the LION which appears as shown in Figure 14.

(AS SEEN IN MID-FEBRUARY)

\* Procyon

\* Alpherat

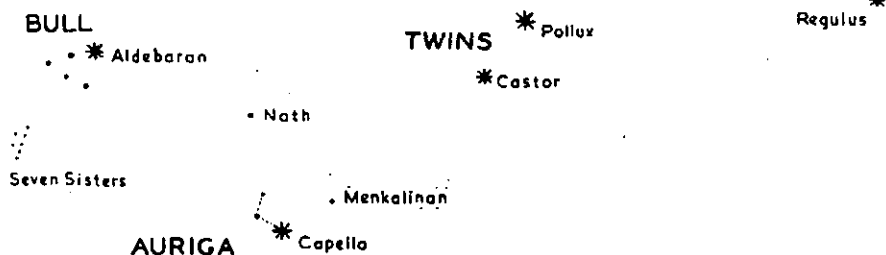


Figure 13.

Another method of finding Regulus is to join Aldebaran of the BULL to Pollux of the TWINS, and continue nearly as far; this brings you to Regulus. Or again, join Antares (SCORPION) to Spica (VIRGIN) and continue an equal distance. The front portion is often called the "Sickle" and is part of the famous constellation called the LION. The brightest star which represents his forefoot, is Regulus, and the tail, which is the second brightest star, is called Denebola (in arabic, "deneb" means a tail and "bola" a lion. There is another star called Deneb, which forms the tail of the SWAN—see para 38).

#### The Virgin, Spica and The Crow.

35. In June, almost overhead is a bright star. This is Spica, in the constellation of the VIRGIN. There is only the one bright star. One and a half hands' breadth to the west of it is a group of four stars shaped

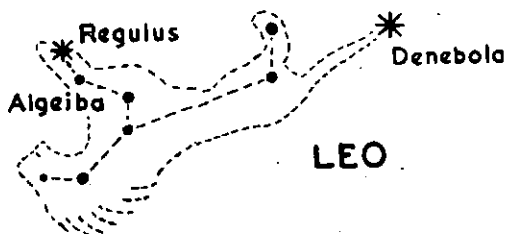


Figure 14.

like Figure 15. It will be noted that of the CROW, no two sides are equal, nor are they parallel. The shortest side always points directly at Spica. This constellation can also be found by producing the longer axis of the SOUTHERN CROSS away from the Celestial Pole.

## VIRGIN CONSTELLATION

\* Spica

THE CROW

↑  
PROLONGATION OF LONGER  
AXIS OF SOUTHERN CROSS

Figure 15.

### The Centaur.

36. Between the head of the SCORPION and the SOUTHERN CROSS is a group of fairly bright stars which make no real recognisable shape, but which form part of a huge constellation known as the CENTAUR. The CROSS is really part of this constellation, in which it forms a hoof.

### Distances to the Stars and to Galactic Systems.

37. So great is the distance to the stars that a new unit of measure is necessary—it is called a "light year" and is equal to the distance travelled by light in one calendar year. As light travels at 186,000 miles a second, a light year is beyond our comprehension when expressed in actual figures. It is nearly 6,000,000,000,000 miles (six million million miles). The speed of light (and of wireless waves) is such that it travels around the earth more than seven times in a second.

The planet Venus, when nearest the earth, is only 26 million miles away; so the nearest bright star (Alpha Centauri, the brighter of the stars in the POINTERS), which is 25,000,000 millions of miles away, is almost a million times further away than the nearest planet. Alpha Centauri is only just over four light years away. The next nearest bright star is Sirius, which is 8.65 light years away. Our own galactic system is about 220,000 light years across.

The furthest stars in our galactic system are the outermost globular clusters, which are about 220,000 light years away. Further out then comes the nearest complete galactic system (M31)—almost one million light years away; and, finally, the furthest galactic systems yet photographed by the 100-inch telescope—140,000,000 light years away. We believe that the 200-inch telescope will enable us to see further into the universe; how far we do not know, for we believe distance to be finite—to curve back on itself just as the surface of the earth does.

### Scales of Distances of a Small Model of the Universe.

If the earth is represented by a point 1 millionth of an inch across, then the sun would be about 1/3,500th of an inch across.

The yearly path of the earth around the sun would be 1/16th of an inch across.

The nearest bright star (Alpha Centauri) would be 225 yards away.

Our own galactic system would be 7,000 miles across.

There would be a gap of 30,000 miles to the nearest star city (M31).

The furthest galactic system photographed by the 100-inch telescope would be over 4 million miles away.

If the universe does NOT curve back on itself like the surface of the earth over which you can travel for ever (but on which you would return after each circle to the same place), then the 200-inch telescope at Mount Palomar in U.S.A. may have photographed galactic systems 10,000,000 miles away on our small model (but 500,000,000 light years away in reality).

### The Brightest Stars.

38. The brightest stars in the sky are of approximate relative brightness and are in the constellations shown below:—

#### Stars in order of brightness down to magnitude 1.

Stars	Relative Brightness	In Constellation
Sirius	100 (Alpha)	THE GREAT DOG
Canopus	52 (Alpha)	THE SHIP (ARGO)
Vega	21 (Alpha)	LYRE
Capella	19 (Alpha)	THE CHARIOTEER (AURIGA)
Arcturus		BOOTES
Alpha Centauri (the brighter star of the Pointers)	17 (Alpha)	THE CENTAUR (Half Man, Half Horse)
Rigel	17 (Beta)	ORION
Procyon	15 (Alpha)	THE LITTLE DOG
Achernar	13 (Alpha)	THE RIVER ERIDANUS
Beta Centauri (the dul- ler of the Pointers)	11 (Alpha)	THE CENTAUR
Altair	10 (Alpha)	THE EAGLE
Betelgeuse	10 (Alpha)	ORION

#### Stars in order of brightness between magnitudes 1 and 2.

Stars	Relative Brightness	In Constellation
Aldebaran	9 (Alpha)	THE BULL
Alpha Crucis		THE SOUTHERN CROSS
Spica		THE VIRGIN
Pollux	8 (Beta)	THE HEAVENLY TWINS
Antares		THE SCORPION

Formalhaut	}	(Alpha)	THE SOUTHERN FISH
Deneb		(Alpha)	THE SWAN
Regulus		(Alpha)	THE LION
Beta Crucis			THE SOUTHERN CROSS

**Stars between magnitudes 1 and 2 continued—Alphabetically  
(Not in order of brightness).**

Adara	(Epsilon)	GREAT DOG
Alhena	(Gamma)	THE TWINS
Alioth	(Epsilon)	GREAT BEAR
Alnitak	(Zeta)	ORION
Alpha Triangulum		
Australis		SOUTHERN TRIANGLE
Anilam	(Epsilon)	ORION
Bellatrix	(Gamma)	ORION
Benetnasch	(Eta)	GREAT BEAR
Castor	(Alpha)	THE TWINS
Delta Argo		ARGO
Dubhe	(Alpha)	GREAT BEAR
Gamma Argo		ARGO
Gamma Crucis		THE SOUTHERN CROSS
Kaus Australis	(Epsilon)	THE ARCHER
Miaplacidus	(Beta)	ARGO
Mirfak	(Alpha)	PERSEUS
Mirzam	(Beta)	GREAT DOG
Nath	(Beta)	THE BULL
Shaula	(Lambda)	SCORPION
Theta Scorpis		SCORPION
Wezem	(Delta)	GREAT DOG

**Stars of magnitudes between 2 and 3.5.**

Algeiba	(Gamma)	THE LION
Algenib	(Gamma)	PEGASUS
Almak	(Gamma)	ANDROMEDA
Alphacca	(Alpha)	THE CROWN
Alphard	(Alpha)	HYDRA
Alpherat (z)	(Alpha)	ANDROMEDA
Caph	(Beta)	CASSIOPEIA
Denebola	(Beta)	THE LION
Diphda	(Beta)	CETUS
Hamel	(Alpha)	THE RAM
Markab	(Alpha)	PEGASUS
Menkalinan	(Beta)	THE CHARIOTEER (AURIGA)
Menkar	(Alpha)	CETUS
Mirach	(Beta)	ANDROMEDA
Scheat	(Beta)	PEGASUS
Schedar	(Alpha)	CASSIOPEIA

The brightest stars were originally called the first magnitude. Those only just visible to the naked eye the sixth magnitude, each being about  $2\frac{1}{2}$  times as bright as the next magnitude below it. However, some stars, such as Sirius, are so bright that we have extended the scale to zero magnitude and to  $-1$ , etc. The brightest star is Sirius, whose magnitude is  $-1.6$ . Alpha Centauri and Altair are zero magnitude.

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In fifty years' time there will be no great reason for the existence of armies. We shall have undermined our enemies sufficiently before hostilities begin, so that the military organization they possess will be incapable of being used in the hour of need.

—Nicolai Lenin.

Notes on . . . .

# TACTICAL EMPLOYMENT of ATOMIC WEAPONS

---

Colonel George C. Reinhardt,  
Corps of Engineers, U.S. Army.

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AS LONG as fissionable material remained scarce, the ability of the strategic air force to deliver atomic bombs on key targets in the enemy heartland was the central core of American war planning. Now that this basic shortage is being overcome, additional concepts for the employment of atomic weapons must be examined. The United States Army must learn to handle these new weapons in both attack and defence as well as to prepare to receive hostile atomic blows. This prospect poses many new problems to commanders and to troops. The swift technological progress in new types of atomic weapons and missile delivery must

not outpace the development of tactical doctrine and procedures for their employment.

While we accept as fact that the advent of atomic missiles to the battlefield changes no principles of war nor fundamentals of tactics, we may reasonably expect that many **applications** of these principles and fundamentals will be subjected to different degrees of variation. Organisation, equipment, staff procedures, and the handling of units on the atomic battlefield will differ from those of World War II just as the machine gun in World War I profoundly affected the land warfare of that period. Thorough testing in field manoeuvres, not theory, should determine the nature and extent of all changes.

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—From "Military Review," USA.

Success in atomic warfare, calls for a careful analysis of the weapons' effects upon armies operating in the field, and upon the installations and services supporting them. It demands thorough indoctrination and training of our own forces, from general to private, so that these troops will be prepared to exploit to the maximum our use of the weapons, and, at the same time, to minimise the effects of hostile atomic weapons used against them.

Before we attempt in the space of a single article to outline the immense task involved in these simple statements, let us first consider the more general questions—What is the place, if any, of atomic weapons in tactical warfare?

#### **The Tale of Two Cities.**

The destruction of two Japanese cities by the only two atom bombs delivered against an enemy has inevitably over-emphasised that particular method of employing the world's most powerful weapon. A future major war may again witness the devastation of industrial centres by atom bombs, but it is highly improbable that such a war will be decided solely by similar attacks or that city bombing will comprise the predominant wartime use of the new weapon.

A parallel exists in the history of artillery, long used in siege warfare to batter down castle walls, before it developed into an anti-personnel weapon. Even in World War II, artillery shattered cities which fanatic Nazis refused to surrender despite encirclement. Manifestly, it was sound to rely upon fire power to reduce the casualties that direct assault would have cost us.

Broadly considered, that was the use made of the atom bomb in 1945. Japan was hopelessly encircled, with all chance of victory gone. Yet, fanatic resistance to the scheduled invasion was certain. Hence, the bombing of Hiroshima and Nagasaki. A beaten foe was jolted into realising the futility of further resistance. In both instances, if the means were bloody, the actual loss of life was less than assault would have entailed.

These considerations, sound as they are, do not constitute the complete case for the selection of Hiroshima and Nagasaki as initial targets. Had the first bombs been ready a few short months earlier, might not their targets have been Iwo Jima or Okinawa? Would not the destruction of a concentrated defensive position with its powerful garrison, determined to inflict severe casualties upon our troops, have been preferable to wiping out two cities which were of limited military importance in themselves?

#### **Atomic Fire Power.**

Probably the strongest arguments favouring a metropolitan target lay in the existing technical difficulties of assuring a hit on any target smaller and less surely defined than a city. Bomb delivery from heights above 30,000 feet had grave limitations seven years ago. There was little chance of designation errors by intelligence or of mistaken identification of aiming point by the bombardier when "ground zero" was the centre of a populous city.

Since that day, the family of atomic weapons has progressed. Commanders of the near future will have a choice of bombs and delivery means to reach varied types of tar-

gets with even greater destructive power available in one package. The accuracy of the original means of delivery, the high-altitude heavy bomber, exceeds the possibilities of 1945. In addition, delivery by fighter planes, by artillery shells, free rockets, and guided missiles is in certain prospect, although dates and details are guarded by security provisions.

No longer is the Strategic Air Command the sole military agency concerned with the offensive use of atomic weapons. Past is the time when only cities, industrial complexes, or large military installations comprised the entire list of "suitable" targets. It is now time to consider the potentialities of atomic warfare upon armies, and their subordinate units, in the field.

#### **Fire and Movement.**

The classic concept of "fire and movement" for seeking the tactical decision on the battlefield began with the revolutionary armies of the French Republic and has gone unchallenged since its exposition by Von Clausewitz. The effect obtainable by manoeuvre dictated all battle plans for the decisive conflicts in a century of warfare. The "fire plan" was devised to support the movement to which it was subordinated. Hence, the common phrases, "base of fire," "support fires," and the like. Even those terrific concentrations of fire that preceded the Normandy landings were essentially aids to, not instigators of, the manoeuvre scheme.

The tremendous concentration of fire power in a single package brought about by atomic weapons suggests possible alterations in this accepted idea. Cases may arise in

which the unusual potency of that "fire power" itself governs the adoption of a particular manoeuvre. A frontal assault, tempting as the most direct route to the enemy's vitals, but cast aside as a bloody insanity with conventional weapons, may now become the cheapest route after atomic weapons open the way. The forbidding concentration of men and guns that bar our way may conceivably comprise the most remunerative atomic targets in the enemy's entire position. Instead of searching out the opponent's weakest point to assault, the atomic missile-equipped army may deliberately shatter his strongest element with their blasts and exploit that destruction by swift columns of armour and following infantry. Weaker elements of hostile force then will fall easy prey.

#### **Offence—Atomic Style.**

Devising plans and procedures and making preparations for attacking the enemy with atomic weapons involves all the difficulties connected with predicting results of new and untried instruments of warfare. For one thing, much essential factual data are still incomplete and in some cases actually contradictory. For another, psychological reactions to the shock effect of atomic weapons are unpredictable, but could, conceivably, be more catastrophic than the physical damage. Panic and mental confusion have won as many battles as bullets.

#### **New Units.**

It should reasonably be assumed that all military forces will, in the near future be adequately instructed in the capabilities of their atomic weapons. In addition, it is to be hoped that our troops will have acquired a sound, unexag-

gerated knowledge of those weapons' threats to themselves, a knowledge which reduces radiation hazards to their actual minor role. Yet, even with military education in atomic warfare, specially trained and equipped units will be necessary.

#### **New Staff Specialists.**

New units will be required for assignments connected with safeguarding and transporting atomic missiles as well as their actual delivery against the enemy. Atomic staff specialists of two types, differentiated by both education and mission, also will be needed. One staff group will be technicians, scientifically trained, to advise the commander in the selection of fuze settings, height of burst, bomb power, and delivery methods with a view to accomplishing the maximum effect upon the target, or targets, of the commander's choice. The second type will be general staff officers, specially trained in the tactics of atomic warfare, to recognise and select priorities among targets. Their task will be to advise the commander, as the artillery commander now advises regarding conventional fire power, concerning the manner in which his atomic weapons should be integrated into an operation to ensure their maximum contribution toward the over-all mission.

The tasks allocated to atomic weapons in the scheme of manoeuvre primarily will be those which, either by their nature or magnitude, cannot be performed effectively by conventional weapons. The limited numbers of atomic missiles, as well as the fact that each missile might influence the course of a battle as much as an entire division, mark target selection as a

problem of vital importance. It is probable, therefore, that such authority will not be delegated lower than the level of the corps commander if, in fact, such discretion is not retained by the army commander.

#### **What is a Target?**

Before commanders are able to render a decision concerning a specific target, many preliminary steps must be completed by numerous agencies and staff echelons. However, no selection can be better than the intelligence provided the staff personnel charged with this vital assessment. With the enemy's picture at hand, the process of choice begins. In a particular situation, the staff adviser must ask: Should the atomic plan (as well as plans for other supporting weapons such as tactical aviation and naval gunfire) be guided by the commander's existing scheme of manoeuvre in order to afford the maximum assistance to that plan? Or, might it be better to hit the enemy at his strongest point, that is, where his troops were most heavily concentrated, rather than at a "weak" spot covered by fewer troops?

Should the enemy risk a large number of men and equipment in a relatively small area, the casualties and destruction that atomic attack might wreak upon them could be sufficient to demoralise the survivors, making them easy victims to swift, exploiting armoured columns following up the atomic blasts. The lesser enemy concentrations could then be dealt with by conventional means. "Economy of force," "surprise," and "the objective" (this last properly the "destruction of the enemy's will to fight" instead of the often heard "destruction of the

enemy") have all been served, and ably so.

Divisional participation in long-range target selection is unlikely. Still less probable would be divisional authority to expend atomic missiles. Permanent (fixed) targets such as defiles, fortified localities, communications junctions, and distant ones such as reserve bivouacs and supply depots will be selected or rejected by higher echelons before they become of tactical interest to a division. Yet, there may be occasions when targets of the utmost importance, which, because of their transitory nature, have escaped detection at higher level, are discovered by division intelligence agencies. It is, therefore, vital that all reconnaissance and intelligence elements of the division be educated to recognise potential atomic targets. No less important are prescribed rules, usually termed standing operating procedures (SOPs), for the swift evaluation and reporting to next higher level of all information (intelligence) which indicates targets worthy of atomic attention.

#### Terrain and Weather.

Terrain and weather must be considered in target selection. The major influence of weather on the effect of atomic missiles enhances the military value of reliable weather reports and forecasts. Fog, haze, and rain reduce the burn effect (ordinarily the most powerful of the weapon's threats against personnel in the open). Rugged terrain, on the other hand, can limit all three of the atom bomb's lethal effects; blast, burn, and instantaneous radiation. However, the hills or ridges must be high enough to "shadow" a locality against the slant line from the point of burst (nor-

mally considered as approximately 2,000 feet above ground).

Blast effect of a bomb exploded over, or in, a terrain compartment is actually increased by "echoes" from the compartment walls. This is **not** true of the burn effects. Radiation is "diffused" by collision with the ground but not to an extent requiring consideration for field operations.

#### Consideration of the Situation.

Atomic missile targets must be selected after considering the existing tactical situation, particularly the comparative strengths of opposing forces; the availability of atomic weapons to both forces; and the missions of these forces. The lowest order weapon available which will accomplish desired destruction always must be used. Consequently, it is impossible to state categorically, in advance, that a certain number of troops, a concentration of so many tons of supplies, or a command post of a specified echelon are "profitable" targets.

#### No Dollar Economy.

Statements have appeared in the public press emphasizing the relative "dollar economy" of atomic weapons compared with conventional means of inflicting casualties upon the enemy. "So many million dollars' worth of A-bombs will kill more foes than 10, 20 or 100 times that sum invested in artillery shells or ordinary bombs." Or, in another form, "A-bombs costing X millions can destroy many times that value in supplies." Whether or not either of these is accurate remains an academic question to the combat commander. He will use tactical-atomic weapons because of their availability and effectiveness, not because of the dollar value of mate-

rial destroyed compared with the cost of the missile. Perhaps our enemies have an entirely different scale of costs from ours. The "value" of an ammunition depot to an army varies immeasurably according to how many similar depots that army may possess. And, finally, what is the "value" of human life on the battlefield? No, we cannot use a dollar sign yardstick in selecting targets for atomic weapons!

The tendency to regard the tactical employment of atomic weapons in the same light as artillery preparation or counter-battery fire also is misleading, although in a broad sense both functions may be performed by the new weapons. Atomic stock piles are likely to be too limited, the missiles too powerful for expenditure on "area targets." Except in instances of dire emergency, authorised by proper authority, atomic missiles will be delivered only against accurately located targets, the importance of which, in the specific situation, have been carefully weighed.

Therefore, the atomic missile will be extremely difficult to deliver against targets of opportunity. The rapid pace of many of the campaigns in the last war caused numerous instances where front-line commanders located "opportunity" targets for long-range artillery or tactical aviation. Yet, because they failed to get both this information and support requests through fast enough and with sufficient clarity, they failed to receive the assistance in time. The seesaw campaigns in Korea have doubtless developed comparable examples.

#### **Concentration.**

The delivery of atomic missiles

against an entrenched enemy prior to our assault is well within present staff capabilities. The principal risks involved will be hostile atomic capabilities to make a shamble out of our assembly areas, if they are too concentrated, and, if again, the enemy can discover them in time. We will know with reasonable accuracy enemy locations. Our front-line units, precisely plotted in operations maps, can dig in for protection, and occupy their deep foxholes at the exact moment. (We hope to time our blasts to catch as many of the enemy in the open as possible.)

On the defence, staff planning looms much more complicated, particularly in case of a hostile penetration. Positions of friend and foe alike will be vaguely defined. Obviously, the atomic strikes cannot fall in such close proximity to our own troops as artillery shells do. "Opportunity" targets will predominate although localities where hostile concentrations might logically be anticipated should be "zeroed-in" ahead of time. Our defensive manoeuvres should particularly seek to compact the enemy within these small areas.

A third, and most unpleasant, prospect for atomic age staffs is the task of re-deploying our reserves, rallying stricken units, fast enough to counter the assault almost certain to follow an enemy's atomic strikes. Logically, current manoeuvres are field testing such problems and gaining practical experience in their solution. Atomic weapons, like every new tool of war, must be thoroughly understood and mastered before they are used in battle.

#### **"Radiation Hazard" Debunked.**

Presumably, Army possession of

atomic artillery, guided missiles, or free rockets will speed up the period between decision as to targets and the moment the missile is actually "on the way." However, it is not likely, even for preplanned missions, that this can be cut to the bare minimum customary with ordinary gunfire. Long-range guided missiles may turn out to be Air Force weapons, complementing that service's strategic bombing mission, and as such would be exceptions. In general, however, guns, guided missiles, and rockets appear to be Army weapons. Their tremendous power will require close control by senior commanders. Their complicated, highly technological logistic problems will necessitate special measures. Safeguarding the stock pile of missiles, guarding such missiles and maintaining secrecy during transit from depots to firing positions, and the safety precautions in handling them to prevent a premature explosion on friendly territory all represent major new requirements in ground warfare. Battalions organised to fire these weapons will need both security and logistic support greatly in excess of that furnished today's artillery from the headquarters to which they are assigned.

Such units will seldom be assigned to divisions or even receive fire missions from division commanders. Limitations of range, however, may result in their occupying positions within the rear limits of the divisional area. In order to be prepared for this last possibility, division commanders and their staffs must be conversant with general procedures and techniques of security, including deception measures to conceal firing positions, as well as the logistic prob-

lems of weapons and missiles. Obviously, they also must be completely informed as to the time and nature of all fire missions ordered by higher authority, for these may affect the security of their divisional area.

Friendly troops in deep foxholes, trained to look away from the direction of the explosion, will be safe a mile from ground zero, for the "nominal" (20 KT) bomb. This "safe" distance may be reduced by additional data being collected from tests such as the recent manoeuvres in Nevada. Tank crews protected by their armour can be closer. Equipment and supplies will be undamaged at distances permissible for personnel.

Fortunately for the quick follow-up, no radiation dangers exist for our troops who advance swiftly in the wake of an atomic air-burst explosion. (After-explosion conditions **within several hundred yards** of ground zero and underground bursts are not definitely known. Even in these explosions, however, residual radiation should be of brief duration **outside** of the radius of the clearly discernable crater lip.)

Handicaps to prompt exploitation will be more frequent because of fires and debris from an explosion. Roads may be blocked and thick, dry brush may be ablaze, but in country open enough to normally permit troop movement, no serious obstacles are foreseen. Plans should be made for rapid movement in complete disregard of the hitherto exaggerated "radiation hazard." Contingency plans should assure cross-country mobility in case roads are blocked or for engineer assistance to clear blocks.

A possibility of atomic warfare is the hostile use of mines, atomic or conventional, to bar an area where our advance is anticipated. The effect of atomic explosions on buried mines, atomic or conventional, is not definitely known. Even if atomic explosions fail to destroy enemy mines, their delaying effect upon our advance will be minimised by cutting channels through mine-fields while hostile covering fire is absent because of our atomic attack.

This consideration applies with equal force to all forms of obstacles which may be encountered in the advance, either natural or artificial. The adage that "an obstacle not covered by fire becomes only a nuisance" is truer than most phorisms. Division plans for exploitation should emphasise the urgency of passing all obstacles while the enemy is still shaken and incapable of laying down effective fires.

#### **Defence Plus A-Bombs.**

General Omar Bradley recently said, concerning the defence of Western Europe: "The atomic bomb will make a formidable defensive weapon" if the aggressor is compelled by terrain and the effects of ground troops to "channel his attack along the natural routes of march."

By causing an aggressor army to change its steam-roller tactics, the Western armies' superiority in mobility and control can be made to pay off. In short, the atom bomb makes it possible to resist aggression with a relatively smaller number of land forces. However, these units must consist of alert, highly trained fighting men, equipped with the most effective means of modern warfare. Such hard-hitting land forces, backed up by adequate naval

and air support, can defeat in detail what remains of the atomic-crippled enemy.

However, the tactical use of atomic weapons is not a cheap and easy solution of our immense security task. The United States and its allies still need many divisions backed by strong tactical air power. The atom bomb in land campaigns can make it unhealthy for an aggressor to mass his forces, but it will not eliminate his armies.

Atomic missiles, like their comparatively miniature counterparts conventional artillery, are primarily offensive weapons in contrast to mines, which are entirely defensive. Yet, despite a given weapon's tactical classification, it can often possess a different strategic potential. Certainly long-range bombers are strictly an offensive striking force. Nevertheless, since the United States' strategic air force will be employed only in retaliation against aggression, it at once becomes a prime weapon of American defence. The same is equally true of tactical atomic weapons which now open startlingly new vistas for outnumbered defensive forces.

The use of this weapon by defending armies might seem to involve contradictions. Concentrations either of men or material, are prerequisites to justifying the despatch of atomic missiles. Apparently, we must remain dispersed while hitting a concentrated foe. Is that possible? The immense striking power of the atomic weapons appears neutralised on a battlefield where both contestants possess it. The massing of force to achieve decisive victory exposes that force to the destructive effects of its opponents' atomic mis-

siles. Yet, dispersed troops cannot apply enough force to defeat the enemy.

The apparent contradiction is explained by recalling the belated success of World War I generalship in dealing with the machine gun. Against frontal attack by infantry, the machine gun had been almost impregnable. Dug into field fortifications, it was hard to destroy by artillery. Yet, a Sergeant York could, single-handed, flank its deadly menace and dispose of its crew with a hand grenade or a sharp-shooter's rifle. In brief, the machine gun must be guarded by enough troops to prevent flank or rear attack from infiltrating individual foes against which it is helpless. Thorough guarding raised the concentration of defenders to a point where attackers' artillery could take its toll and again open the path for flanking skirmishers.

Even the "solid" front, from Switzerland to the Alps, was not impenetrable to determined, infiltrating storm troops and yielded to the German new style assault in March, 1918. Months later, when American armies plunged into the forests of the Meuse-Argonne, manoeuvre broke the machine gun's absolute supremacy and restored to skillful leadership the possibility of wresting decisive victory. Advances could no longer be estimated mathematically beforehand; so many hundreds of casualties for so many yards forward. War's principles, which were merely overlooked, not invalidated, were again acknowledged. Speed and skill of manoeuvre combined with a superior intelligence service would seem the key to success in tactical atomic warfare.

### Renaissance of Generalship.

Many writers concluded in the aftermath of World War II that, because of the increased mechanisation of armies and the immense logistic effort to support them, generals were only planners, not leaders. The general's role—so we were told—had become that of a corporation board chairman. Had that conclusion even been true, the advent of the tactical A-bomb on the battlefield would kill it.

Atomic warfare will tax generalship as never before, by vastly enhancing the price paid for each failure or, conversely, holding out hitherto unbelievable rewards for "outgeneraling" the enemy. The atomic age commander, whose army faces superior foes and must assume the defensive, has the difficult task of disposing his troops so that their strength is great enough to force the attacker to mass if he would advance, yet held sufficiently dispersed to preclude fatal damage by the enemy's atomic missiles which will probably precede his assault.

Manoeuvre is not apt to be again ignored as it was in World War I or in medieval sieges. Were the establishment of "unbroken fronts" possible with available manpower and material, modern conflict still offers the possibility of airborne or sea-borne envelopments. And it will be in the manoeuvre—normally on the most extensive scale—accomplished by the genius of leadership which conceives it and the mobility (including discipline and training) which executes it that combat between two atomically armed hosts may well find victory or defeat.

The next war's commanders will desperately need swift, accurate intelligence; from reliable estimates

of enemy atomic capabilities and intentions to spot reconnaissance of hostile weapons which might deliver the missiles. However, even with those imponderables adequately met, the defending general has barely begun the estimate which leads him to his decision. They will aid him in the successful disposition of his own troops. They will not inform him as to the means by which the enemy's superior strength can be reduced to a point at which a counter-attack can be launched with hope of decisive victory. This latter "uncertainty of battle," as Von Clausewitz expounded more than a century ago, has not changed in nature. It has only become more complicated when the traps into which he would beguile his attacker are no longer sunken roads, enfilading canister, or concealed cavalry to charge an exposed flank. The traps are now situations under which the defender may loose atomic missiles with disastrous results upon the unwary, if superior, numbers and equipment of his enemy. The classic example whereby Hannibal destroyed a superior Roman army at Cannae still typifies the ultimate in tactical art. Only the nature of the enticement and the method of the kill will take on new forms, since the weapons with which the soldier fights have been altered beyond all comprehension of Hannibal's swordmen.

Calculated risks must be taken. That term cannot be permitted to cloak ignorance of the real nature and extent of those risks but should emulate the careful reckoning of a Lee at Culpepper detaching his "right arm" Jackson to Manassas Junction while he faced Pope's Yankee host with a fraction of the Confederate Army.

Some portions of the atomic age battle commander's defending force must inevitably be more concentrated than would be "safe" should atomic blows befall them. Those portions must either be concealed, too mobile to be dangerously hit, or so deeply dug in that their concentration is reduced, in terms of atomic attack. The "dispersion" cure-all for protection against the new weapons is meaningless until analysed and applied to a specific set of conditions. For example, direct a replacement depot commander to "disperse" his camp so that a nominal (20 KT) bomb cannot cause more than 2,000 casualties out of his 16,000 men. With World War II type of construction, that requires a camp of 64 square miles minimum, a square 2 miles on a side for each 2,000 men. Such an installation would be prohibitive to build, impractical to operate. Yet, if personnel were required to live in tent covered, deep foxholes, it could be safely reduced to less than half-size. Camouflage, concealment, and "calculated risk" could permit further concentration.

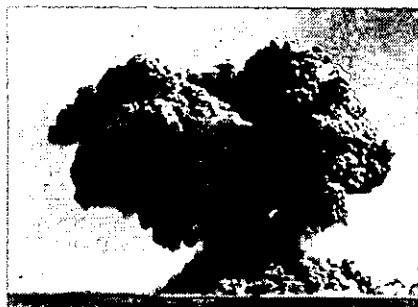
Engineers can build very few atomic bomb-proof installations. The next war's logistics as well as its tactics must make adjustments to new weapons. To site an extreme example, overseas forces may leave the Zone of Interior from beaches in addition to having to land outside of established ports upon their arrival overseas if atomic bombing turns ports into death traps.

### Conclusions.

New, often startling, aspects can be discovered in every phase of operations in atomic warfare. Yet, a few conclusions must already have

become obvious. Atomic weapons are now suited to battlefield use. Commanders up front, as well as those far back, must deal with them, recognise their potential power to help us snatch victory from superior numbers or to encompass our ruin. We must respect, but not fear, the new weapons. Possessing the head-start in numbers and technological

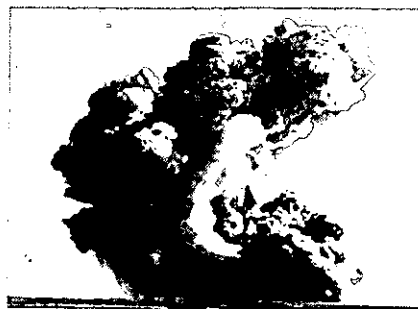
development, we need only ensure that we use them wisely, and protect ourselves against them soundly, not hysterically. Atomic warfare is a challenge to both American leadership and science, which, boldly met, will neutralise an aggressor's reliance upon reckless expenditure of lives to pound out victory in land warfare.



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— MONTE BELLO —

1952

# THE FUNCTIONS

of

# MILITARY SECURITY

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The third and last of a series of articles prepared by the General Staff to draw the attention of the AMF. to the subversive attack which is constantly being directed at the armed services of the democratic powers, and to the necessity for taking appropriate measures to counter it.

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**T**HE aim of military intelligence is to evaluate and interpret information that will indicate the capacity, ability and will of a foreign army to wage war, and at the same time to deny the enemy similar information concerning ourselves.

It is the last part of this aim that we propose to discuss—denying the enemy military information about ourselves. This is the task of Military Security or Counter-Intelligence, although the latter term also embraces civil security.

It is accepted that the basis of all military preparations and plans must be good information. This applies equally well to the enemy or to a potential enemy.

In a previous article, it was suggested that any enemy agent might ask himself three questions:—

- (a) What type of information is required?
- (b) Where is this information to be found?
- (c) How am I going to get it?

Let us examine these questions more broadly than was done previously.

What type of information is required? This does not vary much during peace or in war—plans, training methods, organisations, order of battle, morale of troops.

Where is this information to be found? Sources which have proved themselves in the past are from

documents obtained from headquarters, offices, careless disposal of waste; from careless talk by employees and troops in public places, in correspondence and over the telephone; from indiscretions by the press, periodicals and radio; from observation by agents of the movements of troops, supplies, equipment and stores.

How is the agent going to get this information? It has been shown in previous articles that he will use both highly organised espionage rings and casual sub-agents, who will be infiltrated into key places with access to the sources mentioned above. This may be carried out by the organisation of cells within headquarters, units and departments. It is obvious that in order to create an effective organisation, the enemy must, by means of propaganda and other subtle subversive means, win weaker characters over to the cause, in order to gain a footing within units, etc., where prior infiltration has been unsuccessful. These methods will often be aimed at lowering the morale of units.

Having considered the task from the enemy's point of view, let us now see what we can do to combat enemy aims and methods in relation to the acquisition of military information.

In war, in the field, military security policy is laid down by the General Staff and implemented by a section (MI II) of the Directorate of Military Intelligence, through General Staff (1b) personnel on the higher headquarters, with field security personnel as operatives.

During peace, the procedure is the same as in war, and close liaison is maintained with the security people

in the Navy and Air Force and with certain civil security agencies.

How does Military Security work? Let us start from the unit level.

By direction of the Military Board, the commanding officer of each unit will appoint a Unit Security Officer, who will be responsible to the commander for the security within the unit. The security of the unit is, of course, always the commander's responsibility. The unit security officer should be a fairly senior officer in the unit, and is often the second-in-command.

The unit security officer is responsible for:—

- (a) The education of all ranks to a high degree of security consciousness;
- (b) Advice to the commanding officer on security precautions which should be taken within the unit;
- (c) Ensuring that all current security instructions are observed within the unit and, where necessary, preparing standing orders for security;
- (d) The investigation of all security matters arising within the unit;
- (e) The location and identification of subversive elements within the unit;

Perhaps the most important duty of the unit security officer is in the education of all ranks in security matters, for if there is a high degree of security consciousness, then any enemy agent is going to have a hard time getting information from the unit or in establishing a subversive cell within it. In order to promote this security consciousness, the unit security officer may use such training methods as talks and

## FUNCTIONS OF MILITARY SECURITY

discussions, exercises, demonstrations, use of posters, and disciplinary measures should be taken against breaches of security.

In most cases, field security personnel will be available to assist unit security officers, and will, if required, conduct a security survey of a unit, in order that advice may be given on any security weaknesses revealed by such a survey.

It should be clearly understood that military security is not concerned with the misdemeanours of the troops, and will not report on such matters, provided that no breach of security is involved, or likely to be involved.

Another point, too, which should be emphasised, is that although each unit appoints a security officer, this act does not absolve all ranks, particularly officers and senior NCO's, from the responsibility of policing security regulations within the unit. Members of a unit are expected to be alert to any threat to the security of that unit, and this important duty in the lives of officers and other ranks is not always fully realised.

Security matters within a unit are reported on by the unit security officer to General Staff (Intelligence), often through field security personnel, after which a direction or recommendation will be issued through General Staff (Intelligence) for the implementation of protective security precautions or where a security investigation is required.

In more general terms, the work of military security falls under four main headings:—

(a) Security of information—the

denial to the enemy of direct intelligence;

- (b) Security of personnel—the protection of military personnel against seditions and subversive influences, likely to undermine morale or to affect the efficiency of the unit;
- (c) Security of material—the protection of military equipment, stores and supplies against sabotage;
- (d) Security of operations and training—special security attention given to any operation to ensure security of plans, movement and training, in order that the enemy may be deceived as to our intentions. This type of security cannot be effective until there is a high standard of security of information, personnel and material.

How can you help military security to function effectively? Firstly, ensure that you yourself are familiar with, and strictly adhere to, general and local security requirements, and any troops under your command are "security alerted." Secondly, report immediately to the nearest intelligence officer any act which you consider to be subversive or which may involve a possible breach of security. Lastly, give all possible assistance to any field security personnel who may be working within or about your unit.

Remember, forewarned is forearmed! Whilst it is the task of our intelligence to forewarn our commanders, it is the task of military security to prevent the enemy commanders receiving the same service.

# THE TRAINING of a FUNCTIONAL RIFLEMAN

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Captain W. R. Chamberlain, M.C.

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IT is a common and somewhat trite expression that the entire effort of a nation at war is behind the "man behind the gun". This man is the infantry rifleman, the man who digs the slit trenches, advances under fire to the enemy positions, and who, finally, kills the enemy with his weapon—be it rifle, sub-machine gun or light machine gun. All of our services are behind this man, and take pride in ensuring that he need never "look over his shoulder" for supplies or other administrative requirements. The war worker on the home front is incited to greater efforts to prevent "Tommy" from running out of ammunition for his rifle. Finally, at the front all of our supporting arms—artillery, mortars and tanks—exist for the sole purpose of helping the infantryman into positions that will enable him to kill the enemy at close range.

With this knowledge of the massive support that the infantry rifle-

man receives in carrying out his function of killing the enemy, it comes as a considerable shock to find out that the rifleman has not been truly functional in this role. Colonel S. L. A. Marshall, a historian for the United States Army in the Second World War, conducted a thorough survey of infantry units in action and arrived at the conclusion that of all personnel who were in personal contact with the enemy—either in attack or defence—only 25 per cent. at the most actually fired their weapons in anger and that in many units this percentage averaged about 15 per cent.

While the above figures were derived from a survey of United States' units, they apply equally well to the Canadian Army. It must be emphasized that this outsize percentage of 25 per cent. effectiveness does not apply to the cooks, drivers and clerks of our infantry battalions, but to the men who are expected to, and should, fire, their small arms—the men in the rifle platoons.

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—From "Canadian Army Journal."

One is tempted to ask that if 75 per cent. of our riflemen were not firing their weapons at the enemy, what exactly were they doing? As far as Colonel Marshall's researches reveal, their prime function seems to have been that of keeping the "firers" from getting lonesome. So all the efforts of our services and supporting arms have not been expended in a very fruitful manner. Nor is it any great incentive to the munitions worker to find out that 75 per cent. of small arms ammunition lies unused, and that 75 per cent. of front-line small arms are not fired at the enemy.

The time has come for a good deal of house-cleaning in our training methods if the product of those methods is only 15-25 per cent. effective. If the object of our small arms training is to produce an effective killer of the enemy we have not attained that object. Something is drastically amiss if our so-called riflemen will not fire without orders at enemy within sight and within range of small arms fire. The writer has seen this happen only too often and has received confirmation of this practice from practically all infantry officers whom he has queried.

For reasons which this paper will attempt to enumerate, our trained riflemen (or 78-85 per cent. of them) arrive on the battlefield without the urge to kill the enemy; they have little confidence in their weapons and little desire to use them; they have absolutely no idea of what lies ahead of them nor of how they are going to perform their job of killing the enemy. Their basic attitude is defensive and dominated by the idea of self-preservation.

Can we, then, arrive at any rea-

sons for this most undesirable mental attitude?

Basically, it is felt that the reluctance of the individual soldier to fire his weapon at the enemy could be traced to our way of life. Western civilization has set at its highest ideal the prolongation, amelioration and preservation of human life. From his mother's knee the citizen is taught "safety first" and respect for the welfare of his fellow-man. Our culture is a constructive one, in which destruction is frowned upon as anti-social. As a consequence, a mental-block—most desirable from peace-time standards—has been established in the normal law-abiding citizen's mind against the taking of human life.

So the civilian enters his military training with this reluctance to kill firmly implanted in his mind. Nor does he at any period during his training receive any purposeful indoctrination that will motivate him in such a way that he is prepared to shoot his enemy on sight without having first received a direct order to do so.

The recruit goes into the first of the many phases of his rifle training with greatly varying degrees of experience with shooting. He may have been a fine hunting shot, or he may have had no experience with a rifle whatsoever. In either event he is put through all the deadly mechanics of our weapon training. He is taught to memorize the parts of the weapon, how to strip it, how to clean it, and finally, how to transport it from one position on his body to another in rifle drill.

The largest part of weapon training is devoted to these exercises,

and by the end of them the former hunter has had his keenness considerably dulled, for he only knows that he was able to make successful kills on the game trails without this rigmarole. The novice at shooting, after being initially interested by the novelty of the subject, soon falls into a state of co-operative but lethargic acceptance of the scheme of things—a state of mind that some authorities are pleased to call "disciplined". Certain it is that with such training, his mind is not capable of acting with initiative when it comes to the subject of shooting.

When that red-letter day comes on which the recruit is actually to fire his rifle and his somewhat subdued enthusiasm is roused, what do we do to fan the feeble flame? **We line him up, march him out, line him up again, lay him down in line, and order him to fire at a black and white target.** All is neat and military and disciplined but the net result of such an experience is to awaken no interest in firing in the mind of the recruits. A typical attitude to range practice was expressed by the recruit who stated that he liked the subject because on such occasions he could relax and have a smoke when his relay wasn't firing.

As presumably the object of our training is to fit the man for combat, let us compare the conditions under which the recruit fires on the rifle range with those under which he is **expected to fire** (but doesn't!) on the battlefield. On the range he fires from a level position in a formal manner, in accordance with the book. He fires only on a given order—Heaven help him if he does otherwise. He fires at a large white

square in the exact centre of which is a round black bull's eye. He fires from a known range—given always in hundreds of yards—corresponding to the graduations on his rifle sight.

Now in action, he rarely, if ever, finds a level sward from which to fire. The effective rifleman has to adjust his position to piles of rubble, trees, brush or the odd dead body. He fires when he sees the enemy, and he fires at a target which is often fleeting, sometimes behind cover, and frequently firing back. His range is **not** given—he must figure that one out for himself: he cannot rely on a NCO or an officer to do this for him.

We may now inspect the finished product of our present rifle training. Badly motivated for his job as a rifleman by his civilian environment with no military indoctrination to counter this, his possibilities for the job stifled by a dislike for the mechanics of rifle firing, and his whole weapon training totally unrelated to the battle picture what wonder our rifleman is only 15-25 per cent. effective! It is quite possible that this 15 per cent. effective class comes from men who had pre-military experience in actual hunting, and who reverted to old ingrained practices learned on the hunting field and fired upon the enemy with the same zest and easy skill with which they had once fired at a running deer or a grouse on the wing.

In searching for a cure for the above conditions, certain basic ills in our training methods become apparent. **We have concentrated on the physical and mechanical aspects of rifle training to the exclusion of the mental and moral aspects.**

To outline any training that will be effective, we must have as our object the production of a soldier who will want to fire at the enemy. To this end we must ensure that the recruit forms a genuine liking and interest in small arms shooting. Competitions with suitable awards are suggested, with inter-platoon shoots to encourage team spirit. As much as possible, shooting should be in the form of simple exercises, using three-dimensional targets of life-like proportions, **always** leaving the initiative to fire with the rifleman. The recruit must be encouraged to fire on sight and instinctively, and to further this a modified form of skeet shooting with shotguns would be useful. Firing at cover behind which are set lifelike targets will develop the recruit's confidence in searching fire, and at an advanced stage, moving targets should be used.

When the recruit's confidence in himself and his weapon has been thoroughly implanted, he must be put more and more in the battle picture. He must become familiar with the use of all types of ground, both from the point of view of firing positions and his judgment of distances. He must learn to fire while under fire, and under the noise and disturbances of battle so that when he takes the field he will react to enemy action in an aggressive manner, and not merely "shoot back" but "shoot first".

The relation of the rifleman to the enemy must be given constant attention throughout his training. Some form of indoctrination must be an ever-present part of his conversion from civilian to military thought, in order that he may be-

come motivated as a soldier. It is not a question of engendering hatred for the enemy in the recruit's mind, but of impressing upon him that his sole function is to kill the enemy, and that if he does not perform that function when the opportunity presents itself, he is useless.

The possible criticism that such training will result in lack of control and "trigger-happiness" is not tenable. The problem is not to **stop** fire but to start it, and it is far better to have some excess of enthusiasm than the present lassitude displayed by some of our so-called riflemen. Nor is there any question of ammunition wastage. The ammunition will be **used** and it is the cheapest and most effective means we have of killing the enemy. Artillery concentrations and air bombardments will "neutralize" and "keep their heads down," but no enemy is so effectively "neutralized" as the one with a rifle bullet in his head.

It must be emphasized that this article is not attempting to advocate "quantity" at the expense of "quality" in our small arms firing. We must produce **both**. The expert shot should be encouraged to improve his skill. The recent reports on fighting in Korea state that the sniper's rifle has hardly been used "due to the fact that very few men were qualified snipers".

At one time the soldier's only trade was that of arms, and he was rewarded for proficiency in this trade. He won his "spurs" only after a clear demonstration of his skill in the use of his weapons. The rifleman of today, however, remains among the few individuals in the

Canadian Army who receive no remuneration for attaining a high degree of skill in their trade. In other words, we give trades pay to our cooks, clerks, and storemen because of their special knowledge and skill, but we leave unrewarded the master of the most important trade of all—the marksman.

This is NOT an advocacy of combat pay, as known in the United States Army. A soldier's job is to fight, and he is not entitled to extra pay for doing that job. However, proficiency in that job should be rewarded and skill in marksmanship is capable of being assessed. Certain it is that trades pay would encourage riflemen to improve their skill. The requirement of annual requalification would maintain a high degree of skill and unlimited allotment of "trade vacancies"

would ensure that all riflemen could qualify.

In conclusion, in order to produce the effective, "functional" rifleman, we must accomplish three things. First we must mould his mind so that he has the desire to fire—call it the "hunting attitude" if you will. Then we must improve his skill and confidence and enthusiasm for weapon firing. Finally, we must put him thoroughly in the battle picture by training him under battle conditions, so that he will go into action ready to function as a rifleman. With this proper motivation the rifleman will carry the battle to the enemy; he will replace the former "slit trench attitude" with a positive desire to use his weapon on all occasions; he will dominate the close-range battlefield.

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Let us remember that democracy is a sword as well as a shield; that its purpose is not only to defend old liberties, but to make new social conquests as well.

—Tausig.

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# BOOK REVIEWS

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**DUNTROON—THE ROYAL MILITARY COLLEGE OF AUSTRALIA, 1911-1946.** By Colonel J. E. Lee (Australian War Memorial, Canberra).

One of the first tasks of the Commonwealth Government after federation in 1901 was the reorganization and integration of the military forces hitherto maintained by the States. As the new Army gradually took shape, an Army that was intended to be truly Australian in character and outlook, it became apparent that the type of officers required to lead it could be provided only by an Australian Military College. This impression was confirmed by Field Marshal Lord Kitchener, who, at the invitation of the Commonwealth Government, visited this country in 1910 and drew up a comprehensive report on the development of the Australian Military Forces.

On 27 June, 1911, the College was officially opened with a complement of 31 Australian and 10 New Zealand cadets. The first class of 27 Australians and 8 New Zealanders was graduated on 15 August, 1914, eleven days after the outbreak of the first World War. The Australians were commissioned in the first AIF, and many of them took part in the historic landing at Anzac on 15 April, 1915.

From that time until the present day Duntroon graduates have played leading roles in the development and guidance of our military forces in peace and war. Turning the pages of Colonel Lee's book one comes across great names, names that have added lustre to Australian arms on the battlefields of the world, names that will be spoken with admiration and affection as long as the Australian Army exists.

Colonel Lee traces the history of the College in considerable detail; no event of importance seems to have been overlooked. With his statistical tables—the Nominal Roll of Staff Cadets from 1911 to 1946, Honours and Awards, War Casualties, Service Records, etc., the book is a valuable contribution to the historical records of the AMF. Every Duntrooner will spend many happy and not unprofitable hours reading it, and will be proud to have it in his personal library.

The Australian War Memorial is to be congratulated on the fine job it has made of converting Colonel Lee's invaluable record into a handsome volume at the modest price of 30/-. Order forms are available at all Staff Corps Messes, or copies may be ordered direct from the "Australian War Memorial, Canberra, A.C.T."