

UNCLASSIFIED

0120901061

Australian Army History Unit

18 APR 2014

AUSTRALIAN ARMY JOURNAL

CAPT HOWARD

No. 203 April 1966



AUSTRALIAN ARMY JOURNAL

Editor: A. J. Sweeting
Staff Artist: G. M. Capper

The Australian Army Journal is printed and published for the Directorate of Military Training by Renown Press Pty. Ltd., and issued through Base Ordnance Depots on the scale of one per officer, officer of cadets, and cadet under officers.

Contributions which should be addressed to the Editor, Australian Army Journal, Directorate of Military Training, Army Headquarters, Canberra, are invited from all ranks of the Army, Cadet Corps and Reserve of Officers.

\$10 (£5) will be paid to the author of the best article published in each issue. In addition, annual prizes of \$60 (£30) and \$20 (£10) respectively will be awarded to the authors gaining first and second places in the year.

The information given in this journal is not to be communicated either directly or indirectly to the Press or to any person not authorized to receive it.

UNCLASSIFIED

AUSTRALIAN ARMY JOURNAL

A periodical review of military literature

No. 203, APRIL 1966.

Contents

- 3 Night Operations in Counter-Insurgency
Major L. D. Johnson
- 31 Some Impressions of the Gallipoli Campaign
Major E. K. Baker
- 36 Bamboo
Major G. M. Plunkett
- 46 The Good Leader
Warrant-Officer R. Burns
- 54 A Career Plan for Arms and Service Officers
Major K. L. MacPherson
- 58 Crack and Thump: Training for War under
Peace-time Conditions
Major J. A. Rymer-Jones

CROWN COPYRIGHT RESERVED.

No article in this Journal is to be reproduced in whole or in part.

**The views expressed in the articles are the authors' own
and do not necessarily represent General Staff opinion or policy.**



GALLIPOLI. Anzac Beach at its southern end, looking north on 3 May 1915 to Ari Burnu from the Australian Casualty Clearing Station. The 3rd Field Ambulance and the ordnance were located under the cliff to the right. On the previous day the New Zealand Brigade, moving through to attack Baby 700, had been much hampered by the congestion on the beach.

(Australian War Memorial.)

Night Operations in Counter-Insurgency

*Major L. D. Johnson,
Royal Australian Infantry*

Introduction

FROM the days of Sun Tsu Wu to the present time, night operations have played an important part in insurgency tactics. During the campaigns between 1790 and 1898, Geronimo, Choto, Sitting Bull and Pontaic successfully employed night tactics against the American Army. During the Peninsular War of 1807 and the Russian Campaign of 1812, night incursions on Napoleon's encampments and extended supply lines by Spanish insurgents and Russian partisans contributed considerably to his ultimate defeat. The guerilla tactics used by the Boers from 1898 to 1902 and by Colonel T. E. Lawrence's Arabs in 1916 were based to a great extent on the achievement of surprise by night movement. During the Second World War the cover of darkness was used to significant advantage by the Maquis in France, the Royal Chetniks and Partisans in Yugoslavia, the Andartes in Greece and Crete, the partisans in Italy and Russia, the guerrilleros in the Philippines, the Chins, Karens and Nagas in Burma and the Australian Independent Companies in Timor and New Guinea. Recent experience in Burma, the Philippines, Malaya, Kenya, Indo-China, China and Greece have shown the insurgents' reliance on their ability to operate freely by night. The Cyprus revolt, marked by a high percentage of night incidents, was begun by 'Dighensis' or Colonel Grivas at midnight, 31 March 1955. In Vietnam the night belongs to the Vietcong. This use of the cover of darkness has always been an accepted part of insurgency tactics by which the insurgents gained surprise and mobility to confound their better equipped and conventional opponents.

Major Johnson graduated from the Royal Military College in 1955 and was allotted to the Royal Australian Infantry.

After initial service with 11 NS Training Battalion he was posted in 1957 to 3 RAR, serving with that battalion for about four years, including active service during the Malayan Emergency. This was followed by a two years appointment as Staff Captain AAS UK, after which he briefly rejoined 3 RAR before his appointment in August 1963 to 2 RAR. He attended the Australian Staff College in 1965, and after graduation was posted in December as an Instructor at the Royal Military College.

This article was written as a military history thesis during Major Johnson's attendance at Staff College.

Throughout history, government forces, when countering insurgency, appear to have avoided night operations in favor of operations by day. During the Peninsular War the French moved only by day and then in bands of not less than 25 armed soldiers. In Mindanao, Colonel Fertig's guerilleros so harassed the Japanese that they withdrew to secure barracks by night. It was only after October 1901 that Kitchener employed night raids and marches against the Boers, and in Malaya and Kenya the generally accepted tactic was to 'base-up' in a secure perimeter by night. In some cases, such as the Greek Civil War, the government forces conducted some night operations, but rarely was any effort made to develop lasting techniques. Conventional government forces, confident of daylight superiority, appear to have deliberately restricted their operations to daylight hours.

Reasons for Conventional Force Superiority in Daylight

Overall Government forces have a tactical advantage over insurgents in daylight because:

- (a) Government forces normally have superior weapons and equipment to those of the guerillas, and the means to move fire power and reserves quickly.
- (b) Air support is a dominating factor by day. Air reconnaissance, close air support and the rapid deployment of infantry and artillery forces by helicopters or air drops have a decisive influence on the guerillas' freedom to operate. Government forces generally possess a better measure of air support.
- (c) In daylight government forces usually have superior means of mobility. Reserves can be moved rapidly and infantry forces pre-positioned near their targets by air or ground vehicles. Mobile armoured columns, supported by mounted infantry or artillery, can appear unexpectedly along major routes and near nodal points. This constant threat of unheralded attack hinders the insurgents' freedom to operate.
- (d) Government forces can easily and quickly apply accurate artillery fire on any guerilla concentration. The observation obtained by day enables accurate fire support to be applied by the largest and most destructive weapons.

Though the technical weapons and equipments available to the government forces, when properly employed, make it extremely costly for the guerillas to engage in their normal operations by day, they do not prevent guerilla forces from

doing so. Nevertheless, daylight tactical superiority overall lies generally with the more conventional government forces.

Reasons for Guerilla Superiority by Night

The guerillas generally concede the daylight tactical advantage to the government forces rather than pit their forces against a stronger and better-equipped enemy. Their tactics are primitive and depend on imagination and cunning. They therefore compensate for their weakness in daylight operations by the use of surprise — a weapon of incalculable strength when well used. Even so, by itself, the measure of surprise is generally insufficient by day to counter their enemy's technical superiority and achieve a lasting victory. The guerillas are still unable to operate efficiently or meet the government forces in any prolonged battle into which the government forces can quickly bring reserves and firepower. Therefore the guerillas must be mobile, ready to disappear into bush, jungle or darkness. These must blanket their activities completely to prevent the employment of the enemy's technical weapons. Of these blankets the most effective is darkness.

The need for guerillas to achieve mobility and surprise clearly limits the type and size of weapons and the amount of equipment they can employ, especially in darkness, because:

- (a) They can hope to carry only a small amount of operational equipment when moving at night on foot.
- (b) At night the accurate use of weapons is limited by lack of observation.

These disadvantages, however, have a more hampering effect on the tactical techniques of the government forces because:

- (a) The techniques of the government forces rely more on the employment of technical weapons than do those of the guerillas. These weapons are usually cumbersome and in most cases require good observation for their best use.
- (b) Technical weapons — guns, armour, vehicles, direct-fire weapons and air support — are as a rule designed for more efficient use by day. Generally speaking their efficiency is reduced at night. Tactical techniques which depend on them suffer in an equal degree.

The guerillas' tactics, weapons and organizations are designed so that they are compatible with night fighting. Thus by night when the government forces are at their weakest, the guerillas are at their strongest. The insurgents employ this advantage resolutely and, when searching for a lasting victory, confine their major activities to the hours of darkness.

The Task

If the government forces are to win an insurgent war they must be able to operate more efficiently at night than the insurgents. They must, at the same time, retain those measures necessary for superiority by day. The deciding factors — superior night skills, tactics, weapons and techniques — will give government forces the tactical advantage which will enable them to defeat the insurgents. An investigation of these measures will reveal the best counters to insurgencies.

Pattern of Operations — Military and Civil

Counter-insurgency techniques, especially those related to night operations, must be co-ordinated with other measures included in the pattern of operations. Some of these are:

- (a) *Control of the Movement of the Population.* This entails the issue of identity cards, the resettlement of squatters and the regrouping of scattered villages under police surveillance.
- (b) *Control of Food, Clothing and Medical Supplies.* This includes the imposition of a rationing system, central cooking of the major foodstuffs and strict supervision of the storage and sale of non-perishable goods.
- (c) *Increased Powers for the Police under Emergency Regulations.* This should allow for strict powers of detention, curfew, wide powers of arrest, control of firearms, seizure of property, destruction of property (particularly crops of staple food), gate checks, house search and the proclamation of restricted and controlled areas. It should also allow for the raising of para-military forces.
- (d) *A Form of Centralized Operational Control.* This can be achieved through such committees as an operational council, a 'Director of Operations' staff, and state, provincial or district war executive committees. An important aspect of this control should be police and army co-operation, joint integration of a reliable and resourceful intelligence system and a framework of operations plan which includes all police, military and para-military resources.
- (e) *A Strong Indigenous Political Organization and Objective.* A political party with a firm control over the country should be encouraged. This should be supported by provincial, district and local government boards and secretariats. Some of the main tasks of the government should be firm financial control, reform of social evils,

provision of aid for depressed areas and enlightened legislation to obtain the goodwill of the people.

- (f) *The Employment of Psychological Warfare.* Psychological warfare should include measures aimed at giving the insurgents a sense of military and political defeat, isolating them from the people, undermining their confidence in the insurgent leadership and creating disension and distrust in the insurgent ranks. In addition, one of the primary tasks should be to win the co-operation and goodwill of the people through propaganda.

These are only some of the measures a major power or government force must employ to win an insurgent war. Day and night operations by counter-insurgent forces must be supported by these measures in all stages of revolutionary warfare. Without them, military operations would be of no consequence.

The Stages of Revolutionary Warfare

Revolutionary warfare is vitally important since it is the "most feasible form of warfare in the present condition of "nuclear balance of terror". Neither total war, nor general war is any longer thinkable — except perhaps to Mao Tse-tung. After Korea, even limited war does not seem decisive enough in relation to the human sacrifices involved. Revolutionary guerilla warfare holds the stage, with a special Chinese entrepreneurial interest'.¹

Mao Tse-tung's Influence on Revolutionary Movements

Mao Tse-tung exerts considerable influence on the external policies of the People's Republic of China, and is the present day leading proponent of revolutionary warfare.

As part of her defence policy, China's aim appears to be to extend her sphere of influence over those countries on her periphery generally regarded as traditional buffer states. She has already occupied some. She is firmly entrenched in Tibet and dominates the ancient trade and invasion routes across the Himalayas between Tibet and India. She exercises much influence on Mongolia and North Vietnam. Through fear, Cambodia is aligned with her policies. Laos is neutral and only Western influence in South Vietnam impedes China's aim of complete control of Indo-China.

Apart from her defence needs, China also seeks abundant sources of food to sustain her rapidly expanding population. These can be found in the rich river deltas of the Red River,

1. Revolutionary Guerilla Warfare, *Current Affairs Bulletin*, Vol 35, No. 10, 29 Mar 65, p. 146.

the Mekong and the Chao Phaya. The colonization of Tibet suggests that she may be seeking 'Lebensraum' in these areas.

Unable to extend north and west into Russia, and bounded on the east by sea, China's natural outlet for expansion lies to the South. Since China's southern neighbours are mostly Western-aligned, she also has a 'justifiable' political reason for interfering in their affairs. The southern neighbours comprise the nations of South-East Asia and in this area lies China's prime target.

It can be anticipated that Chinese-inspired revolutionary movements will begin in those areas of South-East Asia not yet afflicted, and intensify in those where activity is already under way. The sort of revolution the Western world can expect will be related to Mao's 'Stages of Revolutionary Warfare'.

Mao's Stages of Revolutionary Warfare

When writing on Protracted War, Mao stated that it generally passed through three stages:

- (a) *First Stage.* This stage covers the period of the enemy's strategic offensive and the communists' strategic defensive. In the military sense the major aspects are marked by minor guerilla action against soft targets, intimidation, subversion, the establishment of base areas, food systems, money sources, recruiting systems and control over the scattered indigenous population.
- (b) *Second Stage.* The second stage is the period of the enemy's strategic consolidation and the communists' preparation for the counter offensive. The military aspects of Stage One are intensified, firm base areas established, regular and provincial forces raised and large-scale operations carried out against the established authority. The battlefield is prepared for the final conventional battle against the massed government forces.
- (c) *Third Stage.* This stage is a period of communist strategic counter-offensive and the enemy's strategic retreat. The guerilla war becomes primarily a mobile war between the conventional forces of both sides. All previous activities are intensified and the communists aim at complete destruction of the governing authority. Guerilla forces are used to assist the communists' conventional force by harassing enemy soft targets such as lines of communication.

The concepts of planning counter-insurgency operations must be related to these three broad phases. Stages 1 and 2 depend

on the special distinctive characteristics of guerilla warfare which require special solutions. Stage 3, however, is more typical of a large-scale conventional war, with tactics and techniques which are more properly the subject of study in Conventional Warfare, and will not be considered in this article. Harassment against soft targets by guerilla action in Stage 3 has the same characteristics as Stages 1 and 2 and should be considered with these stages. Because of limitations of space, the investigation of night operations in Stages 1 and 2 will be restricted to the major military aspects of each stage.

Night Operations in Stage 1 of Revolutionary Warfare

During Stage 1 of Revolutionary Warfare the insurgents lay the foundations of their systems of supply, information and recruiting. These systems rely almost entirely on the co-operation of the civilian population. It is through contact with the people that the guerillas are able to recruit for their cause, obtain food, clothing and drugs, and establish an intelligence organization. Without these intimate contacts in the first phase, the insurgent movement will not be able to secure sufficient support to enable it to expand. Initially the guerilla's main concern is in 'organizing the villagers to assist',² but when the basic systems have been prepared 'terrorist activity will be built up on an increasing scale to conduct a planned campaign of intimidation to destroy government supplies and resources and to obtain arms and warlike stores for use against the government'.³ There is some guerilla action against soft targets but, generally, insurgents will avoid major clashes with government forces.

Contacts between the guerillas and the people will occur by day and night until the government forces establish some form of control over the people. When this occurs, the guerillas will usually revert to night contacts when the cover of darkness affords protection. Some of the insurgents will live with the people to maintain domination over them. Others, including the 'hard-core' leaders, will probably move to inaccessible areas to carry on the military phase of operations. At this stage the maintenance of supply routes and intelligence organizations with the people becomes of vital concern to the insurgents.

The Task

The major feature of counter-insurgency in Stage 1 is the need to separate the insurgents from their source of supplies and isolate them from the people. This can be done by:

(a) Civil action to control the population and its resources.

2. Mao Tse tung, *Selected Military Writings*.

3. *Precis, Infantry Centre Tactics Wing, 1963.*

- (b) Military action to isolate the guerillas.
- (c) Military and civil action to prevent the guerillas re-establishing contact with the people.
- (d) Military action to destroy the guerillas.

These measures require considerable day and night operations to implement them. This article, however, is concerned primarily with night operations and will be confined to those activities necessary by night. It must be emphasized that night operations will be of little consequence unless daylight operations are carried out in conjunction with them.

The measures necessary to control the people and their resources have already been indicated. These measures are indispensable for the success of counter-insurgency operations in the Stage 1 phase.

Military Action to Isolate the Insurgents

Military action to isolate the guerillas should be designed to force the militant guerillas into inaccessible areas, away from any centres of population, and to establish a separation zone between the insurgents and the villagers. Distance between the insurgents and the people is a vital factor, since it provides government forces with space in which to deploy and operate. By dominating the outer edges of populated areas and forcing the guerillas deeper into inaccessible areas, the government forces extend the insurgents' supply and contact routes, confine them to certain areas, and make it hazardous for them to carry out their normal contacts with the people. The guerillas are thus isolated, forced onto the defensive and reduced to meagre supplies.

Within the framework of the operations plan, the military actions by day and night necessary to achieve isolation are:

- (a) Company and platoon base patrolling by day in the separation zone, and ambushing on access routes, nodal points and suspected areas by night.
- (b) Patrolling in depth in the inaccessible areas to harass the guerillas and force them to move, thus revealing tracks which can be followed by tracker teams. By night these patrols can ambush on access routes, ridge lines, water points and suspected areas.
- (c) Patrolling by day and ambushing by night on the periphery of the inaccessible area to harass any guerilla movement out of these areas.

- (d) Carry out search-and-clear operations by day. The pre-positioning of the military forces for this type of operation should be carried out before dawn to achieve surprise.

Military and Civil Action at the Village level

The guerillas' reaction to this tactic will be to re-establish contacts with the population by night movement out of the inaccessible areas, through the separation zones and into the villages. Because they have an intimate knowledge of the countryside they are able to move with ease through any type of terrain — jungle, rubber, cultivations, lallang or swamp — protected by darkness. To counter this, government forces attempting to isolate the guerillas, must operate more by night than by day. In addition, combined military and civil action will be necessary on the inner periphery of the populated areas to prevent the guerillas re-establishing contact with the villagers.. Counter-measures at the village level will not be effective unless a plan for village control has been implemented.

Village Control by Night

Throughout South East-Asia, the countryside is dotted with small villages or hamlets. For centuries, Asian rural communities have gathered in this way for self-protection. The Red River Delta, in Indo-China, is a triangular region with an apex of 120 miles and a base of 70 miles. Yet in this small area there are nearly 7,000 villages with a total population of 6,500,000.⁴ The villages vary in size from a small hamlet of five or six buildings to a large community consisting of hundreds of buildings, housing thousands of people. The villages generally have their own rice mills, tapioca factories, granary storehouses and the means to buy, produce and store a large variety of primary and secondary products. Only in the larger villages will there be found much semblance of government control, the smaller rural communities being forced to look after their own affairs through lack of government interest. The provision of a police force, the enforcement of laws and the availability of medical facilities are inadequate.

The village is the most democratic unit in all Vietnam. 'The law of the King gives place to the custom of the village,' runs an old saying, and in many respects it is still true. The Council of Notables is the intermediary between the state and the villagers in all transactions.⁵

The Dispersed Village

Because of the scattering of buildings in a dispersed village, any sort of control over village life except by village elders is

4. Bernard Newman, *Report on Indo-China*, (1963) p. 100.

5. *Ibid.*, p. 103.

extremely difficult. In a time of insurgent activity it is almost impossible for the government to impose effectively any controls on the distribution and storage, population movement, output of 'backyard' secondary industries, curfews and law enforcement. To control effectively the whole economic and social life of this type of village, the government must reorganize it on the lines of a controlled village. Any military effort, by day or night, to prevent guerilla access to this type of village will be ineffective. Though patrolling and ambushing can be carried out, they will have no great effect in separating the insurgents from the people and their resources.

The Controlled Village

In Malaya this type of village was called a 'new village'. In Vietnam it is described as a 'strategic hamlet' or 'defended village'. In all cases it is the result of government attempts to combat insurgency by reorganizing village life.

The villages are formed by collecting squatters, farmers and workers from outlying areas and resettling them in one compact area. The villages are built to a plan which includes streets, shopping centres, recreation areas, social areas, police posts and security force compounds. The whole village is surrounded by fences, obstacles, lights and cleared areas to prevent easy access by insurgents. In many cases the periphery is encompassed by up to three rows of fences, about 18 feet high. The rows are separated by cleared ground and floodlit for accurate night shooting. Indigenous police and para-military forces live inside the village. Curfews are imposed, gate checks established, food control measures effected and registration of crops and cultivations implemented. The movement of the population is restricted and an identity card system commenced. Vehicle movement is subjected to close police control and certain suspected areas declared 'controlled', 'restricted' or 'prohibited', to allow security forces freedom of movement within them. At night the area outside the village belongs to the government forces to enable them to carry out their counter-measures unhindered by the mass of people.

Counter-measures at Village Level

The framework of operations plan must be designed to provide for military counter-measures by night at the village level. The aim of these operations is to reinforce the isolation of the guerillas from the people and prevent contact being re-established.

Some military measures for controlling a village at night are:

- (a) Ambushing and patrolling in depth in the separation zone on likely access routes.
- (b) Ambushing on likely contact points. Night movement is difficult and it is essential for accurate navigation to use known check points. Some of these are limestone features, tracks or track junctions, gutters or drains, fence lines, sheds, rubber and cultivation edges or corners and roads. Routes to these contact points are designed to avoid scrub, 'dirty' rubber, secondary jungle and tin-tailings.
- (c) Ambushing on approaches close to and on the village perimeters. In darkness, when approaching the village, the guerillas are restricted in the number of routes available to enter the village. Some type of cover close to the perimeter is necessary, and drains, tree-lines, shadows, sagging or broken perimeter fences and animal sheds are usually used. The guerilla must avoid open areas, perimeter lights, guard-houses, gates, freshly turned cultivations and heavily wired areas if he is to be undetected. He must have a secure area to cross the fences and must emerge in the village in a friendly location. A reconnaissance and appreciation by the security force commander should reveal the most likely insurgent approach routes to these village entry points.
- (d) The provision of indigenous military, police or para-military forces within the village to provide gate guards, patrol inside perimeter fences, enforce curfews and generally supervise the internal organization and defence of the village by night.
- (e) Cordon and search of villages. This will usually be done by night, will be controlled by a joint police and military team and can be carried out in accordance with the established methods.

Military Action to Destroy the Insurgents

The process of isolating the militant insurgent forces in inaccessible areas, and separating them from the people by village control, is designed to lead to their eventual destruction. The final phase, however, is a long-term military operation to destroy the remnants of the guerillas by violent military action. This is done by daylight mopping-up operations to complete their destruction and prevent their revival in other areas. Operations consist mainly of company and platoon base patrolling, locate-and-destroy actions and patrols in depth. It is still

necessary, however, to continue night operations so as to dominate the fringes of the areas and prevent the insurgents from escaping or re-establishing contact with the villagers.

The night control of villages must be maintained until such time as the insurgents have been completely destroyed. During this stage, police and special branch action is usually carried out to eliminate the remaining sympathizers within the village.

Night Operations in Stage Two of Revolutionary Warfare

After the insurgent forces have successfully established Stage 1 of Revolutionary Warfare, they then move to Stage 2. The government forces can now expect an intensified campaign of violence by organized guerilla forces. The guerillas will have dominated large areas of countryside, raised regular and provincial units, be well supplied with large calibre weapons and be able to engage government forces in larger scale assaults than previously. However they still avoid a major conventional battle. The military conditions apparent in this stage are those which faced the French in Indo-China from 1951 to 1954.

Pattern of French Operational Timings

TABLE A: FRENCH OPERATIONAL TIMINGS

Place	Date	Time Operation Commenced	Action
Vinhyen	15 Jan 51	afternoon	Mobile Groups 1 and 3 attacked Hill 157.
Vinhyen	16 Jan 51	1500 hrs	Mobile Groups 1 & 3 attacked North Hill line.
Vinhyen	17 Jan 51	Morning daylight	Mobile Groups 1 & 3 counter-attacked Hill 210.
Mao Khe	27 Mar 51	1400 hrs	6 Colonial Para Battalion moved to Mao Khe mine as a relief column.
Hoa Binh	14 Nov 51	Dawn	Three French battalions airdropped on Hoa Binh.
Black River Valley	14 Nov 51	Dawn	Fifteen infantry battalions, 7 artillery battalions, 2 armoured groups 2 dinassauts and engineer units commenced the French counter offensive into the Black River Valley.
Tu-Vu	10 Dec 51	Dawn	Three French infantry battalions supported by tanks, aircraft & a parachute battalion sought out Viet Minh in front of Tu-Vu. Viet Minh withdrew.

Place	Date	Time Operation Commenced	Action
Hoà Binh	22 Feb 52	1900 hrs.	Successful evacuation from Hoà Binh effected. 200 truck loads of supplies, 60 porters & 1,000 civilians withdrew across the Black River. Surprise so effective that Viet Minh lost contact with French.
Hoà Binh	23 Feb 52	0600 hrs	Infantry units evacuated from Hoà Binh.
Tu-Le	16 Oct 52	1300 hrs	6th Colonial Infantry Battalion airdropped into Tu-Le.
Tu-Le	20 Oct 52	Daylight	6th Colonial Infantry Battalion withdrew, under heavy Viet Minh pressure, from Tu-Le.
Hung Hoa	29 Oct 52	Night	French forces carried out a successful river crossing of the Red River for their major drive to Yen Bay and Thai-Nguyen.
Ngoc Thap	9 Nov 52	Daylight	A French task force commenced its drive from Ngoc Thap and Phu Doan to Dong Trai to meet Airborne Group 1.
Dong Trai	9 Nov 52	1030-1500	Airborne Group 1 carried out an airborne assault on Dong Trai.
Phu-Doan	10 Nov 52	Dawn	As part of operation LORRAINE, the French forces drove from Phu-Doan into the Tai hill country.
Phu-Doan	17 Nov 52	Dawn	French forces withdrew from Phu-Doan to Ngoc Thap.
Phu-Duc	24 Nov 52	0500 hrs	Mobile Group 4 counter attacked 36 & 176 Regiments at Phu-Duc and Co-Tich.
Van-Trinh	28 Jul 53	0420 hrs (dawn)	French forces landed at Van-Trinh area to effect operation CAMARGUE (Street without Joy). The major part of the cordon was on position by 0745 hrs but was never effectively closed.
Ankhe	24 Jun 54	Dawn	Mobile Group 100 commenced its withdrawal from Ankhe at dawn. Its task was to reach its first objective 80 kilometres away.
Chu Dreh	14 Jul 54	0430 hrs	Mobile Group 100 commenced its move after dawn.

Table A reveals a pattern of French operational timings:

- (a) Mobile groups operated along highways by day in compact all arms groups. By night the groups bivouaced, preferably in or near established defended posts.

- (b) French counter-attacks onto beleaguered posts were invariably carried out at first light. The relieving columns or counter-attack forces almost always moved ponderously along established routes from their bivouac areas to their objectives.
- (c) New operations began almost exclusively at dawn.
- (d) Evacuations from either a threatened post or a contained post, or a withdrawal for tactical reasons, nearly always began at first light. The only variation to this was when the Viet Minh by massive attacks, forced the French to move in darkness.
- (e) Airborne assaults were carried out usually between 1000 and 1500 hours.
- (f) French attacks were always carried out in daylight.

Pattern of Viet Minh Timings

TABLE B: VIET MINH OPERATIONAL TIMINGS

Place	Date	Time Operation Commenced	Action
Vinh Yen	16 Jan 51	1700 hrs	Viet Minh forces attacked French defended positions on Hills 47, 101 and 201. The attacks were defeated with the Viet Minh suffering heavy losses.
Mao Khe	27 Mar 51	0400 hrs	Viet Minh attacked and captured the Mao Khe mine. The French garrison escaped by moving out of the mine at night.
Mao Khe	28 Mar 51	0200 hrs	Viet Minh attacked Mao Khe village.
Ninh-Bink	29 May 51	Dawn	308 Infantry Battalion captured Ninh-Bink.
Tu-Vu	10 Dec 51	2100 hrs	Viet Minh forces attacked and captured Tu-Vu.
Xompheo	8 Jan 52	0115 hrs	Viet Minh attacked the hill dominating Route 6.
Nghia Lo	17 Oct 52	1700 hrs	Viet Minh attacked the hill overlooking Nghia Lo village at 1730 hrs and followed this attack by a night assault to capture the village by first light.
Tu Le	20 Oct 52	0300 hrs	Attacked and captured Tu Le.
Muong-Chen	20 Oct 52	1915 hrs	Elements of 312 Division attacked Muong-Chen hill post and captured it by 2200 hrs. The French garrison escaped by night.

NIGHT OPERATIONS IN COUNTER-INSURGENCY

17

Place	Date	Time Operation Commenced	Action
Chan-Muong	17 Nov 52	0815 hrs	36 Regiment ambushed the French withdrawal from Phu Doan. The Viet Minh suffered heavy casualties and were forced to disengage.
Phu-Duc	24 Nov 52	0200 hrs	36 and 176 Regiments attacked a French post near Phu-Duc and overwhelmed the post within two hours.
Muong-Khoua	13 Apr 53	2300 hrs	Attacked by 910 Battalion. The French garrison held for one month.
Muong-Khoua	18 May 53	0030 hrs	910 Battalion attacked and annihilated the garrison.
Dak Doa	11 Feb 54	night	Dak Doa was attacked every night from 11 Feb 54 to the night 17/18 Feb 54.
Dak Ya-Ayun	22 Mar 54	0254 hrs	Viet Minh attack lasted until 0430 hrs when the attackers disappeared.
Plei Rinh	22 Mar 54	0254 hrs	Viet Minh attacked with infantry, and used recoilless rifles at close range. (An unusual use of anti-tk weapons at night).
Deo Mong	30 Mar 54	night	Two independent battalions attacked and annihilated the post at Deo Mong pass, by dawn.
PK15 Route 19	1 Apr 54	1530 hrs	19 Battalion and 30 Independent Battalion ambushed GM 100 and by 1900 hrs had been defeated. French B26 bombers dropped napalm at 1715 hrs and caused extensive Viet Minh casualties.
PK15 Route 19	24 Jun 54	daylight	803 Regiment ambushed GM 100. Extensive casualties caused to both sides.
Thai-Binh	4 Dec 53	2400 hrs	Viet Minh attacked a French Divisional command post and medical services are inflicting medical services area inflicting

Table B reveals the pattern of Viet Minh operational timings, which are complementary to the French timings. The French operated mainly by day; the Viet Minh by night. The French had revealed their fear and dislike of the night, and the Viet Minh profited abundantly in reacting to these weaknesses.

The Viet Minh attacked by night because:

- (a) The French superior weapons were less effective than in daylight.
- (b) Air support, France's most powerful weapon, was unavailable at night.
- (c) The French reserves were not usually committed until after dawn.
- (d) The Viet Minh main tactic, surprise, was easiest to obtain under cover of darkness.
- (e) Historically night operations had provided the Viet Minh with all their outstanding successes. They had become adept at night skills and were accustomed to employing them. The night belonged to the Viet Minh.

The Viet Minh only attacked by day when French tactical initiative forced them to do so. When this happened, the Viet Minh usually suffered heavy casualties, as occurred at Vinhien, Chan Muong, and twice at Poste Kilometre (PK) 15. Some other reasons for the Viet Minh attacking by day were:

- (a) The Viet Minh considered themselves ready for a general counter-offensive to destroy the French in open combat.
- (b) The new French weapons had not been taken into account by the Viet Minh. At Vinhien the use of napalm by the French took the Viet Minh completely by surprise, with devastating results. 'All of a sudden, hell opens in front of my eyes. Hell comes in the form of large, egg-shaped containers, dropping from the first plane, followed by other eggs from the second and third plane What is this? The atomic bomb?'⁶ The battle cost the communists 6,000 dead and 500 prisoners.
- (c) The Viet Minh made use of daylight to carry out successful ambushes against the large targets presented by French convoys. The destruction inflicted on the French was generally worth the Viet Minh casualties. On 1st April 1954, for example, Mobile Group 100, ambushed at PK 15 by 19 Battalion, 108 Regiment and 30 Independent Battalion, suffered 90 casualties against 81 known communist dead. Though expensive in casualties this type of action was profitable for the Viet Minh.

By the dreaded pattern of *grinotage*, or slow gnawing away man by man, Mobile Group 190 lost 1,605 men out

6. Bernard Fall, *Street Without Joy* (1963), pp. 36-7.

of 3,198, 85 per cent of its vehicles, all of its artillery, nearly three-quarters of its signal equipment and half its machine-guns and automatics. In most cases the ambush positions, such as the second position at PK 15, were established by the Viet Minh the previous night.

The Viet Minh were rarely caught by new French operations because:

- (a) French operations invariably began at dawn.
- (b) Any tactical positioning necessary before an operation commenced, such as a mobile group advance, was usually done by the French before last light the previous day. Whenever this was done, the French lost the element of surprise and the Viet Minh escaped or set ambushes during the night.
- (c) New French operations were ponderous affairs with masses of heavy equipment held in balanced conventional groups. Mobility was poor, since the groups were restricted to roads, the speed of the slowest vehicle and the need to leapfrog supporting elements. The Viet Minh found they could hold their usual slow, conventional battle procedure. This gave the Viet Minh time for the main body to escape under cover of darkness. This tactic was evident during Operation CARMARGUE when 3 company, 310 Battalion, 95 Independent Regiment sacrificed themselves against the 6th Moroccan Spahis to gain time until nightfall to enable the main body to escape the French cordon.

The Viet Minh unfailingly mauled French evacuations because:

- (a) The communists knew from the pattern of French operations that the evacuations almost always commenced at dawn. This was usually confirmed by the massive preparations made by the French the day before in arranging or destroying their equipment.
- (b) The Viet Minh normally had the whole of the previous night to move into ambush positions, unhampered by French patrols.
- (c) The French evacuation process was usually slow and cumbersome and restricted itself to one route. A typical example of this was the breakout from Tu-Le in October 1952 when the 6th Parachute Battalion, driven from the Tu-Le post by 312 Division, withdrew on one route in daylight. Strung out on a jungle pass,

the French lost two rifle companies in escaping the guerilla net. In this case, the garrison could have withdrawn by night, but was prevented from doing so by the Commanding Officer. 'In any event, to attempt a break-out from the valley in the middle of a pitch black night would have resulted in the total dispersion of the battalion within a short time.'⁷

French reluctance to evacuate positions by night led to the destruction of innumerable small garrisons. On a number of occasions precedents for night evacuations were established. Of these the two most spectacular occurred at Muong Chen and PK15.

The error of Tu-Le was not repeated at Muong Chen. On 20 October 1952, to cover the withdrawal of the remnants of the 6th Parachute Battalion, 80 natives commanded by a French NCO stemmed 312 Division's follow-up from 1915 to 2200 hours, and then escaped under cover of darkness. Using a previously cleared path, during a pitch black night, the French knew their way better than the Viet Minh and escaped.

The French used this successful method of evacuation again during the break-out from PK15 on 24 June 1954. Under the cover of darkness, using an 'illogical' route through deep jungle the 1st and 2nd Korean Battalions, the Artillery Group and the remnants of 510 TDKQ, all from Group Mobile 100, escaped the Viet Minh net. The large French column broke into small platoon-sized groups for ease of movement, and to present only small targets to the Viet Minh. By 1130 hours 25 June 1954 the bulk of the French forces arrived at the 1st Airborne Group's secure base at PK 22, having avoided the major Viet Minh ambush and having experienced only a few minor contacts.

Lessons from the Pattern of Operational Timings

French operations in Indo-China have revealed certain lessons:

- (a) The pattern of operational timings should be varied so as to prevent the insurgents from developing their own patterns freely. Timings for attacks, relief columns, air borne raids and bivouacs must vary so that the insurgents cannot anticipate the times when they will be free to operate. In particular these timings must cover the period of darkness when the insurgents prefer to operate.

7. Fall, *Street Without Joy*, p. 66.

- (b) Night operations by counter-insurgent forces are necessary to reduce the insurgents' tactical advantage of surprise. The former can then regain the initiative by restricting the guerillas' freedom of movement at night, through the use of ambushes, patrols and attacks on bivouacs and concentration areas.
- (c) Fear and dislike of the night must be overcome. There is a need to develop night skills in counter-insurgent forces at least to the equal of those of the insurgents. Individuals should be trained in rapid night movement, night attacks and night patrolling. Small groups should be practised in moving fast by night, to concentrate with their parent units for operations at a long distance from their start-points.
- (d) Technical means of locating insurgent forces by night must be developed to a stage when locating equipments can be carried by soldiers and issued on a generous scale. The insurgents use the cover of darkness to concentrate for particular operations. Infra-red or radar devices are necessary to allow the government forces to locate these concentrations.
- (e) Accurate night-firing weapons are essential to combat insurgent night attacks. Infra-red or radar devices for small arms, tank and artillery weapons should be developed.
- (f) The rapid movement of government force reserves by night inhibits the insurgent's ability to win decisive victories. The arrival of reserves generally decides the outcome of battles. Air dropping and air landing of these reserves during darkness are techniques which must be evolved.
- (g) The use of small tactical infantry groups equipped with radios, light mortars, machine-guns and night-firing aids must be encouraged to counteract the insurgent's habit of dispersing in equally small groups on the completion of operations. This new form of organization allows for a greater number of self-contained groups from each unit than is available under the present organizations. It should be based on about twenty infantrymen, can be assisted in mobility by night air movement and can be pre-positioned on likely insurgent withdrawal routes or carry out harassing tasks in depth for long periods.
- (h) The insurgents' plans depend on reliable information and deductions from the government forces' patterns

of operations. The use of deception and variety by the government forces, in even the smallest measures, are necessary both before and during operations.

The Insurgents' Night Attack

During Stage 2 of Revolutionary Warfare, the four main insurgent military operations which emerge are:

- (a) The attack.
- (b) The ambush.
- (c) The contact engagement.
- (d) The defence of a base area.

In Greece, Indo-China and South Vietnam the most important of these four was the attack, which was almost exclusively carried out at night. The ambush was usually complementary to the attack, being used to prevent the deployment of reserves or escapes by beleaguered garrisons. Its secondary, but not unimportant, tasks were harassment, destruction of small forces and collection of supplies. In projected operations in a counter-insurgency role, the lessons of ambushing in Indo-China have been learned, and it is unlikely that our forces will again be employed in a manner which will make them susceptible to large-scale ambushes. Where possible, the contact engagement is avoided by insurgents and is not as important an aspect of Stage 2 tactics as are the attack and the ambush. The insurgents' defence of a base area is so complex that it requires a large daylight conventional battle to overcome it.

It is not therefore discussed in this article.

By far the most important aspect of Stage 2 operations is the insurgents' night attacks against defended posts or isolated garrisons. Through these seemingly small victories or *pourissements*⁸ the insurgents entice the government forces into the 'prepared areas', where the final conventional battle will be fought.

At some stage during counter-insurgency operations, each unit will find it necessary to occupy a defensive position:

- (a) As a secure base.
- (b) To cover a withdrawal or operations elsewhere.
- (c) To defend a controlled area.
- (d) For defence of forces operating in depth.

The insurgents will attempt to destroy these small defended positions by night attacks, concentrating overwhelming man-

8. Slow but careful destruction of defended posts, one by one.

power superiority against them. The positions, therefore, must be designed so as to be able to withstand assaults and destroy the insurgents at this rare moment when they concentrate and present a good target. The best examples of the insurgents' night attacks are those which occurred in Indo-China from 1951 to 1954.

The Assault on Tu Vu

The post at Tu Vu was an anchor of the Black River Line. By 2100 hours on 10 December 1951, despite a daylight sally by three French infantry battalions and the 1st Colonial Paratroop Battalion, the Viet Minh concentrated two regiments of 312 Division and one regiment of 308 Division against the post. The sequence of attack followed the usual pattern of:

- (a) Intensive preparatory heavy mortar fire from about 2100 hours for forty minutes.
- (b) Supporting fire concentrated on the southern strongpoint.
- (c) At 2210 hours the Viet Minh infantry crossed the wire and minefields regardless of losses. These 'human wave' assaults continued despite effective French artillery defensive fire.
- (d) At 2340 hours the southern strongpoint could no longer be held and was evacuated at 0115 hours on 11 December.
- (e) The northern strongpoint was assaulted at 0300 hours by five communist battalions. It fell soon afterwards.
- (f) At dawn the post of Tu Vu was deserted.

The Assault on Dak Doa

Dak Doa was a small but important post in the French defensive layout in the Pleiku area. It was garrisoned by two platoons of the 43rd Colonial Infantry Battalion and supported by the 10th Colonial Artillery Regiment. The 803 Regiment attacked this post on 17 February 1954. The sequence was as follows:

- (a) At 2300 hours harassing fire by 81-mm mortars and machine-guns commenced.
- (b) At 0250 hours 18 February the mortar fire was concentrated on the French command posts and reserves in the neighbouring post at La P.I.T.⁹ to isolate it from Dak Doa.
- (c) From 0250 to 0335 hours the Viet Minh preparatory bombardment increased in intensity and accuracy.

9. *Plantation Indochinoise de The.*

TABLE C: VIET MINH NIGHT ATTACK TIMINGS

Place	Date	Sp Weapons used	Harassing Fire Timings	Accurate & Intense Concentrations just prior to assault	Infantry Assault Timings	Fire Fight Timings	Departure Timings
Dak Doa	17 Feb 54	81-mm Mortars Machine Guns	2300-0250 hrs	0250-0335 hrs	0345 hrs	0345-0410 hrs	Dawn
Tu Vu	10 Dec 51	Heavy Mortars	2100-2140 hrs	2200 hrs	2210 hrs on first objective & 0300 on 2nd objective	2210-0115 hrs 0300 hrs dawn	Dawn
Xompheo	8 Jan 52	Rocket launchers Bangalore charges Mortars Recoilless rifles	Nil	0115 hrs	0115 hrs	0115-0400 hrs	Dawn
Muong Khoua	18 May 53	Heavy Mortars	2300-0300 hrs	Nil	0300	0300-0350 hrs	Dawn
Muong Chen	25 Oct 52	Mortars	1915 hrs	Nil	1915 hrs	1915-2200 hrs	French withdrew
Mao Kh'e mine	27 Mar 51	Artillery	Nil	0400 hrs	0400 hrs	0400-0515 hrs	French escaped
Mao Kh'e village	28 Mar 51	Not recorded	Not recorded	Not recorded	0200 hrs	0200 hrs Dawn (5)	Dawn
Tu Le	20 Oct 52	Mortars	0300 hrs	Not recorded	Not recorded	0300 hrs Dawn (5)	Dawn
Plei Rinh	21 Mar 54	Rocket Launchers Artillery Mortars	2230 hrs	0254 hrs	0330 hrs	0330-0430 hrs	Viet Minh withdrew
Nghia-Lo hill	17 Oct 52	Mortars	Not recorded	1700 hrs	1730 hrs	1730-1830 hrs	Not recorded
Phu Duc	24 Nov 52	Mortars	Not recorded	0200 hrs	0200 hrs	0200-0500 hrs	Not recorded
Dak Ya-Ayum	22 Mar 54	Mortars Machineguns	Not recorded	0254 hrs	0330 hrs	0330-0430 hrs	Dawn
Thai-Binh	4 Dec 53	Nil	Nil	Nil	2400-0500hrs	2400-0500 hrs	Pre-dawn

- (d) At 0345 hours the infantry assault began and half the post was captured by 0355 hours.
- (e) At 0410 hours the post fell.
- (f) Between 0410 hours and dawn the Viet Minh sacked Dak Doa and by daylight has dispersed to avoid any artillery or air bombardment.
- (g) The French did not send a relief force during the night since 'it was axiomatic that an ambush would be waiting along the roads to Dak Doa'.¹⁰

Sequence of Attack

The timings in table C and examples have revealed a general sequence of deliberate night attacks used by the Viet Minh against the French.

- (a) The Viet Minh thoroughly reconnoitred the French posts to establish exact positions and identify weaknesses in the defensive layout, organizations and procedures. These weaknesses were then selected for attack.
- (b) Weak points were isolated and destroyed.
- (c) The post was encircled by Viet Minh, who infiltrated the position from the surrounding countryside.
- (d) An ambush was prepared on the most likely escape route.
- (e) During the approach march the Viet Minh avoided roads, tracks and likely assembly areas. They advanced in small groups, usually at night, so rapidly that they were in position to attack before the French were aware of their presence.
- (f) Often a heavy mortar and artillery barrage preceded the assault. This 'habitual harassment' usually began in the early part of the night generally by 2300 hours at the latest. It would persist for up to five hours or lapse after only 40 minutes.
- (g) 'Distracting patrols' engaged bivouac areas, neighbouring posts, command posts and reserve areas to distract attention from the main objective. These usually occurred about one hour before the assault began.
- (h) Mortar, artillery and general supporting fire was concentrated on a selected weak point just before or sometimes at the same time as the assault commenced. This fire was generally intense and accurate. Concentrations fell on key points, such as command posts, lighting

¹⁰ Fall, *Street Without Joy*, p. 190.

plants, generators, signals centres and ammunition dumps. These barrages lasted for about 40 minutes and were usually accompanied by a fire-fight of moderate intensity.

- (i) The main assault then developed, allowing sufficient time before dawn to destroy and loot the post, and withdraw to a secure area, usually many kilometres away.

It is this sort of night attack which is still being used by the Viet Cong in South Vietnam; it is typical of the insurgent night attacks we can expect in South-East Asia in the future.

Lessons from Viet Minh Night Attacks

When garrisoning a small post or occupying a defended position in Stage 2 of an insurgent war, the accepted principles of defence for a conventional war must be adhered to.

Because the insurgent concentrates an unusual superiority of man-power against defended positions, there is a need for unusual concentrations of supporting fire to destroy him.

Viet Minh instruction manuals lay down that the attacking force should have a superiority of at least three to one, and preferably five to one, in both men and supporting weapons.¹¹ The insurgent has little difficulty in concentrating man-power, but usually has extreme difficulty in massing fire-power. At Dien Bien Phu the Viet Minh resources were stretched to the utmost to centralize the fire of one regiment of 105-mm howitzers, one regiment of 75-mm guns, eight 37-mm anti-aircraft guns, and 100 .5-calibre anti-aircraft guns.

The French proved that with adequate fire support, small garrisons could hold for long periods and inflict heavy casualties on superior communist forces. To obtain superiority in fire-power, accurate fire tasks must encompass the whole position and these can be provided by:

- (a) Neighbouring artillery units.
- (b) Tanks sited in location, preferably firing cannister shot.
- (c) Mortars sited in location and bolstered by fire from neighbouring mortar units.
- (d) Machine-guns in location and issued on a scale more generous than at present.
- (e) Mines such as Claymore.
- (f) A large reserve of ammunition similar to the scale available to the United Nations forces in Korea.

11. *Notes on the Viet Minh Army*, The War Office, p. 17.

The provision of night-firing aids and locating devices, such as infra-red and radar equipments, are necessary for the most efficient use of these weapons. In addition, the use of long-burning ground and air flares and flare aircraft will greatly assist accurate night shooting. Mutual support by supporting weapons between posts will be of over-riding importance because of the insurgents' technique of isolating and destroying small posts.

Artillery

Artillery is the key to night defence in counter-insurgency because:

- (a) It is the best type of fire support to break up 'human-wave' assaults.
- (b) It has superb flexibility in delivering fire and is able to change targets quickly. Thus, with a small number of guns, fire superiority can be maintained over a variety of defended positions.
- (c) Because it relies less on observation at night than do direct fire weapons, it is more effective in destroying and neutralizing enemy night targets.
- (d) It has long ranges which can encompass many different defended positions.

The following main points should be taken into account when employing artillery in this stage of insurgency war:

- (a) Gun areas should be dispersed to avoid presenting one large target.
- (b) Fire tasks must cover the whole periphery of a post, concentrating only when the insurgents' main attack becomes apparent.
- (c) The insurgents' favourite tactic is to force the defender to fire the fire tasks early in the attack and then move to the assault between them. It may be necessary therefore, to provide fire tasks on the whole periphery of the position at the same time or move the tasks at irregular intervals onto new targets to confuse the attackers and prevent them from pin-pointing any exact locations.
- (d) A reserve of artillery fire should always be maintained for use on any side attacks which may develop.

Patrols

Because the insurgents carry out thorough and detailed reconnaissances before a night attack, and because they make rapid approaches over long distances to their objectives, the

defenders' foot patrols will be required to carry out the following tasks:

- (a) Gain information of insurgent movements along access routes to the position. They should operate by day and night up to distances of two to three miles from the position.
- (b) Ambush along the insurgents' approach routes to harass their advance.
- (c) Ambush and reconnoitre all likely assembly areas, forming-up places and mortar positions to prevent the attacker from carrying out his battle procedures unhindered.
- (d) Attack small enemy concentrations during his attack and ambush his withdrawal routes.
- (e) The insurgent uses the tactic of following patrols into a defended position. The usual patrol checking techniques must be applied to counter this.

Earth Works

The initial insurgent assault teams carry Bangalore torpedoes and prepared TNT charges for the destruction of selected bunkers. These, coupled with the insurgents' accurate mortar fire, are usually sufficient to destroy earth works. Any defensive position must be constructed with deep, thick bunkers to reduce the effects of these concentrated destructive devices, and supported by the usual layout of wire, mines and positions in depth to prevent any deep penetration of the position by the assault teams.

Deep communication trenches with overhead protection should be constructed to:

- (a) Nullify the effects of accurate mortar fire.
- (b) Prevent their use as fire trenches by the insurgents.
- (c) Facilitate the movement of reserves and achieve surprise and protection when moving counter-attack forces.

Air Support

Close air support, using rockets, cannon, napalm and sometimes bombs can be vital in destroying insurgent concentrations at night. Techniques need to be developed to employ these weapons in close support of defended positions by night. Control by electronic devices will be necessary for accuracy and recognition.

The French found that air reconnaissance in Indo-China was not fully effective by day because of the Viet Minh's skilful use of camouflage and concealment. Electronic devices need

to be developed to enable accurate locations to be made by day and night.

Defensive Techniques

In Indo-China the French found that if they held defended positions until daylight, the Viet Minh assaulting troops invariably withdrew from contact to resume the attack again at last light. French close air support by day was the chief reason for this tactic. The Viet Minh persisted, continuing their night attacks until the position was yielded. The Viet Minh could not be defeated in daylight since they did not present a target. They could only be defeated at night when they concentrated to attack the French positions. In the defensive battle, the opportunity to defeat the insurgent force will only occur during darkness, and all our techniques of night defence must be directed towards destruction of the insurgents and not merely self-protection.

Counter-Action at Night from a Defended Position

Apart from the normal defensive techniques employed by the defenders before and during the attack, other counter-measures should be taken when it becomes obvious from the impetus of the insurgents' assault, or the nearness of dawn, that he intends to disengage. Forceful counter-measures at this stage should inflict heavy casualties on the insurgent because:

- (a) His tactics for a disengagement are to hold with a small force, clear the battlefield and break into small parties, which move swiftly to sheltered areas. His supporting weapons are disassembled and carried off to prevent their loss. The insurgent is now at his weakest since his manpower strength is dispersed and incapable of violent reaction, and his meagre fire support is unavailable.
- (b) He does not attempt to concentrate to fight a strong action against the follow-up force since by doing so he will be delayed until daylight, thus presenting a large target to artillery and air attack.

Counter-measures that can be undertaken by the defenders are:

- (a) Ambush likely withdrawal routes with strong but not necessarily large forces to harass him.
- (b) Dispatch reserves to likely sheltered or secure areas within 5 to 15 kilometres of the defended position, to ambush, harass and attack any withdrawing force. These reserves can move either on foot by night, by helicopter or airborne assault, or by fast mobile columns of armour and APC in some cases.

- (c) Artillery and mortar fire and air attack, using napalm, bombs and rockets, can be directed onto the withdrawal routes and sheltered areas.
- (d) Reserve forces can be used in certain situations to attack the insurgents from a flank or the rear while they are assaulting or disengaging from the defended position.

Conclusion

In the past, government forces in counter-insurgency operations have generally confined their operations to daylight hours when their superior weapons and equipments have given them tactical superiority. Conversely, guerillas have preferred to operate at night when the cover of darkness protects them from their enemy's superior weapons, shrouds their activities and enables them to achieve surprise.

The avoidance of night operations by counter-insurgency forces has allowed the guerillas freedom of action to establish their movements and develop successful night tactical techniques in destroying government forces. Unhampered by counter-activity the guerillas have been able to act freely at the times they prefer to operate.

In Stage 1 the government forces can prevent the expansion of the insurgent forces by separating them from their 'life-blood' — the people and their resources. Most contacts between the people and the insurgents are carried out by night. Counter-insurgency forces, therefore, must operate mostly by night to prevent this. At the same time, the counter-insurgency forces must retain those measures necessary for superiority in day-time. By a combination of day and night superiority, the government forces will be able to isolate and destroy the guerillas.

The insurgent night attack is the most important military aspect of Stage 2 insurgency. It is one of the rare times when the insurgents concentrate. It is at this moment that the counter-insurgency forces can bring to bear their technical superiority in weapons and fire support to destroy the insurgents. In addition, the resolute employment of small infantry forces, skilled in night techniques, to harass the insurgents should lead to the regaining of the initiative in night operations. These measures, supported by daylight superiority and strengthened by an intensification of Stage 1 activities in isolating the people from the insurgents will give over-all day and night superiority to the counter-insurgency forces, and lead to the ultimate destruction of the insurgents. □

Some Impressions of the Gallipoli Campaign

The following reflections on Gallipoli by Major E. K. Baker, OC 'D' Company, 16th Battalion, 1st AIF, were forwarded for publication in the AAJ by his grandson, Major D. K. Baker, RAA. Major Baker writes that his grandfather landed at Anzac Cove late in the afternoon of 25 April 1915. His experiences on Gallipoli were brief. He received a chest wound at Quinn's Post on 9th May, and was evacuated from the Peninsula. These impressions, written in the exalted mood of the day, and part prescient in their concluding paragraph, were set down by Major Baker soon after his return to Australia in August 1915, while the events were still fresh in memory. — EDITOR

Sailing in an iron ship
Sleeping on iron decks
Eating our iron rations
Fighting under Iron Hamilton.

THUS an Australian battalion proceeded to Gallipoli on Sunday, 25 April 1915. What were the feelings of these stalwart sons of Australia, many of whom prior to enlisting some months earlier had never worn the King's uniform nor handled a weapon of war?

Were they downhearted? No.

Were they excited or unnerved? No.

Did they show fear? No.

What then? They were as calm as if on an ordinary parade. Their calm demeanour and coolness almost chilled as one thought of the awful task before them. The landing had been carried out before dawn and many brave comrades had fallen, some never to rise again; others were now being conveyed in boats towed by destroyers or trawlers to hospital, perhaps never to fight again.

The wounded men greeted the new arrivals with the cries of 'Give it to them!' 'They can't stand the bayonet!' 'We've got them on the run!' How the men scrambled over the ship's side and down the rope ladders, hastening to help their comrades on shore, to the accompaniment of cheers from the passing boatloads of wounded. No cheers could be given in return as such response would have meant loss of time; every minute was precious to the landing party. Not a sound beyond the necessary

words of command was uttered, although never were cheers more richly deserved nor admirers more eager to applaud.

Serenaded by bursting shrapnel the troops were rowed ashore by members of the higher service — the navy. When the story of the fight for Gallipoli Peninsula is written the men in blue will be given a prominent place for their bravery during the earlier stages of the operations.

On landing the troops listened to a few words from a Staff Officer and then filed past an ammunition depot, each man taking as many rounds as he could possibly carry — each already had 150 cartridges in his equipment. Then they proceeded to their allotted place in the firing line, there to remain until the positions won were made sufficiently secure to allow portions of the forces to be withdrawn for a 'rest'. A rest! Can it be called rest to retire a few hundred yards down a shrapnel-searched, sniper-infested gully, 'to dig-in' until exhausted nature can stand the strain no longer and the mind becomes practically insensible to what is going on; a rest, broken by a dangerous close burst of shell, a bullet, or the inevitable 'Stand to Arms', long before daybreak.

One has read that the pen is mightier than the sword. It might almost now be said that the spade is mightier than the sword. There are no shirkers when trenches are being dug under fire. Every man becomes a Trojan, only ceasing when one stronger than he relieves him. He will not hand his spade to a weaker man.

Like the firing, digging goes on day and night, sapping forward and throwing out 'T' head trenches at intervals, then linking up the 'T' heads, thus advancing the front-line a few yards, improving existing trenches by timbering or sandbags, repairing damaged sections of the trenches, excavating large 'dugouts' for depots, dressing stations, headquarters and resting accommodation, constructing intercommunication trenches and roads, but saddest of all, preparing the last resting place for comrades who have done their best for their country's sake and have answered the call of the King of Kings.

But a soldier's duties do not consist solely of shooting, stabbing and digging. In country such as the Australians are fighting in, every man becomes a pack animal. Beyond a certain point every round of ammunition, every particle of food, every drop of water and every sandbag must be carried forward on human backs, the ground being too rough and steep for mules or pack-horses. While the munitions of war are being carried up the hills, there is a constant stream of wounded being conveyed by heroic stretcher-bearers in the opposite direction.

The incongruity of 'what man has made of man' is almost unimaginable. Here are the highest scientific productions of man being used for the destruction of fellow men — electricity, high explosives, aeroplanes, battleships, submarines and torpedoes; the greatest medical and surgical scientists are being used for the prevention of disease, the amelioration of pain and the healing of wounds, while man himself, except that he is clothed, is living in a most primitive state. Yet these men have not sunk below the level of their more fortunate brothers who know not the horrors of war. They have love, honesty, truthfulness and a longing for peace the same as other men.

Life in the trenches is dreary and nerve-racking. One is constantly on the alert preparing for what might happen and at the same time engineering some scheme to outwit the enemy. Very little is seen of him and that little generally with the aid of a periscope. The value of the periscope is more fully realized when an officer or his observer has had about half a dozen shot through — a saving of half a dozen heads is thus effected. Frequently a spade is held up in the enemy's trench as a sort of 'How do you do?' signal; a 'Quite well thank you!' in the form of a couple of bullets is sent back to show that the greeting is reciprocated.

No special meal times exist; if they did, of course the enemy would develop the ill-mannered habit of dropping in at meal-time. However enjoyable a well-cooked turkey might be, the untimely visit of a hostile Turk would not provide a good dessert. The usual custom is for a small party to decide that they will have something to eat. One will open his tin of meat, pass it round to the others and each draw on his own supply of biscuits. Many and varied are the methods of breaking the issue biscuit; one good idea is to carry two tins of meat in a haversack, put a few biscuits in at a time and eat the pieces as they are broken off. Some biscuits will last quite a long time even under this treatment.

Very welcome on a cold night is the cry 'Tea for "D" Company.' Everybody gets out his mess-tin and dips into the kerosene-tin bucket of hot tea as it is passed along. Oh, the joy! The excellence of it. No such questions as 'do you like it strong or weak?' 'Milk and sugar?' It is *Tea*. It suits everybody's taste, and provided it is not cold there is no complaint. But hot or cold, nobody says 'No thank you'.

'Hello! The quarter master's smiling this morning. What's up Quarter?'

'Shepherd's Hotel breakfast today, lads, I've got some bacon for you.'

The battalion has gone down the gully for a rest and the quartermaster has procured an 'extra' for the men. Opposite each dugout is a little fire with one or two mess-tin covers containing bacon frizzling over it. Very soon the atmosphere is full of the rich aroma rising from the cooking places.

Sometimes things are not quite as they should be. A certain section is short of water. The message goes along the trench: 'Water for - - - Section.'

'How is it they are short? I sent some up about an hour ago,' says the NCO-in-charge.

'Oh, the man carrying the bucket was hit by a shell and the water was spilt.'

'All right. Here you are; but send a more careful man next time,' is the good-natured reply.

Sanitation, one of the hardest things to instill into the minds of the unthinking, is a most important feature of trench life. The trenches must be kept scrupulously clean; scraps of food, paper wrappings and litter of all kinds must be picked up, placed in tins and sent back to be buried or burnt. Empty cartridge cases, ammunition boxes, biscuit tins, surplus sand-bags, damaged rifles, spare equipment must all be collected and returned to the nearest depot. The wounded and the dead must be removed from the trenches as quickly as possible. Constant attention must be given to the work of keeping the trenches clear of all obstacles in order to allow a maximum of movement in a minimum of space. No cessation of hostilities takes place to allow this routine work to be carried out; it must go on just the same as though no enemy was there to be watched; at the same time every nerve must be strained for the opportunity of pushing the attack forward.

Another of the paradoxes of war confronts us. There are our gallant men fighting, digging, pushing forward, apparently regardless of the loss of life, to gain a tactical position or to advance the line; but once a man is wounded quite a different view of the value of a human life appears to be taken. The earliest opportunity is seized to apply his field dressing; he is conveyed to a dressing station where professional treatment is applied; thence he is transferred to a hospital ship, conveyed to a base hospital and finally sent for a period of convalescence to a more congenial climate. From the time the wounded man is removed from the firing line he is attended with the utmost skill and care by the medical profession, nursing staffs and Red Cross workers. The Red Cross and kindred associations and loyal subjects of the Allied nations contribute generously

to his comfort and happiness by their gifts of clothing, delicacies and literature, and also by their personal attentions.

To commemorate the heroic deeds of the men from the Sunny South the landing place has been called Anzac Cove. Of the deeds of daring many will be told and retold, while equally many will remain unknown and unheard as the years roll by. But when our children's children ask of Anzac, then will be told the story of the gallant landing of the Australian-New Zealand Army Corps and how at this place our men received their baptism of fire in the Great War of 1915. □

AUSTRALIANS IN GREECE, APRIL 1941

Most of the men travelled north in crowded railway waggons, but those who went by road in long processions of trucks were hailed by the country folk even more cordially than in Athens. Groups of peasants shouted joyfully, waved and gave the thumbs-up sign which was gaining as wide a currency among the democracies as the Fascist salutes in Germany and Italy; little girls threw bunches of lilac and buttercups into the moving trucks and boys calling 'Englees' and 'Zeeto ee Australia' — 'long live Australia' — held out handfuls of leaves for the drivers to snatch. It was early spring and the countryside so full of beauty that it would have enchanted the Australians even if their senses had not been starved in the deserts of Egypt and Libya. In Attica the steep hills were clothed with pines. Farther north, in Thessaly, fruit trees in blossom stood in fields in which the young crops were a few inches high, and above the farmlands towered snow-capped Parnassus and Olympus. Some of the fields were still unsown, and the old men walked behind the ploughs while the women followed scattering the seed — evidently the young men were all at war. Old women were hoeing the fields; little girls drove donkeys laden with brushwood for the fires; small boys with cloaks slung over their shoulders stood herding the sheep and goats which grazed on the foothills, the copper bells at their necks tinkling pleasantly.

'Once away from Athens with its trams and taxis,' wrote one observer, 'the past seemed very close. The peasants lived and worked much as they must have done a thousand or two thousand years ago, when other armies followed much the same roads as ours and gave immortality to these towns and passes. At the end of the second day on the road the convoy with which I went north halted by a wide shallow stream between steep hills. As the sun set the men stripped on the shingle and, standing ankle-deep in clear water, had their first good wash for weeks. Some old shepherds stood and watched, leaning on their crooks. The sun, sinking between two hills, gided the river where the naked men bathed and shouted. They might have been soldiers of any one of the other armies that have marched past Greek shepherds and their flocks and seen the snows of Olympus against the sky.'

— *Gavin Long, Greece, Crete and Syria* (1953).

Bamboo

Major G. M. Plunkett,
Royal Australian Army Ordnance Corps



DURING the 1939-45 War large numbers of Australian soldiers served in tropical Asia and there made the acquaintance of bamboo. A large proportion of them, unfortunately prisoners of war, acquired close and intimate knowledge of this ever-present type of tropical vegetation as well as a high degree of skill in its many uses. Bamboo was of great value to them. Now that Australian soldiers are operating once again in this area, some knowledge of its potential may be of equal benefit again.

Bamboo is a species of plant closely resembling grass in structure but on a vastly larger scale. There are many varieties, ranging from the small ornamental types of giants, sometimes as thick as 12 inches or more in diameter.

Its uses are many. They include food, fuel, structural material, utensils. Some varieties produce edible seeds, others grow sharp thorny side-shoots which make thickets of this variety well nigh impassable. A visit to a native village in

Major Plunkett joined the Commonwealth Public Service in the Department of the Army ordnance service in 1936. He was appointed lieutenant in the AAOC in May 1941 and transferred to the AIF soon afterwards. He served with the 2/3rd Ordnance Store Company in the 1941-42 Malayan Campaign and was taken prisoner after the fall of Singapore. He left Changi in May 1942 with "A" Force, which worked its way north from Mergui, Burma, through Tavoy to Thanbyuzayat, and thence along the Burma-Thailand railway over the Three Pagodas Pass to Kanchanburi.

He elected to join the ARA after the war, and all his appointments have been in the Ordnance Service. He was recently posted from 1 COD, Bandiana, as Instructor at the Jungle Training Centre. Major Plunkett is a Bachelor of Commerce of Melbourne University.

The illustrations were drawn by Staff-Sergeant W. E. Tyrell.

order to learn what the locals can do with it is well worthwhile. It could be truly said that without bamboo they would be seriously handicapped. However, let us look at some of its uses to the soldier.

As a fuel dry bamboo produces a quick hot fire that leaves no coals, only ash. It explodes on burning, unless split beforehand. The explosions are caused by the air and moisture trapped in the internodes being expanded by the heat. (See Figure 1.)

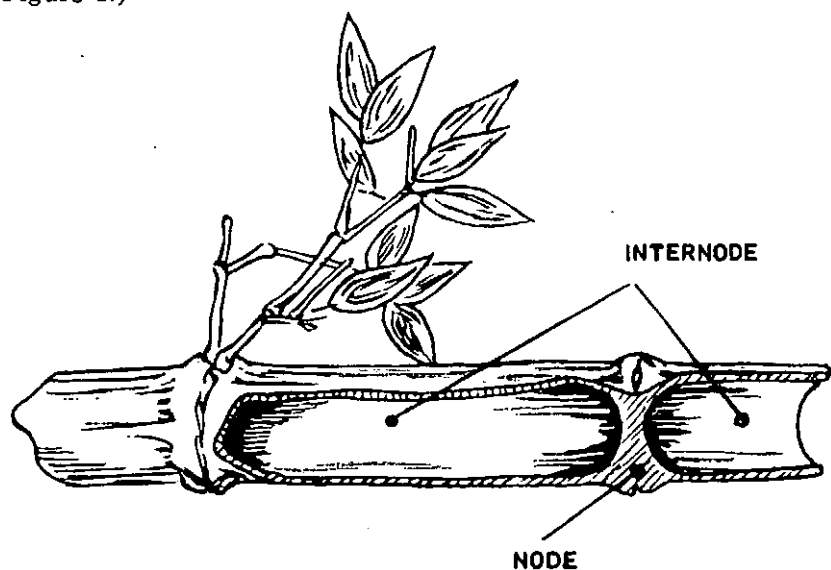


Figure 1.

Two pieces of dry bamboo, held at an acute angle so that the burning ends are together, may be used to carry fire for a considerable time.

A piece of green bamboo, split off one side of a bamboo stick, may be bent double to make a pair of tongs to pick up hot coals.

As food bamboo shoots are well known. (See Figure 2.) All bamboo shoots, gathered as soon as they appear above the ground, are edible. Some may be as long as 12 to 18 inches and up to 3 inches in diameter. They may be eaten raw or cooked but all the outer 'leaves' should first be peeled off. The shoots will give some bulk to the diet and no doubt some nutriment, but lack flavour unless used with other foods; for example, cooked in curry or eaten raw in a salad.

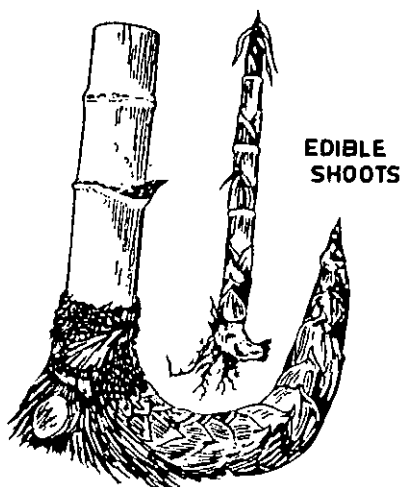


Figure 2.

Inside the base of the leaves, sheathing the lower stem, a brownish or dark purplish powderlike substance will be noticed. This can be very irritating to sweaty skin. It is reputedly an irritant poison if swallowed, but this may be a native myth.

Bamboo has a hard glassy surface, and when split can produce razor-sharp edges and points. Watch it!

When working with bamboo always use it green unless otherwise indicated; it is much easier to work.

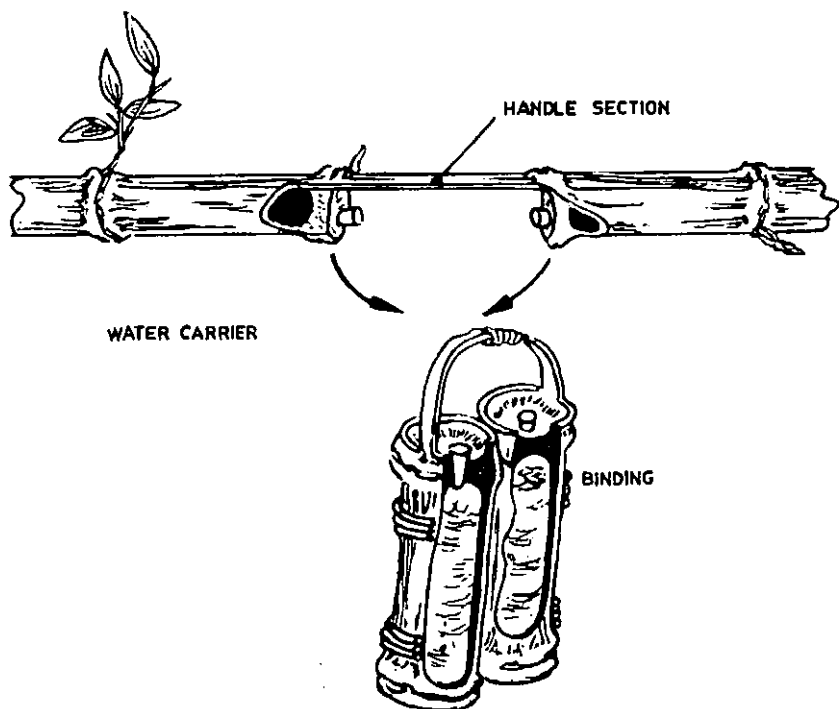


Figure 3.

Because of its nodal structure and flexibility, a wide range of containers and utensils may be made from it. A handy water carrier can be made from three 'sections' of large diameter bamboo. A study of Figure 3 will give the details.

A water carrier of the type illustrated with an effective length of 2 feet and each container of about 3 inches in diameter should hold about 4 gallons. It is quite light when empty.

Similarly a personal water-bottle could be made from a single piece of smaller bamboo. Smaller pieces, with a node at one end, can be used as stoppers and as covers for the mouths of water-bottles and other containers, so that their contents are kept free of flies.

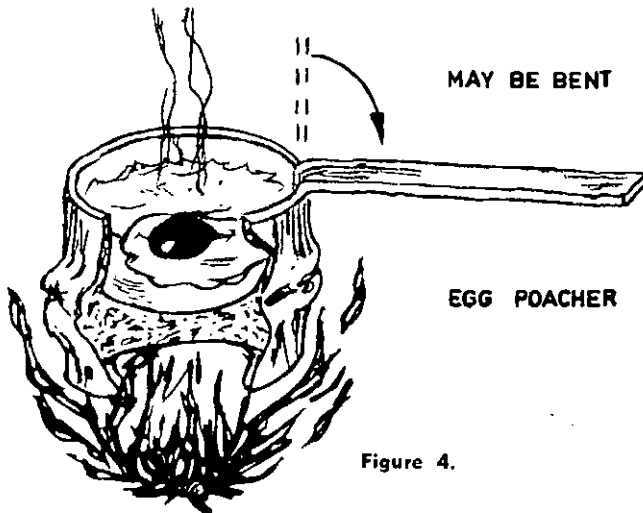


Figure 4.

Sections of bamboo can be used as cooking utensils. A small cup, made by using a node, is an efficient one-time egg poacher. (See Figure 4.) Filled with water and an egg broken into it, it can be placed directly on a fire. The water will boil and the egg will be cooked long before the bamboo is burnt through. If a strip is left on one side it becomes a handle for easy lifting.

By using a complete section of bamboo (or more if desired) rice may be cooked to perfection. Some experimentation, depending on the quantity, will be necessary before perfect results are achieved. The critical factors are the proportion of rice to water (do not forget the salt) and the time it should remain on the fire. The water, rice and salt are poured

into the section of bamboo through a hole bored or cut in the side at one end. (See Figure 5.) The hole is plugged loosely to permit the steam to escape, and the bamboo section is then

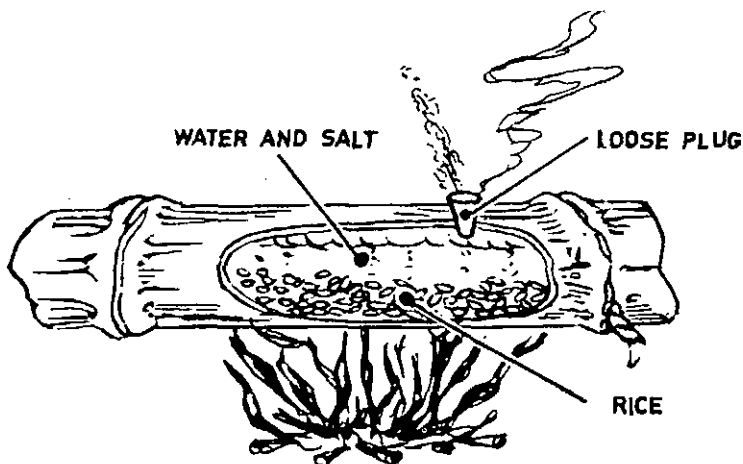


Figure 5.

placed on the fire. The aim is to heat the contents sufficiently to cook the rice without having the water boil furiously. Like the egg-poacher, the bamboo will not burn through before the rice is cooked. When done, split the bamboo lengthways and the rice should be cooked to perfection. Always use green bamboo in cooking utensils; it will not burn through.

If you are lucky enough to get a length of very wide bamboo with a short nodal length, you can make a useful basin or dish which will have many uses. Use one complete nodal length. (See Figure 6.)

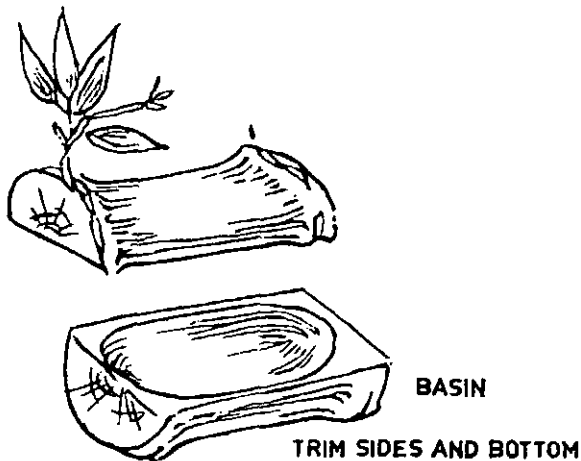


Figure 6.

The uses for bamboo set out above should spark the ingenuity in other useful directions: spoons, forks, ladles, cups and mugs, handles, tongs, candlesticks, lamps, knitting needles, chop sticks and so on are all easily manufactured.

One of the major uses of bamboo of course is as a structural material. It is fairly easy to build a large hut entirely of bamboo, using only a few simple tools. The best way to illustrate this is to give some general directions on the building of a simple rectangular hut of about 6 metres wide and 2½ metres high to the eaves; the length of the hut is dependent on the supply of bamboo and the requirement of the time.

Bamboo, because of its structure, is extremely strong, flexible and light. It has a fair life, but when dead and dry is liable to attack by borers. When dry it is also liable on occasions to split lengthways between the nodes. This splitting does not affect its strength, but allows the ever-present and unpleasant bed-bug to find a harbour. Bamboo's fibrous nature allows it to be split cleanly, thinly and in long even lengths. These thin strips, about 1/16th of an inch thick, soaked in water for some time, make very good lashing and binding material. The only tools needed are: sledge-hammer, ordinary hammer, Bushman saw or hand-saw, ½-inch auger bit and brace or hand auger, machete or parang, and shovel or spade. Materials? sufficient lengths of 3 or 4-inch bamboo, as well as a fair amount of bamboo of smaller dimensions.

First have a look at some of the locally-made bamboo huts — they will give you ideas. Next decide the dimensions

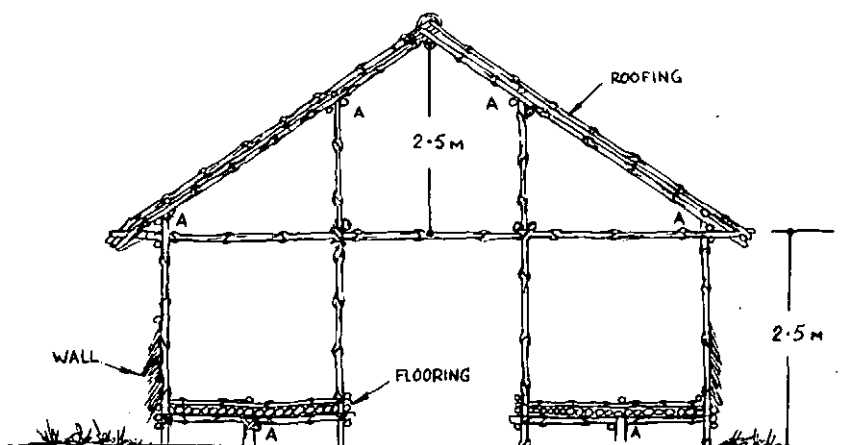


Figure 7.

of the hut. Let us accept that it is to be reasonably large, of the dimensions specified earlier. The length does not matter. Having decided on the size, lay out on a piece of flat ground the size and design of the "A" frame or main structural member. At appropriate points drive in bamboo pegs to form a template. (Figure 7 sets out the general design of this frame.) For a smaller span, one centre pole to the ridge would be sufficient. The long roof and rafter poles may be difficult to obtain in one piece. This can be overcome by using two shorter poles, and pegging and lashing the narrower ends together. Give the roof a good pitch so that the tropical rain is readily shed. The template will enable the required number of frames to be reproduced much more easily.

Now for some constructional details. Work out in advance the quantities and lengths of poles required and pre-cut them with the saw. All cross-joints are made by pegging and lashing — nails and spikes will split bamboo and will not hold. Make roughly round pegs, split from the thick walls of large bamboo, so as to be a drive fit in the $\frac{1}{2}$ -inch hole and long enough to protrude some 2 inches each side of the joint. An easy way to split bamboo is to set firmly a machete point down in the top of a post or stump of a suitable height. With one man pulling and controlling and another pushing the bamboo pole against the edge of the machete, the pole is readily split lengthwise into pieces of the required thickness. Similarly thin strips can be made for lashings. As mentioned the lashings should be soaked in water to keep them flexible until required; on drying out they conform and tighten to the joint.

With the lengths positioned in the template, $\frac{1}{2}$ -inch holes are bored through the joints, pegs driven in and lashings applied around the points and pegs. The lashings are secured by twisting the ends tightly and thoroughly together. They cannot be knotted successfully. Wire or other suitable material could of course be used for lashing, but the requirement stated earlier was for a hut built entirely of bamboo.

Where poles are required to butt to others (see at A, Figure 7), a large V-shaped notch is cut in the top, a $\frac{1}{2}$ -inch

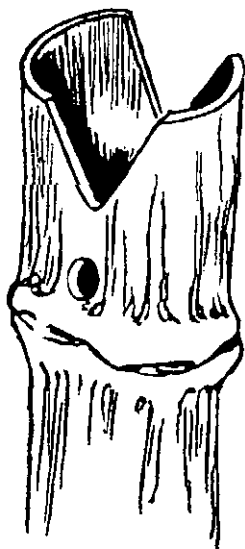


Figure 8.

hole bored below the notch and a peg driven in to protrude some 2 inches each side. (See Figure 8.) The joint is then lashed, using the peg to give a purchase.

In making the hut, the distance between the frames is determined to some extent by the availability of suitable lengths of bamboo. The frames are positioned and erected into holes dug in the ground, being held upright by manpower and temporary struts until the horizontal members are pegged and lashed. As soon as the two frames are permanently erected the remainder are quicker and easier to erect.

Study of Figure 7 provides a general idea of the necessary longitudinal, etc., poles joining the frames together. In this figure the 'circles' represent the ends of these members, which must be lashed and pegged to the appropriate upright and cross-members. Variations may, of course, be made to the number or position in accordance with particular requirements. The figure does not show the sloping or diagonal poles, pegged and lashed between the frames on the walls, to provide longitudinal strength (wind braces). Figure 7 also shows a platform at each side with an aisle down the middle. This is a matter of choice.

The platform and walls up to the desired height are covered in with 'planks' of bamboo. These planks are made by taking pre-cut lengths; starting at the nodes they are 'bashed' with the sledge hammer until the whole length is splintered and slack, but holding together. It is split down one side and opened out. (It is a nice point as to when the right amount of bashing has been done.) This will give you a plank up to 12 inches wide, depending on the diameter of the bamboo, and to the length required.

The planks are laced to the wall members, using lashing strips at frequent intervals to hold lengths of small or split bamboo on the outside. In a similar manner the flooring is made for the platforms. The flooring is fairly flexible, and more or fewer bearers may be used than shown in the diagram, depending on the proposed loading. With bearers one metre apart the flooring is strong enough for troops to live and sleep on.

The roofing consists of enough bamboos of small diameter lashed along the roof members of the frame to form purlins. (See Figure 9.) On these are laid lengths of bamboo split down the middle with the nodes knocked out. They are laid in the manner of semi-cylindrical tiles *a la* Spanish mission, and held in place with lashings and horizontally laid small or split bamboo in a similar way to floors and walls.

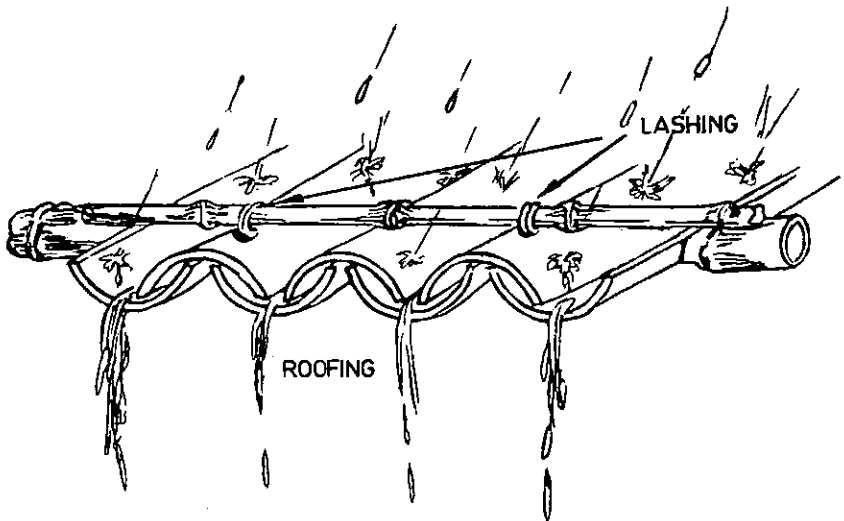


Figure 9.

The same sort of split bamboo could be hung at the eaves as guttering, if there is such a requirement. (It is useful for obtaining a supply of rain water, but the first rain should be allowed to run off so that roof dust and so forth does not contaminate the supply.) In Asian countries easily erected native roofing material is often available (e.g. Malayan atap), but bamboo tiling is effective. The ingenuity can be exercised to devise a suitable waterproof capping out of bamboo for that rain-weak spot, the ridge.

Here then is a hut, made entirely of bamboo and with only a few simple tools. What has been described of the technique is sufficient to allow more elaborate or complex structures to be designed and built. Of course if other suitable and better materials are available they would be used. But as has been shown all is not lost if only bamboo is available.

Here are a few more points before closing this brief article. With the nodes knocked out using a stake or iron rod, water piping is produced. The narrower end, fitted into the larger end, will give any run of piping desired.

Long lengths bashed with the sledge hammer, soaked in water and twisted together have been used by the local inhabitants to make tow ropes for towing barges on the rivers. No doubt a sort of rope could be made also by twisting together lengths of lashing.

There are many products other than bamboo to be gained from the local vegetation. Observation and questioning, particularly in country and forest areas, will soon provide knowledge of what is available and what can be achieved.

As an example, the banana or plantain, whether cultivated or wild, is raw material for substitute bandages, cigarette paper and light cordage. The trunk is cut down and the top cut off. Lengthwise layers can now be peeled off. Be careful not to split them, and discard the outer ones which are damaged or marred. Place one layer over a smooth sloping pole of the appropriate diameter. Using a blunt table knife, carefully scrape away the outer fleshy tissue from the full length and until only a thin fibrous membrane is left. Soak this in water until all sap is washed out, and hang it up to dry. The result is a strip of white paper-like material about 2 inches wide and as long as the original trunk (perhaps 5 or 6 feet). It is fairly easily torn lengthways, but is strong across. It makes a useful bandage. Cut into suitable lengths and stuck with rice paste, it is fairly acceptable cigarette paper, particularly if the only paper available is newspaper. These strips twisted and rolled together make cordage.

The writer hopes that this article will be of some help to Australians on service in East Asia. The information it contains was learnt the hard way by the prisoners of war; the skills they developed made their life less unpleasant, and no doubt contributed substantially to their ultimate survival. □

BURMA-THAILAND RAILWAY 1943

It was a purely Australian camp and was surrounded by a bamboo palisade. We spent the night under an atap roof and the Australians were as friendly as they could be . . . Several things were unusual about Hintock. The latrines were made of wood, were clean and sixteen feet deep; they had made a complete water system out of hollow bamboo pipes, and had rigged up showers into a bath place entirely carpentered from bamboo; and they had a silver bugle blown by a first-rate bugler, who made the calls sound more beautiful with the mountain echoes than I'd ever believed a bugle could sound.

— John Coast, *Railroad of Death* (1946)

The Good Leader

*Warrant Officer R. Burns,
Royal Australian Infantry*

No quality will get a man more friends than a disposition to admire the qualities of others.

— Boswell

Introduction

'LEADERSHIP,' wrote Field Marshal Sir William Slim, 'is the art of influencing and directing men to an assigned goal in such a way as to obtain their obedience, confidence, respect and loyal co-operation'. It 'is a mixture of example, persuasion and compulsion. It is the projection of your own personality so that you get men to do what you want them to do, even if they aren't very keen on doing it themselves. Leadership is the most intensely personal thing there is in the world, because leadership is just plain you. It is the projection of your personality, so it is not much good starting off to be a leader unless you have got personality and you have got to have a certain kind of personality. In that personality you must have certain qualities: courage, will-power, initiative and knowledge. If you haven't got those, you won't make a leader.'

From the regimental officer and NCOs viewpoint soldier management and leadership go hand in hand. During World War II there were fair, good and outstanding units in all formations, and this variation primarily was in direct ratio to the qualities of leadership displayed by unit officers and NCOs. Leadership which produces success in battle can be easily adapted to other activities to produce equal or greater success.

Personal requirements of a Leader

Many and large books have been written on the problem of producing good leadership. Fortunately the rules are capable of being reduced to simple and practical terms. Once simplified any intelligent person, however inexperienced, can master the principles in much the same way that most other human

Warrant Officer Burns enlisted in August 1945 and served with the 65 Inf Bn in Japan and with 3 RAR in Korea from the outbreak of hostilities until wounded in January 1951. Afterwards he served with 13 and 20 National Service Training Battalions, with the 1 Reinforcement Training Battalion and at the FARELF Training Centre. He was attached to the Jungle Training Centre. (1957-58) and to RMC (1958-61). Thence he joined 3 RNSWR in May 1961 and a year later the 13 Cadet Battalion.

In 1964 he qualified as a linguist/translator in Bahasa Indonesia at the RAAF School of Languages, Point Cook. He is now serving as an instructor with 1 Recruit Training Battalion, Kapooka.

accomplishments can be learned and mastered. Any theory that the qualities of leadership are solely hereditary must be rejected, although undoubtedly accident of birth may endow the embryo leader with qualities that give him initial advantages.

The raw material of leadership is man. To the military leader men are tools. A leader is successful to the extent that he can induce men to work for him. Ordinarily and of their own initiative people operate at only 35 per cent of capacity. The success of a leader is measured by the extent to which he can 'tap' the remaining 65 per cent. Even with a sound basic knowledge nothing can replace experience, which is essential if the best results are to be obtained. Leaders in close contact and direct control of troops, such as regimental officers and NCOs, must apply their knowledge and experience of leadership to produce efficient man-management.

The exercise of command responsibility requires the maintenance, first, of discipline, second, of the status of the position of command to which officers or NCOs have been appointed. This demands four essential qualities:

- (a) *Loyalty.* Loyalty is one of the strongest forms of motivation. Loyalty to the task and to the unit and superior commanders is essential. Loyalty to junior leaders and to those over whom command is exercised is also essential for the maintenance of morale. Be loyal. Criticism of superiors in the hearing of subordinates lays open the critic to similar treatment. Loyalty works both ways and if frequent differences of opinion between equals occur, a good leader will refuse to sacrifice subordinates in resolving these differences.
- (b) *Sense of Honour.* If the requirements of honour are to be met, high ethical standards are essential. Fairness in distribution of censure and praise and in all activities which deal with the satisfaction of physical and mental needs is a basic factor in promoting high morale. When a man requires punishment, administer it in an impersonal way and to the degree of severity that the offence warrants. When the debt has been paid forget the incident. Men look to their titular leaders for reward and punishment. Above all be intellectually honest. Officers and NCOs cannot be expected to know everything. When in doubt frankly admit it. Men respect frankness; bluff, on the other hand, will lead to loss of respect.
- (c) *Sense of Responsibility.* This quality, above all others, singles out the officer or NCO from the men he com-

mands. A clear understanding of where responsibility lies, both to seniors and juniors, and a constant endeavour to discharge such responsibility, are basic requirements of the successful discharge of command. Almost every man will want to do whatever is expected of him. Failure to do so is almost always a result of improper instruction. The dependable leader is loyal to what he believes is right and enforces orders to the letter in spirit and in fact. This dependability implies performing a duty with or without supervision.

- (d) *Knowledge.* Technical knowledge and ability in officers and NCOs will help in developing the confidence and respect of subordinates and in sustaining it. Coupled with the intelligence to recognize and deal with any situation which he encounters, it will assist greatly in establishing in the minds of the troops the knowledge that their leader can assist them in achieving their aim. Inevitably, however, there will be times when the leader will be dependent on the advice or special knowledge of his subordinates. The good leader will not hesitate to accept it. He will not lose respect in doing so and will be regarded as a fool if he does not. Listen also to the suggestions of subordinates. If their suggestions are worthwhile, apportion credit where due. It is the responsibility of the officers and NCOs to make the most of the available schools and courses in order to improve their knowledge. Ensure also that subordinates are given every opportunity to attend. When a course is completed the knowledge so gained must be used to the widest possible advantage.

Some additional personal characteristics which a leader must develop are:

- (a) *Courage.* Courage is a mental quality which recognizes fear. Every man experiences fear in a crisis. The leader must never show it. He must fortify himself with a scale of values which enables him to control his emotions. The only fear which should worry a good leader is fear itself. Moral courage is often a rarer thing than physical courage. A leader can be brave in battle and yet lack the moral fibre to do what is right in other matters which confront him. Enduring physical and moral courage is the mark of the leader.
- (b) *Initiative.* This is the faculty of seeing what needs to be done and doing it; a willingness to act in the absence of orders and to accept the responsibility in-

volved. The exigencies of the service will require leaders at times to be absent from their commands; at such times decisions may have to be made by subordinates. Initiative must be developed in subordinates. The absence of the leader provides the opportunity. In learning to develop initiative subordinates may sometimes make mistakes. Learn to underwrite the honest mistakes. Do not pay subordinates the supreme insult of telling them that they are not paid to think. On the contrary they *are* paid to think, and have been given rank in order to implement their decisions. Rank is to be used to serve your subordinates; it is not a reward or a licence to exercise idiosyncrasies.. One object of rank is to enable officers and NCOs to fulfil their obligations to their subordinates, which includes the development of their initiative potential.

- (c) *Decisiveness.* This is the ability to make decisions promptly, announce them authoritatively, concisely and clearly. In this regard it is the wise person who refrains from criticism of a situation until he learns the reasons therefore, and can make logical constructive decisions.

Many officers and NCOs regrettably find it impossible to make the simplest of decisions, apparently because of fear of repercussions from above. Nothing will lower the morale of the troops quicker than indecision, or an unwise decision reached after too long an interval. Order and counter-order eventually lead to disorder.

- (d) *Tact.* Tact is the ability to deal with superiors and subordinates without giving offence. Tact requires an understanding of human nature and consideration for the feeling of others. Officers and NCOs should be as good as their word. A promise is binding. Promises of rewards — or punishments — which cannot be fulfilled should not be made. Tact begins with a respect for the individual, particularly the subordinate. The men are the ones who make or break an officer. An officer should never lose sight of this basic truth. Do not belittle their importance; give them responsibilities and then back them up. By proper use of his NCOs the officer adds to their prestige. Be understanding; do not allow subordinates to feel they are not to be trusted.

- (e) *Endurance.* Mental and physical stamina, good health and an abundance of energy are important. Endurance is evidenced by the ability to keep going and complete

a reasonable task. The presence of an officer or senior NCO when the going is tough — 'sharing the situation with the men' — is all important. A leader has endurance in proportion to his ability to withstand pain, fatigue, distress, hardship and disappointment. He must have the ability to think more clearly and for a more sustained period than the men he commands.

- (f) *Discipline.* Men admire strict officers and NCOs provided they are also just. An officer or NCO who attempts to be a good fellow loses his grip early. New officers and NCOs cannot be easy at the outset and expect later to become strict. They can, however, be strict initially and then ease off as circumstances warrant. Cheap popularity with subordinates should not be sought. The men expect officers and NCOs to play their parts according to their positions. They do not begrudge rank, pay or prerogatives, provided these are used in their interest. Avoid becoming too familiar with the men. Good soldiers do not expect it. The relationship is best maintained by being fair, firm, yet friendly.

Do not recount doubtful stories or indulge in outbursts of profanity before your men. They will not admire you for it and it could lead to loss of their respect. Rudeness, abuse and ill-temper are seldom justified. These qualities stamp the inefficient officer and NCO and should never be resorted to. The wishes of a good leader are acted on as a command and politeness is far from being a sign of weakness. Rather it is a sign of character. Military courtesies begin at the top. Observing these courtesies between seniors and subordinates is not belittling to either; they are evidence of alertness, pride and good manners.

When administering discipline, be consistent, constructive and impersonal — avoid abuse or sadism. Minor breaches must be corrected on every occasion. A liberty taken must be instantly rebuked. If minor breaches are permitted, major ones will soon occur. Every breach must be fearlessly corrected.

- (g) *Enthusiasm.* Nothing is so infectious as enthusiasm or so easily communicated to subordinates. It is expressed by the cheerfulness, optimism and willingness of the leader. Dull, idle and lackadaisical officers and NCOs can never hope to become good leaders.
- (h) *Bearing and Dress.* The bearing and appearance of the leader are the outward expressions of his inner worth. A

leader must be most careful about his dress, appearance and deportment. He is looked upon by his men as an example of what is correct. Set the proper example. Men will look to their officers and NCOs for their model. They will have their own standards; unless the leader can surpass them, he will lose their respect.

- (i) *Welfare.* To lead successfully the leader must know his men. A good officer and NCO will know their names, background and personal characteristics. He must have a personal and genuine interest in them or they will not have it in him. Each individual has problems. There are no easier ways of getting a grip on the men than by helping them to solve the personal problems likely to give them greatest concern. Officers more so than NCOs are frequently asked by their men to investigate matters relating to conditions or service, or for advice on personal and domestic problems affecting their families. Such inquiries, unless of a frivolous nature, must be received sympathetically, dealt with quickly and with the greatest of care. Indifference to a soldier's personal problems will only produce lack of confidence and respect. If the leader makes it apparent that he is doing everything in his power to assist the men in meeting their needs, he will win their respect and be quickly accepted by them as a leader. Troops resent the attitude of an officer or NCO which gives the impression that looking after their interests is a bore and a nuisance. Such an attitude will destroy unit spirit and efficiency. The officer or NCO who handles such problems for his men with diligence and speed will have gone a long way towards establishing himself as a respected leader.
- (j) *Unselfishness.* The unselfish leader is one who does not take advantage of a situation for personal pleasure, gain or safety at the expense of his unit. To guard against any tendency in this direction, officers and NCOs must always place the interest of their troops before their own. For example, in the field, always see that the troops are settled down before concerning yourself with your own comfort. Never eat before first seeing to the troops' fare. Keep the troops informed as much as security will allow; they must be told the 'reasons why'. If the troops are required for duty or are allowed leave, let them know as early as possible. If troops are accommodated under poor conditions in the field, do not set up business in a marquee or tent with most

of the comforts of home and expect the troops to 'pig it'. See that your men get the best available administrative support: meals, canteen supplies, mail, transport, clothing, equipment, leave and so forth. You must find out what they are entitled to and see that they get it.

Confidence, respect and the development of a unit's spirit all depend on the troops feeling that their officers and NCOs are interested in their welfare and requirements.

- (k) *Training.* Nothing irks troops more than dull, uninteresting training. Morale suffers and respect for officers and NCOs alike is lowered. Well-prepared, well-organized and well-presented training impresses the troops. Some training, however, out of necessity, is unfortunately dull.

If a VIP is to visit your unit, do not 'stew' the syllabus to give the impression that only interesting lessons are taught in your unit. VIPs are not so easily fooled and the troops themselves resent it. Better that the daily routine should proceed as originally planned than a specially prepared out-of-context syllabus, designed purely to impress the VIP.

It is the responsibility of junior officers and NCOs to train their men properly, because only in this way will the confidence of the troops be obtained and retained. Poorly trained troops are the direct result of poor officers and NCOs.

What Men expect of their Leaders

In summary the men, as mature professional soldiers, have a right to expect of their leaders:

- (a) Honest, just and firm treatment and proper consideration of their problems.
- (b) Personal interest taken in them as individuals.
- (c) Loyalty.
- (d) Shielding from harassment from 'higher up'.
- (e) The best leadership, with clear-cut positive orders which are not constantly changing.
- (f) A well-thought-out programme of training, work and recreation, which exercises demands on them commensurate with their capabilities.
- (g) That their good work be recognized and publicized where appropriate.

Future Prospects

If it were possible to gaze into a crystal ball and foresee the future, one would still be unable to determine a 'yard-stick' to measure the standard of leadership likely to become available in the Australian Army. With the advent of National Service and the expansion of the Army the standards are likely to vary because the quality of the available material will vary. With officers and NCOs being turned out by establishments and schools where standards vary, what then is the standard by which the quality of leadership can be gauged?

The re-establishment of junior leaders' courses and/or schools would be a step in the right direction and a school along lines similar to the Central Instructors' School, which functioned at Kapooka, NSW, would improve the quality of many instructors newly appointed to roles where their leadership qualities will be under critical examination.

Conclusion

The personal characteristics or qualities listed above can all be developed. An officer or NCO who wishes to become a successful leader must therefore be aware of them and by constant objective analysis discover in which of them he is lacking. Once aware of them, constant application should develop these qualities which fall below the standards necessary for the successful exercise of command. □

The Guards are superior to the Line — not as being picked men like the French — for Napoleon gave peculiar privileges to his guardsmen and governed the army with them — but from the goodness of the non-commissioned officers. They do in fact all that the commissioned officers in the Line are expected to do — and don't do. This must be as long as the present system lasts — and I am all for it — of having gentlemen for officers; you cannot require them to do many things that should be done. They must not speak to the men, for instance — we should reprimand them if they did; our system in that respect is so very different from the French. Now all that work is done by the non-commissioned officers of the Guards. It is true that they regularly get drunk once a day — by eight in the evening, and go to bed soon after, but then they always took care to do first whatever they were bid. When I had given an officer of the Guards an order, I felt sure of its being executed; but with an officer in the Line, it was, I will venture to say, a hundred to one against it being done at all.

— *Notes of Conversations with the Duke of Wellington 1831-1851.*

A Career Plan for Arms and Service Officers

*Major K. L. MacPherson,
Royal Australian Army Service Corps*

THE key phrases in our army advertising are 'Modern Army', 'Highly Skilled', 'Learn a trade', and others which indicate efficiency. The emphasis is on a modern efficient army in which each member is a skilled specialist.

This is so for the majority of other ranks, but it does not apply to officers. Officers are still trained as a group with an emphasis on all-arms knowledge. This system is based on the concepts of a past generation and is out of touch with reality. Army officers of today, like the other ranks and their counterparts in civil industry, should specialize. Only through specialization will proficiency and efficiency be achieved.

To study career planning, consider two army officers who receive the same basic training and are commissioned at the same time. One is an arms officer, the other is a service officer. Both did equally well on the basic course, are of equal intelligence, and are commissioned with equal seniority. Both officers are familiar with the organizations and roles of the various arms and services, and each has a basic knowledge of his profession.

Consider these two officers again in five years time. They are now captains and have gained regimental experience in their respective corps. How does their knowledge of the army compare now? Both still have their general knowledge; it will be more detailed here and there through contact with other arms and services, but basically we now have two officers with diverging careers.

The arms officer, through participation in unit and collective field exercises, knows more about the employment and deployment of the arms than does the service officer.

Major MacPherson graduated from the Royal Military College in 1954 and was allotted to the RAASC. His subsequent appointments include OC 126 Tpt Pl FARELF (1956-57), RAASC Officer HQ 1 Inf Bde Gp (1957-59), Adjt HQ 3 Div Column (1959-60) and of HQ CRAASC 3 Div (1960-61). This appointment was followed by two years S&T training in the United Kingdom, after which he joined the RAASC Centre in Southern Command. He attended the Australian Staff College in 1965 and after graduation was appointed DAQMG (Maint) HQ PNG Command.

Conversely the service officer has gained experience in administration and logistics and knows more of these aspects than does the arms officer, and they cannot be considered as equal.

So far the army has trained two specialist officers, and at this stage of their careers neither officer could confidently perform the tasks of the other though each has a basic all-arms knowledge.

The career plans of these officers have, so far, followed the pattern of other professions. One would assume that this pattern would continue but it does not.

In the next few years both officers have to study for promotion; through study their knowledge of organizations, characteristics and roles and service administration is brought up to date and expanded. Each officer must also qualify at an all-arms tactics course; it is at this stage that the army tends to forget about the separate careers of these two officers.

The infantry tactics of the course naturally favours the arms officer. He has had practical experience in the field with forces of all-arms, whereas the service officer has only his general knowledge of unit characteristics and roles. With the introduction of the non-assessed course (Tac 3) the difference in tactics experience is less important. But the fact remains that two officers, each with different training, are expected to qualify at a course which is designed to test only the arms officer. In fact the army is trying to unify two separate careers.

Why does the army try to enforce a common level which does not exist? Civil industry, which must work for efficiency to achieve a profit, would never insist that an executive in a sales department should be thoroughly familiar with the work of an executive in a manufacturing department. Each knows basically what the other does, but one department is only interested in the end product of the other. This analogy is still sound when applied to the arms and services of the army. So if the army wishes to employ the arms officer and service officer profitably, it must allow the career of each officer to progress along specialist lines.

At this stage in the careers of the two officers staff training must be considered. Under the present system the Australian Staff College will train these two officers for grade two staff appointments in all branches of the staff, and prepare them to assume, after experience, command and higher staff appointments.

At Staff College about 40 per cent of the course is devoted to a study of the arms, general tactics and operations war

general, while only 7 per cent of the course is devoted to a study of administration. Naturally a proportion of the time devoted to tactical studies includes a study of administration, but there is still a distinct bias which gives the arms officer an advantage over his service contemporary.

Again the army is trying to weld two separate careers into one at a time when it should be developing two separate careers. Consider the aims of Staff College; will it train a service officer for grade two staff appointments in the general staff branch of the army? Will it prepare a service officer to assume command of a service unit? The answer in both cases is no. But if these questions are applied to the arms officer the answer in both cases would be yes.

It would be in the army's best interests if the Staff College dealt only with subjects which are of common interest to both the arms and the service officer. There certainly must be studies involving the inter-dependence of the arms and the services, but these should only be in general terms and the arms and service officers must be the experts in their respective fields. For one to attempt to become a semi-expert in the other is to produce an officer who knows a little of everything rather than an officer who is expert in one particular field.

What is the alternative? With the exclusion of all-arms tactics courses, the career plan for the arms officer and for the service officer is satisfactory up to the time that staff training is undertaken. At this time greater efficiency would be achieved if the arms officer attended a 'General Staff' college and the service officer attended an 'Administrative Staff' college.

In this way the arms officer would receive specialized training that would fit him for grade two staff appointments in the General Staff branch of the army and it would prepare him to assume command of an arms unit. In the same way the service officer would receive specialized training that would fit him for Administrative Staff appointments and prepare him to assume command of a service unit. It would also allow the detailed study of administration and logistics. At the present time there is no facility to study this aspect of war in any detail.

The weakness in this system are, first, that some aspects of staff work are not the prerogative of either the arms officer or the service officer; second, that the arms and services must learn to operate together to form an efficient fighting machine.

These weaknesses could be overcome by having a staff college with three distinct training wings. An 'Administrative' wing to train service officers for grade two staff appointments

in 'Q Staff' appointments and for command of service units, a 'General Staff' wing to carry out similar 'G' functions for arms officers, and a 'Common Services' wing to deal with subjects common to both the arms and the services. The 'Common Services' wing would also deal with the relationships between the arms and the services and would establish the unification of the two aspects of training.

By such a career plan the army would receive the benefit of specialist knowledge at grade two and higher staff appointments. It would also establish that there is no bias between the arms career and the service career within the army. This latter aspect would be of inestimable value to the army as a whole, for when an officer is commissioned he can look at two careers within the army and know that, regardless of whichever he chooses, he will receive specialized training and will have a career which will allow maximum advancement and a variety of appointments. Both careers will be attractive and a high officer standard in each will be the outcome.

Only by establishing separate careers for arms and service officers will the army produce the skilled specialist officers which are required in today's army. □

RELUCTANT SOLDIER, 1941 STYLE

The following letter was received by Army Headquarters, Melbourne, from a country farmer, asking for exemption from compulsory military training.

'I received notice to go to camp, but I want to say I won't be along. I suppose they'll go me but I will put up a scrap. I ask you — Is it fair? I have done two camps and lost a lot of cash. If I go to camp I get 5/- a day; if I stop home I get 15/-. At any rate what's the Army done for me? They didn't even get me made a corporal or a lance-jack. I am a mixed farmer and its hard keeping the wolf from one door and the stork from the other, and running a dairy and poultry farm I am flat out. Another thing, just between ourselves, I can't trust the wife when I go away for a weekend so how can I trust her for 90 days? I am not going to send my wife 3/- a day to spend on blokes here. I believe in home defence, but in my case it's home defence under the house with a shot gun. Do you blame me? Please say if leave will be granted so I will know, but I'm not going anyway.'

— Extract from Int Summary No. 68, attached to 2/24th Battalion war diary, July 1941.

Crack and Thump

TRAINING FOR WAR UNDER PEACE-TIME CONDITIONS

*Major J. A. Rymer-Jones,
The Parachute Regiment*

WHAT do we expect of a soldier in battle? We expect him to be aggressive in attack and steady in defence; he must be well disciplined and display courage and resolution. It is surprising then to find that the commander who attempts to introduce realistic and imaginative training into peacetime exercises does so only at considerable risk to his future career. He is virtually forbidden to exercise his talents in the training of his men to fit them for battle.

I certainly do not advocate endangering soldiers' lives needlessly, nor do I subscribe to recklessness. At the same time, however, it does seem to me of great importance that we should consider how best we can prepare the soldier, particularly the infantry soldier, for war. This is specially pertinent today in view of the employment of units in operational theatres at very short notice, and with no opportunity for training under active service conditions. It is rare nowadays to find a time when at least one unit is not on active service. Is it possible for such a unit to train for battle while still in a peace-time theatre? It is my respectful contention that the relevant orders and regulations prohibit or at least inhibit realistic training. Battle efficiency demands more than physical fitness, and its attainment demands special consideration. Perhaps the most important of all factors contributing to preparedness for war is field firing.

In these days of guided weapons, one of the most difficult assessments to be made is in the choice of soldiers who are to control anti-tank missiles. Co-ordination can be judged by a series of aptitude tests, and one can gauge whether a man is psychologically conditioned for the role of a controller. But it is the test of battle alone that will prove how suitable, steady and accurate he will be under fire. Such skill is at one end of the spectrum; at the other, is the efficiency of the rifleman. If the guided weapon controller cannot be tested, then it is surely impossible to test the rifleman. Although there is no effective way to simulate enemy fire, to give the 'feel' (some would call it 'smell') of war, at least supporting fire gives some degree of battle simulation.

Some benefit can be gained from training in infantry/tank co-operation, but principally only for the commanders. At rifleman level, the benefit is little more than that the soldier can

ride on a tank rather than walk. They then find themselves converging on an objective from one direction, with the tanks advancing from another, the gunners flashing torches down the gun barrels to simulate rounds fired. However, if there is to be realistic training, and we are to gain vital mutual confidence and respect, armoured units must be permitted to train with the infantry, using their main and secondary armaments, firing either close to a flank or preferably overhead.

With artillery, guns and mortars, the direction of firing is not so important. It is acceptable that with due regard to 'unders and overs', fire can be either towards the advancing infantry or from a flank. At some stage, however, the reliability of the artillery weapon must be proved, and the exceptional short round and 'cook off' be weighed in the balance against the demands of battle efficiency. Within the meaning of artillery I include the 81-mm mortar, but I consider that within a reasonable distance of infantry in the open, it should also be possible to fire the 106-mm RCL, both spotting rifle and main armament, and the GPMG, not only from tripods but, under supervision, even hand-held.

It would certainly be of little value, and indeed rash, to start field-firing before a soldier is well trained. There are certain prerequisites, of which the first and most important is that every soldier should be classified as, at worst, a first-class rifle shot and preferably as a marksman. Shooting standards aside, it is obviously imperative that every soldier taking part in field firing exercises should be adept in handling his personal weapon. Having obtained a very high standard, the next step should also be taken on the rifle classification range.

Most battles are won or lost in the 'dog fights' when the attacking troops close with the defenders. The battalion attack hinges on the ability of the sections and individual soldiers to close with the enemy and kill or capture him. One must envisage, therefore, that on the objective, if not earlier, the assault line is broken and sections break up, with soldiers working in twos and threes, with fire and movement between themselves. Training for this can only be achieved by field firing exercises at section level, based initially on section minor tactics. However there is a logical progression from the fire and movement practices, which are now part of the annual classification course; not only should the rifle and gun groups practise fire and movement, one with the other, but the individual riflemen should be taught to advance, alternatively moving and firing ('peppercotting').

The inclusion of the section GPMG poses two major problems: firing from a flank may cause ricochets, while overhead

fire at present demands a tripod mounting and detailed pre-registration on a target. The danger area templates, however, give a slightly pessimistic impression as it is only at the strike of the bullet that the danger starts, with only limited danger along the line of flight. The critical factor, therefore, with the GPMG is surely a question of angle of elevation and range. Indeed, an experienced, responsible instructor must be more important than a tripod, so long as the gun is handled by a competent trained soldier.

An examination of the regulations for the Bren LMG in field firing exercises shows that the minimum danger area at fifty yards from the firing point, is twenty yards on either side of the line of flight, which is about equivalent to the danger area on a rifle classification range. It can be seen, therefore, that there are problems in training soldiers realistically even at section level. However, progress beyond that stage, without loss of realism, is then even more difficult.

I have mentioned the requirement for live firing during infantry/tank co-operation exercises. If such an exercise were to be arranged now, and tank HE shells fired over a rocky area, one would find the ludicrous situation of the infantry having to be over 2,300 yards to a flank, for nearly 9,800 yards along the line of sight. It would be even worse if APDs Mk3 shells were to be used, in which case the danger area extends for 15,500 yards along the line of sight, and up to 3,900 yards to each flank. Even with the 106-mm RCL, the practice round demands an area, including the back-blast safety area, of 6,900 yards in length and, on hard ground, at the widest 2,800 yards.

These figures are sufficient to show that it is impossible to include most types of supporting weapons in realistic field firing exercises without taking a calculated risk. If we are to achieve a fair degree of battle efficiency, then it is vital that we find ways of including such weapons in our exercises. How this is to be done I have not attempted to suggest here, but I consider that there might be three means: by increased accuracy and reliability of weapons and ammunition, by reducing the lethality of practice ammunition, or by accepting a proportion of casualties. If we cannot achieve the first two then we are driven to the third choice: the acceptance of casualties from training. If this is even remotely possible, then the responsibility should be removed from the junior commanders. But what is one casualty in training, so long as lives are saved in war? We must train with realism, yet maintain a sense of proportion. □