

0120000902

UNCLASSIFIED

Australian Army History Unit
16 July 2014



ARMY JOURNAL

ARMY JOURNAL

Editor: C. F. Coady

Staff Artist: G. M. Capper

Printed and published for the Australian Army by The Dominion Press, 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, Army Journal, Directorate of Military Training, Army Headquarters Canberra, A.C.T. 2600, are invited from all ranks of the Army, Cadet Corps and Reserve of Officers.

\$10 will be paid to the author of the best article published in each issue. In addition, annual prizes of \$60 and \$20 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.

COVER: 'One of the Old Platoon' by Hon. Ltut. Will Dyson in December 1916. At the Australian War Memorial.

ARMY JOURNAL

A periodical review of military literature

No. 234, NOVEMBER 1968

Contents

- 3 Ingredients of Victory in Counter Revolutionary Warfare
Major W. S. Tee
- 14 Some thoughts on the Airmobile Concept
Major J. F. McMahon
- 24 Notes for Young Conferees
'T2'
- 28 AMF Gold Medal and ASCO Prize Essay Competition
- 30 The Vegetation of South-East Asia
H. S. Hodges and G. R. Webb
- 41 The March Offensive, 1918
John Terraine

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.**



(Photo by 'The Sydney Mail')

Part of the crowd which, on receipt of the news that the Armistice had been signed on 11 November 1918, left work and flocked to Martin Place, Sydney.

Ingredients of Victory in Counter Revolutionary Warfare

Major W. S. Tee,
10th Gurkha Rifles

MAJOR Paul Greenhalgh, currently the exchange officer at the School of Infantry, Warminster has lent me past numbers of the Australian Army Journal going back to 1963. They make a fascinating study and show that the Australian Army is, as a first priority, oriented towards countering communist Revolutionary Warfare in South-East Asia and have encouraged me to write this article.

A few of the articles in the Journal are concerned with single arm techniques of Counter Revolutionary Warfare (CRW). Brigadier Patterson's article on infantry, Captain Clarke's on artillery and air support, Lieutenant French's on tracking and Colonel Templeman's on engineers are examples from this category; but the main burden of the articles is tactical, strategic and political (I use the word 'political' as a direct quote from articles). The generality of articles make it abundantly clear that CRW is not contested only between soldiers and that military solutions are therefore only a subordinate part—a Platonian part—of the whole; as the communists practise Revolutionary Warfare the contest is one of total individual and collective commitment. This thought is not entirely novel for according to Spengler 'Victory is not the essence of the fight'.

Although all guns that fire in revolts or revolutions are not communist most of them are, even if a few triggers are squeezed in pursuance of a will-o-the-wisp nationalism: anyway communists tradition-

Major Tee graduated from the Royal Military Academy in October 1939 and was posted to 1/4 Gurkha Rifles in the Indian Army. He served with 4th Gurkha Rifles throughout the Second World War and was in command of the 4th Bn 4th Prince of Wales's Own Gurkha Rifles during the break-out battle on the Chindwin. Service with Gurkha units continued on the North-West Frontier of India, in Malaya during the Emergency and Hong Kong during the years 1945-1960 broken only by a period as CI(JW) at the FARELF Training Centre in Johore State.

In 1960 Major Tee was posted as an instructor at the School of Infantry at Warminster. He then served as a SO for Psy Ops on the staff of the Director of Operations in Borneo. Following a tour as GSO2 Tactics at the School of Transport in UK he is presently Film Project Officer at the School of Infantry, Warminster.

ally fish in troubled waters and have even been known to agitate calm ones for their own nefarious ends. Their primary end, Soviet and Chinese alike, is world dominion and those who forget this, or ignore it, have been led into dark alleys of doubt and error. Communism does work in secret—Rajagopalchari's question 'Why are communists so shy of daylight?' is germane.

The Kaiser's War heralded the era of change in which we live. Winston Churchill fought against it—'I have not become the Empire's first Minister to preside at its dissolution'; Jan Smuts recognized it—'Mankind is on the march'; and Harold Macmillan's *Wind of Change* irrevocably exposed it to the limelight.

Communism has exploited this tide of change; some of its apologists claim that communism provoked it. Since its beginnings communism has opposed capitalism and in Asia has generally moved under the banners of anti-imperialism and anti-colonialism. (That Soviet Russia is the most oppressive colonial power the world has ever known—after communist China—is certainly not bruited about by either power even in their disagreements!) Mao, the surprising upstart of General Darling's article, intends world dominion no less than the faceless men of the Kremlin and communism has the advantage of a supra-national ideology; as Chester Bowles noted 'The fanatical discipline of the communists is a formidable force'.

Generally communism is identified with change where capitalism, for which the Free World fights, is necessarily identified with established economic and trading patterns; or at best with gradual change. Communism has therefore a dynamic appeal in a time of change; it appeals to the have-not nations and the have-not peoples. And, as a corollary, capitalism favours and is favoured by the haves. Asians and Africans, more than Europeans and Americans, are divided into haves and have-nots; the very rich and the very poor; the Soongs and the people they have exploited. According to the revered American President Jefferson 'Widespread poverty and concentrated wealth cannot long endure side by side in a democracy' and I can only suppose that the same is true of any other sort of state. Unequal distribution of wealth has always caused discontent and always will; but in the past the have-nots generally accepted their lot because they did not know that any other distribution could be achieved. Religion, the so-called opiate of the people, and custom supported the establishments and the compulsion of law, made and enforced by the haves, has been a further sanction against change. On this subject a percipient American, Zawodny, has this to say: 'You cannot expect a starved peasant in an under-developed country to fight

on behalf of "free enterprise"—he has already experienced it from his landlord'.

A sacred tenet of Leninist communism states that capitalism will fail when it can no longer exploit colonial 'slave markets'. In the event Holland, Britain, France and the United States, capitalist countries at one time in theory enjoying slave markets, have generally prospered after dependent territories in Asia and Africa have become independent. The resultant need for Moscow apologists to explain this seeming fault in communist dogma resulted in the ideology of neo-colonialism (and neo-imperialism). In consequence communist parties throughout the world now perpetuate Lenin's discredited doctrine where they might otherwise have discarded the romantic fallacy and come to understand the vital nature of man and the ideologies he needs. Neo-colonialism will be the banner of communist provoked dissidence in the future and will replace the tattered flags of anti-colonialism and anti-imperialism that have drummed up discontent in the recent past. As an example, during the Indonesian aggression against Malaysia the Sumatran, General Nasution, coined the nursery word 'Necolim'. It is an abbreviation to suggest a horrid and despicable amalgam of neo-colonial, colonial and imperialist sins. By confusing understanding perhaps he hoped to invoke the truth in Lincoln's dictum that 'Public opinion is everything. With it nothing can fail, without it nothing can succeed'.

But communist leaders do not build castles on sand. When they provoke or horn in on a revolution they exploit real grievances. Their provocateurs do not need to dream up grievances; they only have to listen in the market place to learn what is currently making People unhappy. In every undercapitalized country—and in most others too—real grievances can be found in plenty. Among them are land tenure—Land to the Tillers—; corruption and bribery; lack of medicare, education, communications and security; maladministration of justice and autocratic government by a privileged minority. In the past these real grievances have been righted in some nations either by force or, more often, by enlightened minds; and changes will inevitably be made in other nations too.

Every nation has its Achilles heel which, if trodden on hard enough, will raise a shout of revolution; and in a climate of change much support will be given to programmes that favour the have-nots. Cures for grievances may or may not be practicable—usually not—but at least they evoke support for change in changing times. Grievances and intended panaceas in a country where revolution is planned will be widely publicized; external radio broadcasts may even claim to come

from within the territory—as was the case in Malaysian Borneo. The transistor radio, cheap and small—some would add nasty—and independent of mains electricity is a catalyst in an age of communication; the remotest communities on earth can hear the beguilements of those who seek to provoke change by exploiting their grievances.

Soldiers who fight Revolutionary Wars will be guerillas; but communist soldiers do not act only as soldiers. Under party direction they act in every way open to them to gain their party's ends; they are communists first and soldiers second. Because of the military history of the Free World its soldiers are generally trained in close order combat and seek quick decisions to eliminate enemy military force; this training is inappropriate to CRW as soldiers cannot win decisions even by decimating the enemy's military strength.

Much of our CRW tactical doctrine is based in our soldierly preoccupation with close order fighting and quick decisions; with killing and 'destroying' the enemy. Dien Bien Phu is an example although the causes of failure there can be traced through personality clashes further on still to attitudes in Metropolitan France. The indecisive battle of Khe Sanh is a corollary to the shambles of Dien Bien Phu; but General Giap did not accept the bait; he declined the temptation of a close order battle with the entrenched Americans—wisely so. Tactical doctrine for CRW is concerned with cordons and searches, searches and clearings, assaults on camps, attacks on villages, protection of places and things; all have an implicit tactical background of close order activity. Even the scales of weapons and equipments that we carry are geared to close order battle, as is our logistic system.

CRW forces must have this close order battle capacity as a secondary skill in order to be able to counter guerilla concentration—if such ever occurs—but CRW forces must have a primary capacity for independent action to spread ideas and counter communist or enemy ideology. Bombs and bullets will not win decisions but ideas will; but we do need ideas. Every soldier needs to carry the living seed of freedom and to spread and nurture it wherever he goes; but he must be trained to defend himself—as the SAS do. Soldiers must be trained to fight and, as Tito Broz has said, those who fight sometimes die; but killing and being killed is not the way to win decisions in CRW—'Do not put a premium on killing' said Sun Tzu a few thousand years ago.

Guerilla soldiers have generally avoided close combat with regular forces—and the more the long term effects of the Tet offensive are assimilated, the more they will in future. But guerillas do seek to possess

the night. Regular soldiers must dispute the night equally as they do the day because he who owns the darkness has first refusal on the loyalty of People. Fear is a strong compulsion in the long, still, silent hours of darkness. In the past Free World soldiers have been inclined to base up at night; they lose a trick by doing so.

The first principle of war accepted by the British and the Australian Armies—but not by all armies—is the selection and maintenance of the aim. What then is likely to be the selected aim of an Australian military intervention? The pursuit of policy by other means? The support of an allied government? The destruction of an enemy military force? The maintenance/restoration of law and/or order? Aiding the civil power? Keeping the peace? Even winning the hearts and minds of the people? Perhaps victory—victory at any cost? None of these ideas describe to me the action required of an intervention force—they beg the issue. As Mao and Gandhi both agreed, it is the people who decide issues; power resides in the people. Might not your selected aim be to restore the loyalty of People to their own government? Each case will, of course, be marginally different but a generalization helps in deciding the sort of soldier an army oriented to CRW as a first priority should seek and the sort of equipment, support, organization and training he needs.

When the loyalties of a people are suspect—and wherever intervention is invited they will be—a communal change of opinion will be needed for an intervention to succeed. In the present age of communication opinions will not be changed by force nor loyalty be won or directed by it; I doubt if it could ever have been so won—the pen has an ancient history of being mightier than the sword. Bodies can indeed be coerced and a measure of obedience enforced but loyalty, a positive and voluntary mental commitment, cannot be forced. Many years ago Burke, a great parliamentarian, said 'our patience will achieve more than our force' and in 1968 I say that the force of opinion is more compelling than the force of arms. Soldiers trained solely, or as a first priority, in close order combat for decisive military action are unprepared to achieve the aim I have selected; particularly alien soldiers in a foreign land.

Only People decide issues and nothing else, literally nothing else, is vital. All CRW action, military most of all, that offends a majority of People can only be another signpost on the road to failure. Collective punishment, as Otto Heilbrun has pointed out—'No measure is more self-defeating than collective punishment'—does more harm than good.

But changing people's opinions is fiendishly difficult; an awareness of the nature of man and of his antecedents is necessary to success.

Having agreed the aim in general, the selection of particular aims for particular *interventions* (and of particular aims for particular operations) presents difficulty. Ideally our government and that of the aided territory select a common aim, or at worst compatible ones. For sovereign nations to find an exact identity of interest, to select a common aim, is never simple. Then again, throughout the hierarchy of government and the territorial administration, selected aims that govern action should be compatible with the aspirations of divergent community interests. Minority interests, no matter how powerful, should logically go to the wall; but they do not.

CRW is a human activity that demands co-ordination of divergent organizations; each organization is spoken for by People and the impact of personality on policy at even quite low levels has to be experienced to be believed.

Every government agency and its individuals ideally sink their interests in the interests of the whole. How simple to say and how difficult to achieve! Every society has its individuals who are, of their nature, hellbent on gaining benefit, individual or collective, beyond their just deserts and at the expense of the whole. The trick, of course, is to build the interests of the nation round the interests of a majority of its people so that they are co-incident; Democracy in action.

But between sovereign nations an exact identity of interest and a common aim are almost impossible to achieve and the good is, as always, the enemy of the best. No love affair between dissimilar strangers is really possible; yet no less is necessary to achieve success quickly, efficiently and inexpensively.

From reading Australian Army Journals and other material and from listening to unending discussions I notice that military men, probably because of their close combat training, are obsessed with ground and space, with the human instinct of territoriality. Lieutenant-Colonel Garland wrote down the old chestnut about CRW being like naval warfare. Its not true. CRW concerns People, not ground or space; dominating or pacifying areas has no validity—People must be pacified or dominated. The reason why ground loses the impact it has in so-called conventional tactics is that the guerilla enemy has the tactical initiative and only if he offers hard targets can we attack them and only if he will attack our defence is it worthwhile setting it up.

Space too loses its importance except in the sense that Sir Robert Thompson used it. He tapped his forehead and 'Space in here' he said. In that sense space is all important in CRW. Of course some bits of ground are given importance; secure bases and a secure L of C for regular forces and a sanctuary for the guerilla enemy—the difference is that we are committed to defend our chosen ground but the enemy's choice is secret or is off limits for some inhibiting reason such as a frontier. Ground outside these chosen areas can be surrendered or held without regard for the ground itself. Yet military thought is still pre-occupied with the ground. The impact of ground and space has not yet been recognized in its true perspective.

Guerilla forces, all military forces, require a sanctuary where soldiers can let their hair down—have a haircut—in safety. A secure base and L of C for intervention forces; and guerillas cannot in the end survive as a military force unless they can rest, think and train in safety. The guerillas need for sanctuary is an Achilles heel and, within the territory, action by security forces must be carried everywhere so that nowhere can guerillas find sanctuary; military force that allows sanctuary in its own territory is either incompetent or insufficient to its task. And by diplomacy national leaders must seek to deny sanctuary over frontiers adjoining the combat area.

The need for every party of soldiers to be responsible for their own protection also requires that the place we are, the ground we stand on, is securely held. But this is a common sense measure which does not demand that People be considered after ground.

Military preoccupation with ground dies hard; to break it and give attention to People as the determinant of CRW is not wholly impossible but it's very difficult. Military men, and others concerned with the exercise, must realise that People's opinions have to be changed and People convinced before victory can be won. They must come to realize that a 1000 lb bomb, HE and napalm equally, will fail to convince even the weakest mind in the twentieth century that might is right; generally bombs will make enemies of People. Sometimes bombs will kill a few enemy and that is a desirable short term aim but you've made a bad bargain if those same bombs give you a long term debit by alienating People.

This concept is a part of what has come to be called the 'hearts and minds' campaign—psychological warfare or operations; but the idea must be carefully examined and understood and those concerned with CRW must be sure that minds—and hearts—are won for the right

cause; a love triangle is a nasty muddle and, as with love, loyalty can be given only to one person.

Soldiers are concerned with the short view and their tactical operations have short term immediate aims. The short term aim in the hearts and minds campaign is to get the support of the people so that soldiers will know what the enemy is doing and so that the enemy will not know what the soldiers are doing. This aim is achieved by being kind to People; by building schools and hospitals and roads, by curing ulcers, by carrying letters, by giving protection, by listening sympathetically, by giving candy to kids and soap to grown-ups and in ten thousand other ways. But long term effects are notoriously of greater impact than short term; when the guns are silent and foreign soldiers go away they leave their new friends worse off than before. We, in our transient plenty and for our own ends help people with alien resources and, while we remain, their lives are made that much easier. After a taste of better things, their lack causes resentment and it is inevitably channelled towards their own government who, for a multitude of reasons good or bad, it does not matter which—cannot help their people as foreign soldiers did. In the end our short term winning of the hearts and minds is a long term loss both to the government we support and to its people.

Solutions that are realistic and just in winning the hearts and minds of People for their own government are difficult to dream up and every case has its darker side. The trick is to create appetites that can be met from our resources but whose satisfaction does not detract from the prestige of local government and which can actually repel the loyalty of People from us so that their own government has first option on it. But nothing is simple in CRW and most governments—especially those which are young and proud—are unwilling to allow foreigners to enhance their prestige with their own people; this attitude is formed by pressures of history, of world opinion and of internal stresses. Yet the people in any territory where we are asked to intervene will be alienated from their government—else we would not be asked to intervene; heaping coals on the embers of discontent is difficult to avoid because soldiers are sympathetic wherever they find hardship or deprivation.

Another complicating factor is that, where grievances are real, the revolutionaries and the people may be one and the same group. The benefits and the punishments, the carrot and the stick, will then fall impartially on the same group and they will be confused; but an intervention force committed to the support of an establishment that has

lost that amount of support will probably fail anyway no matter how dynamic the soldiers and their leaders are.

Spengler wrote 'It has always been a platoon of soldiers who have saved civilization'. In CRW the presence of soldiers is necessary because an enemy can succeed by force against a government that does not protect itself. Sun Tzu wrote 'The supreme art of war is to subdue the enemy without fighting' and this thought, if it is added to Spengler's, gives a clue to the place of force in CRW. A lack of force or force misapplied or misdirected can lose decisions but force cannot gain decisions. In CRW the application of force is essentially defensive and it is only offense that can gain military victory. The place of force is to hold the ring, defensively, until other factors can be brought to bear to win decisions; the soldierly attitude of mind that declares that 'time is not on our side' is an anachronism: time is neutral, even maybe on our side. I, for one, have no doubt that in the end communism will not dominate the world; man's basic instincts of dominance and territoriality will never allow a monolithic government—unless a threat from space appears!

The application of force must be selective in every instance; as collective punishment is self-defeating—I had almost written counter-productive—so damage and death that are inflicted unselectively alienate People. Bullets and bombs, and bayonets if they are carried, must be aimed precisely, each separate one of them, to supporting the selected aim; indiscriminate use of force or force that does not discriminate its target, even if it kills an enemy or two, will alienate People and therefore must be accounted a debit in the long term balance sheet. Force must be considered in its relationship to People, not to ground or areas and the long term effects of using force must be weighted against the short term.

Much has been written and much more will be written about control in CRW. General Darling's evocative English springs to mind; 'bludgeon tactics' and 'controlled robustness'. He deprecates the one and praises the other but he misses the point that, at every level, force and its commanders must be the humble and obedient servant of its master, never its master's equal.

Very many writers have expounded the idea that a trilogy should control operations at the highest as at the lowest level. That's wrong. I am convinced that direction of all effort must be centralized in one person at each level. The top man, whoever he is, must pass his overriding instructions directly to the next echelon of his subordinates all the way to the lowest control. At every link in the chain this person

must direct operations in their widest sense. The chain of executive control must be a mirror of the administration of the aided territory and the military command structure must match it.

In these controllers and in no one else can lie the seed of victory or success. Others are concerned with their part in problem solving—they see the trees, not the wood—and their advice on what is possible—and impossible—within their own spheres must be part of the background of the top man's decisions. But risks to win or lose, policies and priorities, selection of targets and the allocation of resources are in the province of the controller only.

Who should these splendid men or women be? Soldiers, sailors or airmen? No—they have too narrow an understanding and training. Policemen of any kind? Again no—they are far too concerned with the trivia of law enforcement and anyway look inwards at their own people. Businessmen, politicians, statesmen, administrators? All are fully committed to their mundane tasks or are excluded by partisan interests or security doubts—anyway their normal activity is an essential part of the life of the community. Whoever these super men are they must be dynamic humanists and draw their inspiration from the leadership of their top man. They must be trained to their task and, most important, they must give their undivided attention to it all the time. They will be a professional corps of peacekeepers with prestige and standing above sectarian interests. Their top man is all important; he must have the confidence of at least two governments and an internationally accepted image as well as the unswerving loyal support of a multitude of ambitious men. He may be called a Director of Operations but if he is he must be Director not only in name. He must have a free hand to hire and fire his subordinates—and not misuse it—and he must have some influence in appointing and dismissing nationals of the territory in which he is working. He must have the ear of the cabinet and sit as chairman of the war council but not be tied down by its routine. He must have control over the police forces, the security agencies and the armed services; have influence with the financial authority and some understanding in the Ministry of Internal Affairs and the support of the legal eagles. Finally he must be able to answer John F. Kennedy's bitter question 'Is prestige the shadow of power or is it the substance?' Lao Tse Tung wrote many centuries ago of the sort of man we need—'Of a good leader who talks little when his work is done, his aim fulfilled, they will say "We did this ourselves"'.
a good leader who talks little when his work is done, his aim fulfilled,

These high calibre peacekeepers need to be recruited and trained now before further communist inspired revolutions irrevocably destroy

peace in Asia or in Africa. A training academy is necessary for them; there, all the elements of an intervention force and its backers can delineate their contribution and capacity; there, the peacekeepers can get to know the commanders and soldiers, the administrators and civil servants through whom they will work; there, combat ideas and psychological patterns such as are outlined in this article—or others—can be thrashed out and there the peacekeepers can disseminate doctrine and action. There, under the watchful eye of the head of government, the sacred cows of established and sectarian interests can be sacrificed to a twentieth century—and twenty-first too—combat competence in CRW. No present or projected service or other establishment can meet the need of training peacekeepers.

At this academy the dignity of People—each individual, separate person—and their instinctual needs can be understood; there, the enigma of democracy, government of the People by and for the People, can be studied so that it becomes a shining star to defeat the drab, outmoded, failing creed of communism. The Free World needs this idea as a positive ethic.

From my reading of the Australian Army Journal I have gained a deeper insight into the complexities of CRW and the impression that the Australian Army is highly professional and essentially open-minded. I wish I knew more of your army and your people. Yours is an expanding nation with expanding interests and horizons.

Your national investment in individuality and free enterprise and your national commitment against communism—the latter arising from the former—are heartwarming to see and a priceless asset in a turbulent world. You will carry the torch of freedom and, by example, show the way being ready to help those less fortunate than yourselves.

You will fill the vacuum that our and other withdrawal has created in this time of change and it is from your community that the peacekeepers are most likely to emerge. □

Some thoughts on the Airmobile Concept

Major J. F. McMahon
Royal Australian Infantry

Airmobility extends the flexibility and versatility of ground combat to a degree limited only by the understanding, imagination and ingenuity of the commander and his staff.

— 1st Aviation Bde Operations Manual, US Army South Vietnam.

Introduction

REDEPLOY a two battalion task force with its supporting arms and services including its superior tactical headquarters twenty miles or more. Be ready for, or in action with a balanced force in the new location in a little over twenty-four hours from the time the warning order is received. This for some Australians is Vietnam 1968.

The equivalent or better has been done in past wars and exercises by conventional means, given reasonable terrain and a favourable or manageable enemy situation. In conditions of unkindly terrain, poor or non-existent roads, which are probably being interdicted by 'Charlie' anyway, the airmobile operation has become the 'conventional' means for the Free World Forces including the 1st Australian Task Force (1 ATF) in Vietnam.

The airmobile concept is the norm in Vietnam today: with Australia's comparatively limited manpower it must be the AMF's concept for tomorrow in tactical thinking, equipping and planning. This concept applied to the AMF will lift our capacity to wage war by adding that extra span of movement and flexibility lacking in other concepts of

Major McMahon was commissioned in the ARA in July 1955. He was posted to 16 NS Trg Bn, then in January 1957 to 3 RAR as Asst Adjt. He served with that unit in Malaya as a Coy 2IC from September 1957 to October 1958. From November 1958 he was Adjt, 12 Inf Bn until being posted to 1 SAS Coy, RAR as a platoon commander from November 1960 to May 1962. After completion of a parachute jump instructors course, he was attached to OMA, Washington from January to July 1963 to learn free fall parachuting techniques with the US Army Parachute Team. He was the Senior Instructor, PTF from August 1963 to May 1966. In July 1966 he was posted as GSO2 69 GL Sect serving with No 5 Sqn RAAF (Iroquois). He went to Vietnam as GSO2 (Air), 1 ATF and remained in that posting until his return to Australia in May 1968.

tactical mobility. A third dimension must be added to the Army's ability to operate as an independent national force. But this is the world of policy; let us lower our sights to the world of nuts and bolts because it is here that experiences can be shared and, where worthwhile, they can be applied as lessons learnt. Then, as the tools become available we have the necessary technical know-how to apply them in the best interests of the service.



A US Army Assault Helicopter Company airborne with Australian troops over Phuoc Tuy Province.

This article is primarily concerned with air staff planning required to lodge an infantry battalion or sub-unit by utility (Iroquois) helicopter into a potentially hostile landing zone (LZ). The operational examples are drawn from Vietnam. Because of space the article will not cover the lodgement of supporting arms, such as the ever essential artillery support by medium (Chinook) helicopters. Neither can the almost immediate logistic build up by everything from the Iroquois to the less plentiful Skycrane be covered. The reader should keep this article in the context of a larger picture which makes up the airmobile concept. For example air planning tables prepared by HQ 1 ATF combine the infantry assault, supporting arms build up and logistic phases in the one table—there are no sharp divisions. The movement plan is blended with the artillery and diversified forms of aerial fire support as well as

logistic planning to mount the operation; the whole being brought together under the unified command of the senior ground commander. This background must be appreciated in looking at one facet of the *airmobile concept*.

In addition this article will be further limited by avoiding, where possible, duplication of material published in the current Training Information Bulletin on airmobile operations.¹

Despite popular views to the contrary of operations in Vietnam, one problem must always be borne in mind. Shortage of air support can be a fact of life. At times there is not enough air available to satisfy the user, or the many potential users, bidding for the same limited assets. Every possible economy must be practised to ensure that the available air effort is used in the most efficient manner. It obviously follows that this availability and its limitations such as weather, hours of daylight, radius of action, endurance, payload etc. will vitally affect the commanders concept of operations and detailed planning.

Planning

The key to a successful airmobile operation is the full integration of the aviation support into the Ground Commander's plan. This is achieved by a liaison officer from the nominated supporting aviation unit (either US Army or RAAF) visiting the unit concerned—normally at least twenty-four hours prior to the commencement of the operation. Obviously the larger the operation the earlier liaison should be established. In this way joint planning is achieved. Waiting for the supported unit to complete its plan before attempting to graft on the aviation plan can contribute to a mutually unacceptable operation.

It must be remembered that the senior ground commander or, as he is titled, the 'Air Mission Task Force Commander' (AMTF Comd) is the overall commander. The aviator acts as a technical arms adviser in the same way as a CO works with his gunner. In fact, it is laid down that except in exceptional circumstances, the liaison officer will be the Air Mission Commander (AM Comd) for the forthcoming operation. In this way executive decisions can be made and orders finalized on the spot. From the joint service point of view this liaison visit fulfils the function of a reconnaissance group/orders group.

Dealing with reconnaissance, it is an SOP that during the liaison visit, the AMTF and AM commanders will together fly a visual reconnaissance (VR) of the proposed pick up zone (PZ) (if not in a

¹ Training Information Bulletin No 14, July 1967.

known base area or their present location), possible or proposed LZs and alternative LZs. This helps security by keeping VR to a minimum. Of equal importance it ensures that both commanders are looking at exactly the same piece of dirt together. A minor difference in map reading on separate VRs could literally prove fatal in the worst case.



Planning an airmobile troop re-deployment in the 'Long Green', Phuoc Tuy Province. The CO of 2 RAR, his operations officer and two officers of the US Army Aviation liaison team.

At times insufficient attention is given to the careful selection of alternative LZs. These should always be selected in the event that landing in the primary LZ is not practical. In reasonably open country, such as extensive rice paddy, the alternative LZ should not be nearer than 1000 metres to the primary LZ. This prevents a Viet Cong unit effectively covering both LZs. Examples can be quoted in Vietnam where initial assault waves came under heavy fire. The AMTF Comd ordered follow up waves into alternative LZs. In this way, with minimum losses of troops and aircraft, troops at the primary LZ were relieved and the objective gained.

Planned times between waves must be carefully considered. Presuming the proposed LZ has, on VR, been found to be 'clean' i.e., little potential dust hazard, it is considered the time separation between the first and second assault waves should be *one minute, and for subsequent*

waves thirty seconds. If the first wave should strike opposition, this allows the AMTF Comd sufficient time to hold back the second and successive waves while he quickly re-assesses the situation. He has only three options: re-inforce, extract, or use an alternate LZ for successive waves.

An example of the effect of a 'dirty' LZ on timings occurred during 'Operation Junction City'. In this case large areas had been pre-burnt with napalm prior to the operation. At one particular LZ during the initial assault the command and control helicopter had to 'talk-in' earlier waves of 'slicks'² until the rotor wash had swept the LZ clean. In the dry season the minimum time separation between waves may well be one minute. Here the advice of the AM Comd is essential and the AMTF Comd may be unable to achieve the rapid build up rate he desires.

Flying heights are of interest to the artillery in planning the fire support programme in relation to the fly in. The majority of hits on Iroquois are taken between 0 and 150 feet AGL in the combat assault and from 50 to 1000 feet in transit. Wherever possible, slicks now fly at a safe minimum height of 1500 feet AGL (tracer burn out height). This leads to the pre-planning requirement to consider action to be taken in the event of an aircraft being downed by either mechanical failure or enemy fire. This eventuality must be considered in the planning phase and not left until the emergency occurs.

Responsibilities

Much has been published on responsibilities between ground commanders and air commanders in the past, and now in current publications. However it should be clearly understood that the following applies in Vietnam in regard to US Army aviation units:

- The AM Comd must give final technical approval for the selection of the PZs and LZs consistent with the AMTF Comd's plan (again the importance of the two flying a joint VR during the liaison/planning phase).
- If the AMTF Comd over-rides the technical advice of the AM Comd at any time the AM Comd may, should time allow, appeal the decision to his superior headquarters. If times does not allow he is to carry out the orders to which he objects and the AMTF Comd will then be held responsible for that action.
- The AM Comd is to exercise command and control over all army aviation support during the airmobile operation.

² Troop carrying helicopters.

- The AM Comd is charged with executing the operational orders of the AMTF Comd and recommending deviations from the pre-planned sequence of events when such is required by the tactical situation.

It is *not* the responsibility of the AM Comd 'to cancel an assault, or change an LZ if safety of aircraft is involved because of enemy action or adverse flying weather'.³ In practice however, with the AMTF Comd and AM Comd both flying together in their mobile command post—the command and control (C and C) helicopter—joint mutual decisions can be rapidly made by the commanders viewing the progress of the operation from the one vantage point above the battle. For one battle there must be only one commander.



In a C and C helicopter above 'War Zone C'. Sitting with his back to the camera is a battalion commander from 1st Inf Div (US). Holding a handset is his operations officer.

Use of C and C Aircraft

Experienced US army units have developed, to a marked degree, the concept of a ground commander fighting his unit from an airborne command post. It would appear that once the art has been acquired it has many advantages in the type of warfare being waged in Vietnam.

³ *Training Information Bulletin No 14*

But it is stressed that American commanders do not substitute exclusively the airborne for the ground CP. They use the C and C aircraft selectively to maximum advantage.

During a road opening operation two battalions were separately inserted at critical points along the road. These operations were combined with an armoured thrust along the axis of the road. While each battalion was being inserted and until the unit was firmly secure on the ground the battalion CP remained airborne. By use of coloured smoke in the close country the battalion commanders knew at all times the progress of each company as it moved into its pre-planned area and thus visually controlled and co-ordinated the whole securing operation. Similarly, as sub-units fanned out, blocking artillery fire was shifted by the artillery adviser with the CO. During these critical periods, while each battalion in turn was securing its position, the Brigade Commander was also airborne in a separate C and C aircraft. In this way, if as a result of enemy action the plan had to be changed, the Brigade Commander did not have to rely on signal reports, as he was watching the developing situation without losing touch with his own ground command post and without directly interfering with the CO commanding his battalion.

It is pointed out that, for this particular operation, smoke from the point platoon was the most suitable ground/air identification. Depending on the particular circumstances other forms of positive identification can be used.

It is now considered a normal practice for the next senior American commander to fly in a separate C and C aircraft and observe the air-mobile operations of subordinate units. The practice has much to commend it.

To be effective, the C and C aircraft should not be tied to any formation flight plan. It flies at a safe height above the slick traffic.

Layout and Crewing of a C and C Aircraft (Battalion Operation)

A UH-1D or H is used. In the three instances the author observed American battalion commanders using C and C aircraft the composition of the airborne CP varied. The diagram represents one CO's ideas for a particular operation.

Note 1 AMTF Comd (or other staff officers) can speak through the aircraft's FM radio to any required ground net. Normally this radio is tuned to the battalion command net. The AMTF Comd is able to speak on intercom to the AM Comd. The AM Comd can monitor all outward transmissions of the AMTF Comd.

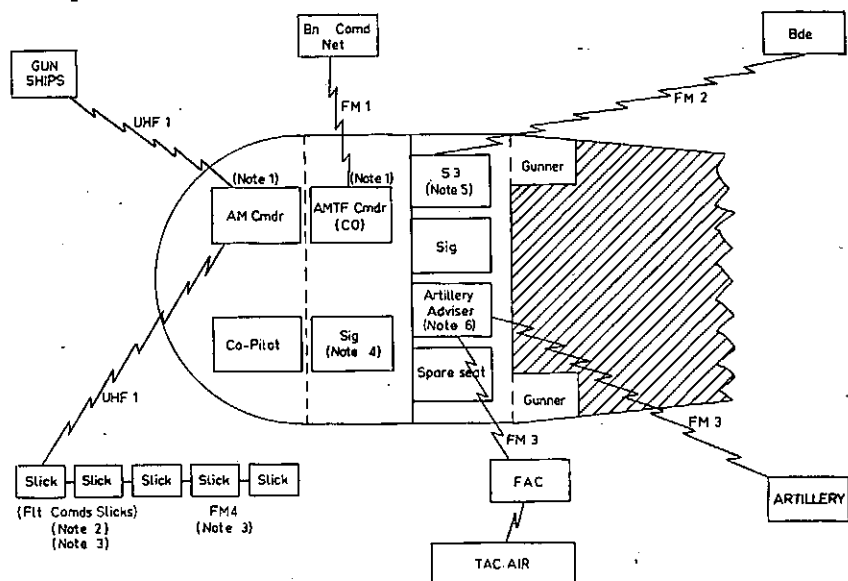
Note 2 AM Comd controls slicks and gunships through flight detachment commanders on a separate UHF net.

Note 3 Flt Comd controls individual aircraft through a separate FM net.

Note 4 PRC 25 on battalion net. Back up set for AMTF Comd or his S3 (Operations Officer). On deplaning this can become the CO's rover set.

Note 5 The S3 can use the aircraft wireless to monitor the battalion net and a PRC-25 carried by a signaller to communicate on the brigade net.

Note 6 PRC-25 artillery net. Normally an FAC is also circling in the area. The FAC listens out on this net. Therefore through his artillery adviser, the AMTF Comd controls all supporting fire (arty, tac air) except the gunships. Through the aircraft's intercom the artillery adviser can speak to the AMTF Comd and listen on battalion net.



General Note 1 Using the above layout there is no requirement for a special radio console to be fitted in the cargo compartment of the aircraft. However there is a requirement for additional headset leads to be available in the cargo compartment.

General Note 2 Maximum of six (6) personnel are carried in the airborne CP because of weight limitations.

General Note 3 Aircraft makes orbits to the right. Note position of commanders.

General Note 4 Despite Note 1 many aviation commanders consider that the AMTF Comd should not operate on the aircraft FM radio. The AMTF Comd should provide his own PRC-25 if the aircraft is not equipped with a radio console.

Employment of Gunship Fire Teams

A gunship or armed helicopter is a helicopter equipped with an attached weapons system which is fired by the aircraft commander or co-pilot. This is opposed to the slick which only carries defensive armament in the form of side door machine guns. The tactical unit is a minimum of two gunships forming a Light Fire Team (LFT). A Heavy Fire Team (HFT) is three gunships. Normally in a large operation, as an LFT expends its ammunition or fuel, it has to be replaced on station by another LFT. This can present quite a problem in a hot action as an LFT can expend its full quota of ammunition in under five minutes. For a prolonged operation a request for an HFT will ensure that, with the allowance made for the staggered re-arming or re-fuelling of individual gunships, an LFT is always available to support the operation.

The technical advice in regard to the employment of gunships integral to the assault helicopter company allocated to support a unit can be given when the AM Comd conducts his liaison visit. At this time the gunner can co-ordinate his fire planning in regard to the LFT/HFT.

In the combat assault some tasks carried out by gunships are:

Escort

- Escort of slicks from the PZ to LZ and return. If the aviation assets are available this should be a separate task for a separate LFT, to that detailed for pre-strikes. Having this escort LFT in addition to a pre-strike LFT provides a reserve to the AM Comd should the pre-strike LFT require support or replacement while re-arming.

Pre-strikes

- A conventional sequence is at H hour-2 (H hour being when the first slick lands on the LZ) when the LFT makes a firing pass (armed reconnaissance) over the LZ. The aim is to check visually and by fire whether the area of the LZ is occupied by the Viet Cong. This also fills in the gap as the artillery lifts from its preparatory fire to blocking fire role. The LFT then makes a second pass at H hour-1, under direction of the C and C aircraft, to mark the position where the first slick will

land. Marking is done by the hand-dropping of a coloured smoke canister. With the Huey Cobra gunship other marking methods, if required, must be used. Finally at H hour on its third pass over the LZ the LFT escorts in the slicks. If a separate escort is being employed, this latter LFT remains on call at height and picks the slicks when they leave the LZ.

Conclusion

The roles, tasks, capabilities and limitations of the utility helicopter in the combat assault deserve careful study to assist in building up Australian tactical doctrine for airmobile operations.

Training and experience is limited by the number and type of helicopters that are nationally available. However without having the assets valuable introductory training can still be carried out in the form of cloth model exercises, TEWTS etc. This will ensure that when limited helicopter support is available to the army on joint exercises it will be used to the maximum advantage.

As a corollary it is essential that RAAF helicopter pilots must be closely attuned to army thinking and have a sympathetic understanding of ground tactical problems. It is often stated by US Army personnel that their airmobile operations run smoothly because their aviators are soldiers first and pilots second. It would appear that continued and increasing emphasis must be placed on joint service training in Australia. This must apply in particular to the training of junior officers of both services who will be charged with making the airmobile concept a working reality. □

MONTHLY AWARDS

The board of Review has awarded prizes for the best articles published in the July and August 1968 issues of the Army Journal to:

July: Mr A. R. G. Morrison ('Cyclopean Viewpoint') \$10.

August: Lieutenant-Colonel G. J. Leary ('So you want to be a Linguist') \$10.

Notes for Young Conferees

By 'T2'

THE Conference is a military institution in which all officers at one time or another find themselves involved. Yet, there appears to be no instruction available in training manuals on the art of practice of conferring. This article aims to fill this obvious gap in the education of officers.

The Principles of Conferring

The object of having a Conference is to avoid making a decision. Just as in the days of ancient armies a Council of War was only called when the General did not wish to attack the enemy, so, today, a conference is called only when a Commander or his staff do not wish to make a decision. If they wished to decide something, they would simply decide it, or if they wished to act, they would act. If they required someone else's views beforehand, it is simple to pick up a telephone and ask. The whole purpose in having a conference is to delay, and if possible, avoid such decision or action. A further aim, of course, is to provide an excuse for inactivity, and to spread any censure over as many individuals and branches as possible.

The more people there are present, the easier it is to come to no decision, but conversely the longer it takes to achieve this. The number of people invited to attend needs careful consideration. If too few are asked, it will be very difficult to avoid deciding something. If too many attend, the whole day, or even days, may be spent in the process, and it might be considered easier in the long run to abandon the aim, and actually make a decision.

A conference should be attended by the most senior and distinguished officers available, regardless of whether they know anything about the subject under discussion. The important thing is that they should be seen to be present, thus advertising the importance their branch or department attaches to the decision which is not going to be taken. (In the unlikely event of any real knowledge being called for, it is permissible for a junior staff officer to be taken along as an adviser.

Usually he will be so afraid of contradicting his own chief that he will remain mute throughout the proceedings.)

No conference is complete without tea or coffee. This is a ritual which must be observed without fail. Either the meeting must be summoned at least half an hour before it is due to begin, in order that the participants may consume an adequate quantity first, or proceedings must be adjourned just after they have begun, while some minion clatters around with a tray and cups. Biscuits are optional.

The Duties of Conferees

Bright Young Fanatics. It is as a BYF that an officer often makes his first appearance at a conference. Thinking his brilliance and enthusiasm unique, he is surprised to find that BYFs tend to come in pairs. One is normally the originator of the project under discussion, and is fervently convinced of the correct solution. The other is provided by the conference organisers to balance the first, and to ensure that the



'There is often one member who is, in fact, at the wrong conference. . .'

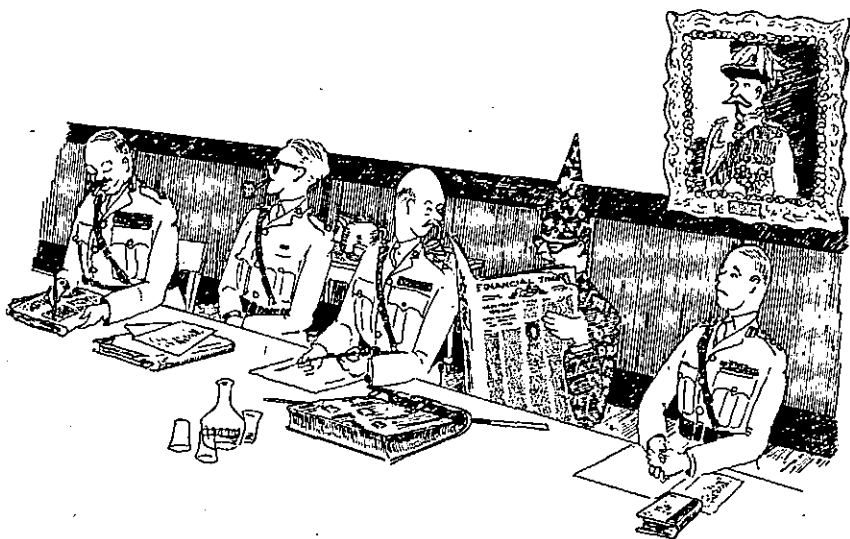
meeting cannot be stamped into agreement. Both fanatics talk at such great length and interrupt each other and everyone else so persistently that all the other attenders become *thoroughly irritated with both*. It then becomes relatively easy for all to agree to leave the problem unresolved, or, at the least, to postpone any decision until another conference has been arranged.

Technical Expert. In this new scientifically-conscious Army, no conference is allowed without the presence of a technical expert, either

a technical staff officer or a civilian scientist. If the conference seems in danger of coming to a decision, he is at once invited to speak. He promptly delivers a long incomprehensible lecture, illustrated by complicated graphs, slides, wall charts etc. All other conferees lapse into coma, and all risk of a decision at once disappears.

Wrong Conferee. There is often one member who is, in fact, at the wrong conference, but, as his interventions are no more irrelevant than many others, neither he nor the other members realize this. It is normally possible for him to leave at the end convinced that he attended the right meeting.

Branch or Department Representatives. Normally these know nothing about the subject under discussion, nor have any interest in it. They are present solely to show that their branch or department is so important that it must be represented. They intervene in discussion whenever they see a chance to plug the party line of their branch. Research suggests that many branches keep one officer permanently on duty as a Conference Representative, with the responsibility of selling his branch's latest policy to as wide an audience as possible.



Financial Wizard. One of these appears at every conference. No one knows where they come from, and certainly no one ever invites them. He sits silent throughout proceedings apparently reading the 'Financial Times'. He only speaks if one of the fanatics succeeds in convincing the other that he is right and it looks as if a decision is

becoming inevitable. The Financial Wizard then points out in two crisp sentences that:

- (a) There is no money allocated under current estimates for this project.
- (b) Before the project could even merit serious consideration, comparable saving must be achieved elsewhere.

He then invites all present to suggest where this saving should be made, and returns to the 'Financial Times'. This ensures that the meeting breaks up not less than one hour later in an acrimonious atmosphere of extreme antagonism; no decision, of course, being agreed or even likely.

The Chairman. Normally the most distinguished officer present, he is usually the representative of the branch which does not want to make a decision. He, therefore, steers the conversation into lengthy and irrelevant discord, using the Technical Expert, Branch Representatives and the Financial Wizard to prevent the Bright Young Fanatics from agreeing with each other. If he can get the meeting to split into three separate quite independent arguments, he can consider himself highly successful.

The Secretary. This is the usual role given to a new conferee. His main job is to write the minutes. To this end he should be seen making copious notes throughout the meeting. The experienced Secretary, however, tears these up as soon as he gets back to his office. He then writes down *not* what the distinguished conferees said, *nor even* what they probably thought they said. NO. A good Secretary works out what they would have liked to say if they could have thought of it at the time. This ensures that:

- (a) No decision can possibly be recorded.
- (b) Another conference is certain to be necessary, thereby giving further opportunities to the Secretary.
- (c) The Secretary earns considerable approval from a large number of senior officers. By this means an experienced Conference Secretary can, in fact, count upon rapid promotion and glowing confidential reports.

AMF Gold Medal and ASCO Prize Essay Competition



THE conditions governing the AMF Gold Medal and ASCO Prize Essay have been revised and now provide for the division of the competition into two sections: a Senior section for officers, and a Junior section for other ranks. Also competitors may select any subject of a military nature as the theme of their essay.

The revised conditions are set out below.

Eligibility to Compete

Officers and other ranks of the active and reserve lists of the Australian Military Forces are eligible to enter the competition.

Subject

Competitors may select their own subject of a military nature.

Sections

There will be two sections:

- (a) Senior—for officers;
- (b) Junior—for other ranks.

Prizes

The AMF Gold Medal and \$100 will be awarded to the better of the winning essays from each section provided it is of a sufficiently high standard.

\$50 will be awarded for the best essay in each section provided it is of a sufficiently high standard. In the case of two, or more essays of equal merit from the same section, this prize money may be shared.

Submission of Essays

- (a) Essays are to be typewritten and submitted in quadruplicate. Units are to provide typing assistance where so requested.
- (b) Length of essays is to be between 3,000 and 5,000 words.
- (c) Authorship is to be strictly anonymous. Each competitor is to adopt a motto and enclose with his essay a sealed envelope with the motto and section identification typewritten on the outside and his name and unit address inside.
- (d) The title and page number of any published or unpublished work to which reference is made in the essay must be quoted.
- (e) Essays are to be addressed to the Secretary of the Military Board, Army Headquarters, Canberra, ACT. The envelope is to be marked 'AMF Gold Medal and ASCO Prize Essay'.

Judging

Essays will be judged by at least three referees appointed by the Chief of the General Staff.

The decision of the referees will be final. They are empowered to recommend that the AMF Gold Medal Essay and the ASCO Prize of \$100 be not awarded if, in their opinion, no essay submitted is of a sufficiently high standard.

A prize of less than \$50 may be awarded to the winning essay in either section if, in the opinion of the referees, the standard of the essay does not warrant the award of the full amount.

Promulgation of Results

The results of the competition will be promulgated in AAOs and in a notice to AROs for display on unit notice boards.

Closing Date for 1968 Competition.

The closing date for the 1968 competition is 31 March 1969 and results will be announced by 30 June 1969.

The Vegetation of South-East Asia

H. S. Hodges and G. R. Webb,
Royal Military College, Duntroon

The Malayan jungle is rough and mountainous, rising to more than 7,000 feet. It is so dense in places (particularly near the fringes) that a patrol may take four hours to cover a mile, and it can pass within 5 yards of a man or within 50 yards of a 100-man camp without knowing it.

—R. Clutterbuck, *The Long Long War* (1967)

Mangrove forests are widely distributed on sedimenting shores throughout South-East Asia. The mangrove trees are of some thirty species, all with structural adaptations enabling them to root in unstable muds and to tolerate daily inundation of their root system by saline tidal water.

—E Dobby, *South-East Asia* (1958)

Introduction

THE natural vegetation of South-East Asia, which forms part of the Indo-Malayan plant zone, is probably the richest in the world 'surpassing even the forests of the Amazon basin and the Congo.'¹ For example approximately 15,000 flowering plants have been identified in the Philippines,² and at least 11,000 species in Borneo³. Similarly, between 20,000 and 30,000 species of trees, shrubs and grasses have been identified in Indonesia.⁴

Although the vegetation of South-East Asia is not yet completely known,⁵ it is thought that the region contains at least 35,000 species of flowering plants. By way of contrast 13,000 species have been identified in the whole of tropical West Africa and only 2,000 species in the British Isles.

Types of Vegetation

Originally most of South-East Asia was covered with tropical forest. Although large tracts of forest still remain, particularly in Malaysia,⁶ much of it has been affected at one time or another by the

The third of a series of articles on the military geography of South-East Asia written for the Army Journal by Professor Hodges, Head of the Economic Department of the Royal Military College, and Mr Webb, Senior Lecturer in that department.

activity of man with the result that the proportion of undisturbed forest would be relatively small.

Climate and altitude are the main factors determining the type of natural vegetation found throughout South-East Asia. However, the soil and underlying rocks do exert an important influence in some areas. For example both the distribution and luxuriance of dry teak forest in Burma are very much influenced by soil and the underlying rocks; on good loamy soils it gives way to wet teak forests with a mean annual rainfall as low as fifty inches, whereas on poor sandy soils the more xerophytic (drought-resisting) community intrudes into much wetter areas.⁷

Three main types of natural vegetation can be distinguished; namely coastal, lowland and mountain vegetation.

Coastal Vegetation

Coastal vegetation comprises beach woodlands and mangrove forests. Beach woodland is found along sandy, well drained shores and consists mainly of casuarinas and coconut palms. It seldom extends more than a few hundred feet inland.

In areas where the land surface is being extended seawards by the deposition of silt, the shoreline is fringed with mangrove forest which thrives in half consolidated mud. Such conditions are found only where inshore waters are sheltered enough for mudbanks to form. In other words mangroves attain their most impressive development on sheltered coasts to which rivers bring ample supplies of alluvium.⁸ Thus mangroves are found along all the more sheltered stretches of the gently shelving shorelines of the Sunda Platform as well as near the mouths of rivers. In addition, mangroves are found on the Irrawaddy delta of Burma, the Mekong delta of South Vietnam and in various parts of the Philippines, e.g., Palawan and Mindanao.

The importance of a sheltered coast is illustrated very clearly in

¹ M. E. Poore, *Vegetation and Flora*. Ch. 2 in *Malaysia* edited by Wang Gungwu. Melbourne, 1964, p. 44.

² A. Ravenholt, *The Philippines*, New Jersey, 1962, p. 9.

³ E. H. Dobby, *South-East Asia*, London 1958, p. 61.

⁴ C. Robequain, *Malaya, Indonesia, Borneo and the Philippines*, London, 1955, p. 42.

⁵ The Flora Malesiana Foundation has been established to produce a definitive flora of the Malayan peninsula, Borneo, Indonesia, the Philippines and New Guinea, and already 3 volumes have been produced.

⁶ Forest still covers more than 70 per cent of Malaya, 71 per cent of Brunei, 73 per cent of Sarawak and 80 per cent of Sabah. Poore, p. 46.

⁷ S. R. Eyre, *Vegetation and Soils*, London 1964, p. 222.

⁸ In some areas of Indonesia, Malaya and Borneo the amount of alluvium being deposited is so great that the land is being extended seawards at rates of up to 30 feet or more per year. Wang Gungwu, *Malaysia*, p. 49.

the cases of Malaya and western Indonesia. Figure 1 shows that mangroves are found along the west coast of Malaya which is well protected from the winter and summer monsoon winds. However, on the east coast of Malaya gales and high seas of the winter monsoon prevent the formation of mudbanks and there are no mangroves except in sheltered inlets. Mangroves around Sumatra are almost confined to the shallow, sedimenting shores on the eastern side which is also the leeward side for much of the year.

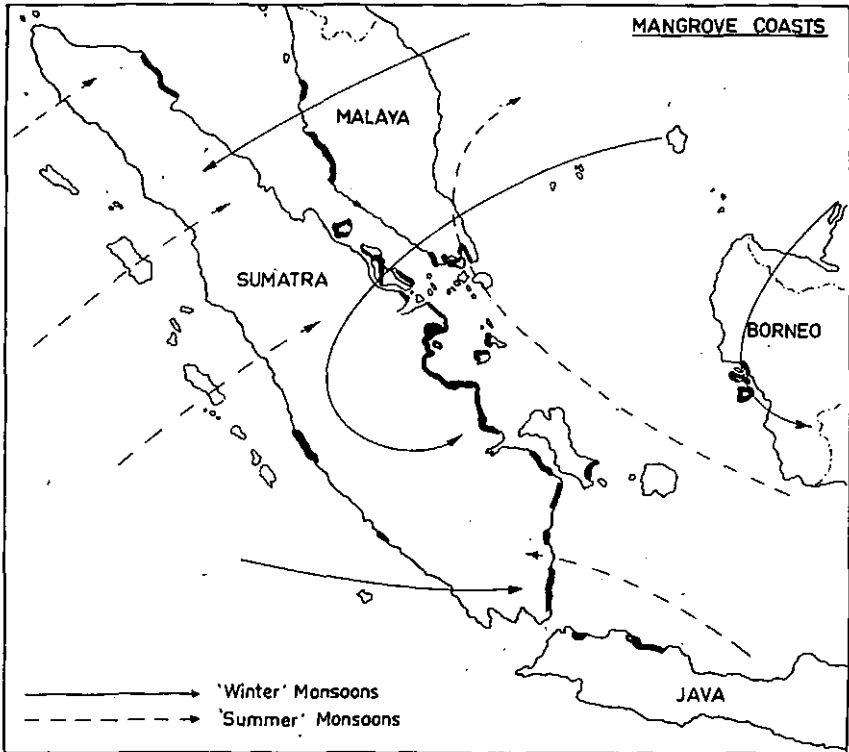


Figure 1

The mangrove forest is actually a stage in the natural reclamation of the sea. The mangroves act as anchors for sediments and so help to build out the shoreline. On the landward side of the forest, the older mangroves trap more mud and ground levels are raised above the tide. When this happens the mangrove is replaced in turn by freshwater swamp forest and ordinary dry land forest. The mangrove forest varies in width from about 100 yards to several miles.

Lowland Vegetation

Corresponding to the two major climate divisions of South-East Asia, lowland vegetation can be divided into two main types, namely

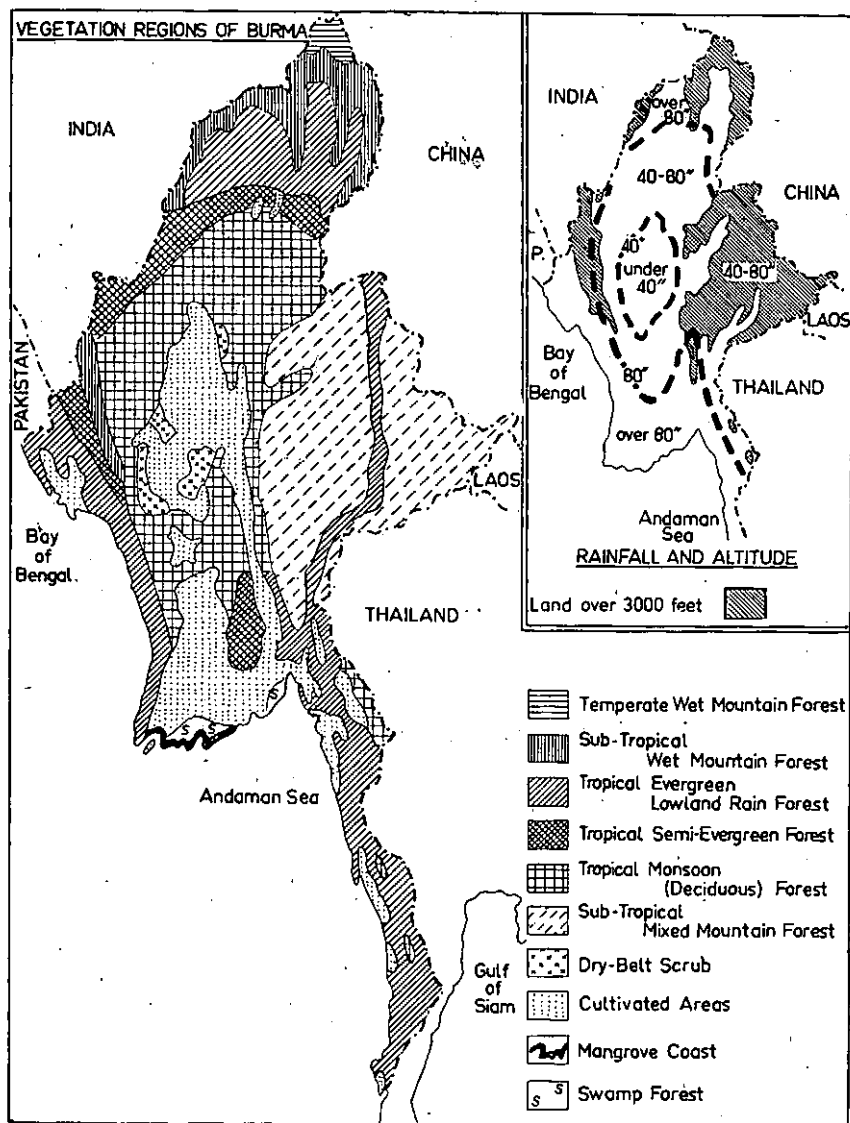


Figure 2

tropical evergreen rain forest and tropical monsoon forest. The distribution of the two types of forest is shown by Figure 2, which is restricted to Burma in order to show the necessary detail.

It will be observed that tropical evergreen rain forest is found in the coastal lowlands (omitting the cultivated areas where it remains only in patches), in the Sittang and Salween valleys, and in the northern part of the interior lowlands. Similar rain forest is also widespread on the plains and lower slopes of the rest of South-East Asia, notably in Malaysia, Sumatra and Borneo (Kalimantan). Generally speaking it is confined to areas up to about 3,000 feet in height which receive over 80 inches of rain a year and which have no dry season. However, it is not the characteristic vegetation throughout the equatorial zone. In the southern Celebes and the lesser Sunda Islands (to the East of Java) it is replaced by mixed deciduous forest owing to the influence of the relatively dry winds of the easterly monsoon which originate over northern Australia. Similar replacement is evident in the rain-shadows of Burma, Thailand and Indo-China.

Analysis of the structure of tropical evergreen rain forest reveals that the vegetation is arranged in three layers. These are usually termed the A, B and C-layers. The A-layer trees (or 'emergents') reach a height of about 160 to 190 feet and project as rather isolated specimens above a more or less continuous roof formed by the B-layer of trees, approximately 60 feet in height. Beneath this canopy are the younger C-layer trees (about 30 feet in height) and shrubs and undergrowth. The undergrowth itself is fairly thin, except at the edges of roads, paths or rivers where the extra light induces dense ground vegetation.

Most of the A-layer trees belong to the Dipterocarpaceae family. The trunks of these giant broad-leafed evergreens are usually unbranched for over 100 feet and at the base are strengthened by large buttresses. Throughout this type of forest many creepers or lianes are to be found. Often several hundred feet long, they climb from the ground up the trees to reach the sunlit crowns. They use the trees as support only and spread in great festoons from tree to tree.

The tropical evergreen rain forest is enormously rich in species, but has few large stands of any one species. For example as many as 210 species of trees have been found on only 4 acres in Malacca, and 250 species over two feet in girth on 15 acres in Sarawak.⁹ In Burma 300 to 350 species of trees have been found in an area of approxi-

⁹ Poore, p. 47.

mately 8 square miles.¹⁰ With such a remarkable admixture of species, commercial forestry operations are severely restricted.

The second main type of lowland vegetation is tropical monsoon forest or deciduous monsoon forest. This is the natural vegetation of those areas of South-East Asia that have a dry season and usually less than 80 inches of rain a year. South of the equator it occurs in eastern Java and the islands eastward to Timor. North of the equator it is found in parts of Burma, Thailand, Cambodia, Laos, and Vietnam.

During the wet season this forest is not unlike tropical evergreen rain forest, although the trees are not so prominent, the canopy is less complete, there is more light at ground level and there is more undergrowth. However, in the dry season marked differences can be observed. The leaves fall from many of the trees and shrub species,¹¹ and much of the undergrowth withers.

As in the case of tropical evergreen rain forest, a wide variety of species are to be found in tropical monsoon forest. However, large tracts of one species do occur, particularly teak. Consequently a good deal of timber can be exploited economically. For instance in the Philippines commercial stands of timber cover 23 million acres whereas non commercial stands cover only 14 million acres.¹²

Mountain Vegetation

In the mountainous parts of South-East Asia the forest cover undergoes several changes with increasing altitude. Above 2,000 to 3,000 feet the Dipterocarps tend to be replaced by oaks, maples and magnolias. Between 5,000 and 9,000 feet the forest in the equatorial zone undergoes a further change with moss forest becoming prominent. 'Here . . . the forest is often bathed in dripping cloud which deposits its water as it is blown through the branches of the ridgetop trees. Under these conditions the incessant drip of water within the forest makes it appear as though it were raining even though no rain is falling outside. The forest is low; the branches of the trees spreading and grotesque, matted thickly with liverworts, mosses, filmy ferns and epiphytic orchids. The ground is covered with thick peat formed by half-rotted wood and leaves.'¹³ Away from the equatorial zone, moss forest is less common and in many drier areas is replaced by pine forest.

¹⁰ P. W. Richards, *The Tropical Rain Forest*, Cambridge, 1964, p. 329.

¹¹ Tropical Monsoon forest can be subdivided into semi-evergreen forest and deciduous forest. In both types the B-layer trees are often evergreen. See Eyre, *Vegetation and Soils*, pp. 219-222.

¹² Ravenholt, p. 8.

¹³ Poore, p. 52.

The picture given above of lowland and mountain vegetation is naturally a broad one as additional zonal changes can be distinguished upon close examination of the natural vegetation of particular areas. For example the following table shows five altitudinal zones of vegetation in Indonesia.

TABLE 1—ALTITUDINAL ZONES OF VEGETATION IN INDONESIA.¹⁴

Altitude (feet)	Vegetation
0- 1,800	Evergreen tropical rain forest of the lowlands.
1,800- 3,000	Submontane evergreen tropical forest.
3,000- 7,200	Tropical montane rain forests, including mossy forests.
7,200- 12,000	Tropical subalpine forest.
12,000- 13,500	Tropical alpine scrub vegetation.

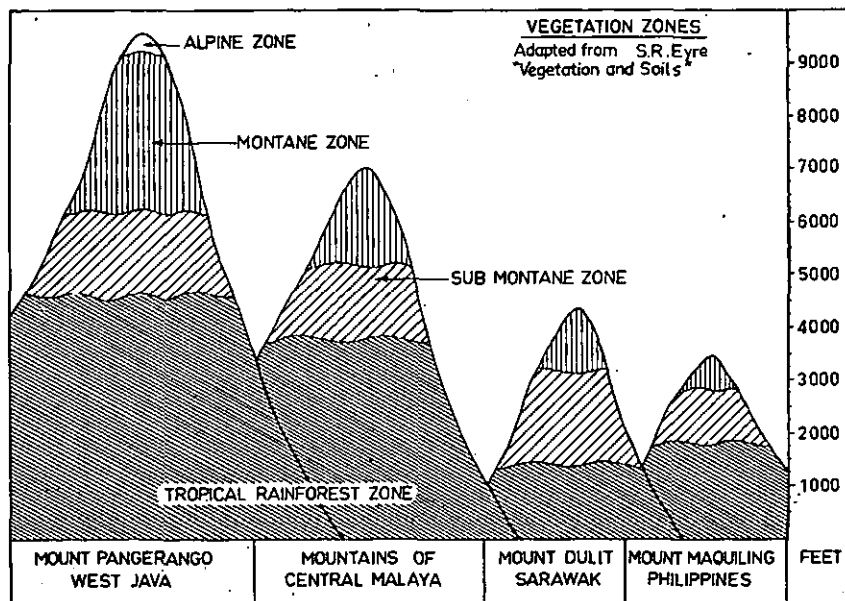


Figure 3

Furthermore it should be noted that the altitudinal limits of zones vary considerably in different areas. This can be seen very readily from Figure 3 which shows the vegetation zonation on four mountains in various parts of South-East Asia. It appears that small isolated mountains,

¹⁴ K. J. Pelzer, 'Physical and Human Resource Patterns', Ch 1 in *Indonesia* edited by R. T. McVey, Connecticut, 1963, p. 6.

especially those near the sea, and exposed to higher wind speeds and moister air masses, have lower vegetation zones than larger mountains which obstruct atmospheric flow to such an extent that they modify significantly their own climate.

Replacement of Forest by Savannah

The natural forests of South-East Asia have been subject to a good deal of human interference, particularly by hill tribes practising shifting cultivation. These are cultivators who clear small plots, raise crops until the soil becomes exhausted and then move on to clear a new area. Left to themselves the abandoned plots would eventually revert to primary forest, but they are often cleared again before this can happen. The result is that the forest is eventually replaced by savannah (i.e., open country with grass and bamboo). In Borneo, Sumatra and the Philippines there are hundreds of square miles of coarse grass where the annual rainfall is great enough for tropical forest. These areas were once forested but after repeated clearing, burning and cultivation, the soil has become too poor for trees to re-establish themselves. In actual fact it is probable that all areas of grassland in South-East Asia have been man-induced and that the region does not contain any areas of true natural grassland.

Influence of Vegetation on Military Operations

The difficulty of identifying targets and troops in lowland tropical forest hampers the use of artillery and aircraft. For example during the Emergency in Malaya offensive air strikes were reported to be almost wholly unsuccessful. 'Hundreds of tons of bombs were dropped on the jungle every month, particularly in 1951-52; they probably killed fewer than half a dozen guerrillas a year.'¹⁵ It is possible that more effective results are being achieved in the Vietnam War through the use of B-52 strategic bombers, which are capable of carrying 30 tons of bombs, but it is difficult to assess the actual damage in areas of tropical evergreen rain forest, except where the attack is so intense that severe defoliation by blast occurs. Similarly, in the course of one operation in Sarawak during the Indonesian Confrontation 'the immediate local tactical situation was so obscure that it was impossible to call down air strikes or even artillery fire.'¹⁶ In order to overcome this problem in South Vietnam the United States air force has been spraying forested areas to kill the vegetation and so expose the Viet Cong. Defoliation is also being carried out in the demilitarized zone between North and South Vietnam. It is

¹⁵ R. Clutterbuck *The Long Long War*, London 1967, p. 161.

¹⁶ P. E. Collins, 'The Front was Everywhere', *Journal of the Royal United Services Institute*, May 1967, p. 143.

reported that the defoliant increases visibility in forested areas by 80 per cent within two weeks during the dry season.¹⁷

In the true primary tropical forest it would be rare to find clearings large enough and level enough for the customary mid-latitude sitings of field artillery and the height of the surrounding trees may well require special high-angle procedures. Mortars prove more suited to these restricting conditions and are much more easily transported than the field guns in forest where the tree-diameter and tree-spacings may well prevent access by towing vehicles.

Nevertheless the fact remains that the task of destroying the enemy must rest very largely with the infantry (particularly small units). Unfortunately the task of fighting on the ground is by no means an easy one. In the first place attacking and destroying the enemy in lowland tropical forest is extremely difficult because of the concealment which it affords to those being pursued. There is considerable truth in the observation that 'in the jungle the defense has the advantage.' In areas of thick undergrowth (e.g., areas where the canopy has been destroyed so allowing dense secondary forest to spring up) a patrol could pass within several yards of the enemy and fail to make a sighting.

The same is true of waterways and secondary tracks through tropical forest: the easiest routes to follow provide an enemy with maximum route-side concealment for an ambush.

A further complication is that of poor light. In tropical evergreen rain forest the light intensity on the forest floor is usually less than 1 per cent of that just above the forest canopy and as a result identification beyond about 30 feet is difficult.

The extent to which tropical forest can neutralize superior numbers was clearly demonstrated in the Malayan Emergency. 'At the height of the operations about 5,000 terrorists were being hunted by some 230,000 regular soldiers and police. This is an overwhelming majority. One must remember, however, that over two-thirds of Malaya is covered by jungle and this jungle was the equalizer. In this... it took 1,000 man hours of patrolling to make one contact and 1,500 man hours for each terrorist killed.'¹⁸

Secondly, navigation through lowland tropical forest is difficult because the vegetation obscures landmarks. This is readily apparent from

¹⁷ See *Aviation Week and Space Technology*, 8 May, 1967, p. 82.

¹⁸ I. R. Way. 'The Influence of Mobility on Military Operations in South-East Asia', *Australian Army Journal* March 1966, pp. 25-26. Richard Clutterbuck points out that by 1956, 20 battalions were chasing about 2,000 guerrillas in Malaya, but were killing on the average only one guerrilla a day. *The Long Long War*, p. 165.

Colonel Chapman's vivid description of his experiences in Malaya during World War II. 'I was now to learn that navigation in thick mountainous jungle is the most difficult in the world—and I had always rather fancied myself at map reading and finding my way in all types of country from Greenland to Australia. In the first place it is quite impossible to find out where you are on the map: the limit of your visibility is fifty to a hundred yards and even if you are on some steep hill-side, where a small landslide has opened up a window through which you can catch a glimpse of another steep blue-clad hill-side, you are none the wiser, as, one hill is exactly like another. There are no landmarks—and if there were, you could not see them. Another difficulty is that there is no way of judging distance: it took us more than a week to realize we were taking eight hours to travel one mile on the map instead of the three or four miles we imagined . . . Perhaps the greatest impediment to navigation is that, having decided to move in a certain direction you are quite unable to do so owing to the difficulties of the terrain: we were continually forced off our course by swamps, thickets, precipices, outcrops of rocks, and rivers.'¹⁹ Numerous other examples of the difficulties of navigation could be quoted from the Emergency in Malaya, the Indonesian Confrontation and the Vietnam War. In the latter case, a former American platoon leader has written that 'the compass finds extensive use in all areas of Vietnam. In the jungle and other densely vegetated areas where noticeable landmarks do not exist or are not observable, one must rely solely on the compass and pace for navigation . . .'²⁰

Thirdly, progress on foot varies a great deal. Movement off tracks (so as to avoid ambush and mines) is relatively easy in primary forest but in areas of secondary forest it can be painfully slow. Where slashing of the undergrowth is inevitable, the approach of troops is advised by noise, and the speed of advance may depend on the rate at which a track can be cut. In some cases it may fall as low as half a mile a day or even less. Similarly, it is difficult to penetrate mangrove forest with its tangled root systems and waist deep mud.

At the same time, however, mobility can be greatly increased through the use of helicopters. By this method troops can be speedily deployed and the wounded quickly evacuated. For areas where landing sites are not readily available or cannot be cleared, techniques have been developed for the raising and lowering of troops through the forest canopy. In the future it is possible that hovercraft may be used to deploy

¹⁹ F. Spencer Chapman, *The Jungle is Neutral*, London, 1949, pp. 56-57.

²⁰ P. H. Graves, 'Observations of a Platoon Leader, Part I', *Infantry* May-June 1967, p. 36.

troops in tropical forest areas by transporting them along waterways and across open or cultivated areas to the forest margin.²¹

Fourthly, dense vegetation influences the morale of troops. By reducing visibility to a few feet it creates mental stress for anyone on the move. By immobilizing the lower levels of the atmosphere, it reduces the rate of drying of skin and clothing, thus contributing to personal discomfort; and by being frequently thorny it requires that clothing shall be made of stout material which again minimizes the ventilation of the body and promotes discomfort.

Conclusion

The natural vegetation of South-East Asia, particularly lowland evergreen and monsoon forest, constitutes one of the most difficult environments in which to prosecute war. Although anti-communist forces fighting in the region during the Malayan Emergency and the Vietnam conflict have developed many techniques to cope with this environment, and would seem to have a greater mobility than the enemy, this advantage is somewhat balanced by the fact that the enemy, when located, has only to retire a short distance into the enveloping greenery to be completely lost once more and free to move on foot, slowly and unseen, to some other location many miles away. At the time of the relief of Khe Sanh the besieging enemy were said to have just 'melted away'. One must blame the vegetation directly (and therefore the climate indirectly) for much of the ability of the Viet Cong to assume the initiative at places and times of their choosing and thus their ability to require Allied forces of far greater total number to be deployed against them in a local defence role. ' . . . as the course of events in Vietnam has shown, jungle country provides a natural base for insurgent operations which even the most sophisticated methods cannot easily penetrate.'²² □

²¹ See G. P. Wheeler, 'Employment of Hovercraft', *Military Review*, October 1967, p. 30.

²² Alastair Buchan, *War in Modern Society*, London, 1966, p. 73.

The March Offensive, 1918

Fifty years ago the German Supreme Command launched a massive attack upon the Allied lines in France which very nearly succeeded.

John Terraine

AT five O'clock in the afternoon of March 3rd, 1918, a treaty of peace was signed. The contracting parties were, on the one hand, the Empires of Germany, Austria-Hungary and Turkey; on the other, the Bolshevik Government of Russia, which had come to power in October 1917 on the slogan: 'Down with the war!' Now, at Brest-Litovsk, the Bolsheviks brought that war to an end. By the terms of the treaty their delegation signed, Russia lost 34% of her population, 32% of her agricultural land, 54% of her industry, 89% of her coal mines. This was a German peace. The newspaper *Nord-deutsche Allgemeine Zeitung* wrote the following day: 'The significance of the treaty with Russia lies in the fact that the German Government has worked only for a peace of understanding and conciliation.' The Bolshevik delegate Sokolnikov, on the other hand, called it 'a peace which Russia, grinding its teeth, is forced to accept'. One thing it was, beyond doubt: a clear indication of what Germany's other enemies might expect, if she won another victory.

And this, it appeared was something that Germany, after nearly four years of war, might now accomplish. It would be now or never. Germany's allies were at the end of their tether, only upheld by the strength of Germany herself. Austria-Hungary and Turkey were in the worst plight. 'We had to take into consideration', wrote General Ludendorff in *My War Memories*, 'that Austria-Hungary might actually arrive at the end of her military power . . . Turkey was faithful to the alliance, but at the end of her strength . . .' The Bulgarian Chief of Staff informed him that Bulgaria was 'secure'—but active operations had practically ceased on the Bulgarian front. 'That he could, of course, never ask for enough German stores and German troops was inherent in his office. With every word he expressed the hope of a German victory in the West.'

The German Army; which had borne the weight of the war from its outbreak in August 1914, was now a declining force. 'As our best

men became casualties, our infantry approximated more nearly in character to a militia, and discipline declined.' Deserters were numerous—tens of thousands of them had fled to Holland. 'They and the skrimshankers at the front, of whom there were thousands more, reduced the battle strength of the fighting troops . . . to a vital degree.' The Allied strategy of 'attrition' was at last bearing fruit:

Against the weight of the enemy's material the troops no longer displayed their old stubbornness; they thought with horror of fresh defensive battles and longed for a war of movement. . . . In the West the Army pined for the offensive, and after Russia's collapse expected it with the most intense relief. . . . The condition of our allies and of our Army all called for an offensive that would bring about an early decision. This was only possible on the Western Front. All that had gone before was merely a means to the one end of creating a situation that would make it a feasible operation. . . . All that mattered was to get together enough troops for an attack in the West.

There was another consideration. In April 1917 the United States of America had entered the war against Germany. In theory this was an accession of strength to the Allied cause which could easily outweigh the collapse of Russia. In practice, unready as she was, and deeply committed already to supplying the Allies with war-material, America had found it strangely difficult to mobilize her own forces. By December 1917, there were only four American divisions in France, and only one actually in the line. Nor was there any immediate prospect of a change in this situation. Yet it was also clear that it would not last for ever; one day practice would coincide with theory; one day the Americans would be there. 'The American danger', Ludendorff declared, 'rendered it desirable to strike in the West as early as possible; the state of training of the Army for attack enabled us to contemplate doing so about the middle of March. . . . If all went smoothly at Brest-Litovsk, if our people there worked with real energy, we could expect to have our forces ready for a successful attack in the West by the time mentioned. No delay could be justified. It will be obvious with what interest we watched the peace negotiations.'

The state of Russia being what it was, it is unlikely that the German Supreme Command (O.H.L.) would have departed from the date selected for the great attack—March 21st; but it was an undoubted comfort to know that the enemy in the East had been eliminated. The transfer of material and troops from the Eastern Front to the West had begun as far back as November 1917. In all (including those from Italy) 42 extra divisions were made available for the western attack. German divisions in the West increased from 150 at the beginning of November to 160 at the beginning of December and 171 at the end of

that month. With remarkable accuracy, British G.H.Q. Intelligence plotted their further arrivals.

February 6th: 174, February 21st: 179, February 25th: 180, March 3rd: 182, March 10th: 184, March 11th: 185, March 18th: 187. By March 21st there were 192, 190 of which were identified by 'G.H.Q. Intelligence on March 22nd. The number finally rose to 208.

Mass is important, but it is not everything in war. This vast array was intensively trained for the task it had to perform. The essence of the training laid down was, in Ludendorff's words, 'to adopt loose formations and work out infantry group tactics clearly. We must not copy the enemy's mass tactics, which offer advantages only in the case of untrained troops.' Penetration, envelopment, and swift reinforcement of success were the thoughts inculcated into all ranks of the German Army. As matters turned out, its quality proved too uneven for the universal application of these elixirs. This was to some extent foreseen by O.H.L., which allotted training and equipment priorities to 'attack divisions' as opposed to 'trench divisions'. 'General Headquarters regretted that the distinction . . . became established in the Army. We tried to eradicate it, without being able to alter the situation which gave rise to it.'

The German attack, when it came, was to prove a conventional attack. The patient, obedient German soldiery, led by a remarkably intelligent and professional body of officers and N.C.O.s, proved able to do many things better than most of their opponents had yet been able to do; but they did little that their opponents had not attempted, and were in some cases soon to surpass. And the mainspring of their battle would be what it had been all through the war: artillery. By 1918, however, this meant artillery in a mass never before dreamed of, and used with all possible sophistication. Out of their 13,832 pieces of artillery on the Western Front, the Germans assembled 6,473 on the sector of attack—a concentration beyond any previous comparison, and 'orchestrated' at the key point by the outstanding artillerist of the war, Lieut.-Colonel Bruchmüller.

'We had no tanks . . . our attacks succeeded without them.' Tanks, says Ludendorff, 'did not impress me . . . Not until our infantry lost its discipline and fighting capacity did the employment of massed tanks, combined with artificial smoke, produce a fatal effect on the course of events.' It is in character that he should be inexact about this matter: in fact, the Germans used nine tanks on the first day of battle—four of their own A7Vs and five captured British Mark IVs. But he was correct in the main, since few would dispute his verdict

that 'tanks are only effective in masses,' and the Germans never deployed more than 13 on a single occasion. What is more interesting than argument about Ludendorff's attitude to the new arm is the reflection that the same reasons for its absence applied to armoured cars and (to the best of my knowledge) to motorized machine guns (which the British Army certainly possessed). And since no German cavalry appeared either, this meant that the German General Staff launched what it fully intended to be the decisive battle of the war, in an area which, Ludendorff admits, 'seemed to lack any definite limit', with no mobile arm of exploitation at all. It hardly seems credible, yet it was so.¹ This attack would go as far as the German infantryman's legs could carry him; no farther.

Long discussion took place about the area to be attacked. Another assault on the French Army at Verdun was contemplated, but rejected. An assault on the British in Flanders seemed more promising, but March was too early for operations in that wet, low-lying region. So the final choice fell 'on the area between Arras and Péronne, towards the coast. If this blow succeeded the strategic result might indeed be enormous, as we should separate the bulk of the English Army from the French and crowd it up with its back to the sea.' It was recognized that there were drawbacks here: the 'lack of any definite limit' mentioned above, and the wilderness of the 1916 Somme battlefields not far behind the British front, through which the momentum of advance would have to be maintained. Preparations were therefore continued for further attacks in Flanders, aimed at the Channel Ports, whose possession was vital to the British, should the first attack fail.

So the stage was set for the *Kaiserschlacht*—the 'Emperor Battle'—which was to be fought for the ultimate stakes. Three Armies, Eighteenth, Second and Seventeenth, would deliver the attack: 71 divisions, of which 32 would be in the first line of assault. Forty-three of these divisions faced the front of the British Fifth Army, under General Sir Hubert Gough.

Germany's intentions were clearly formulated; her preparations were vast and meticulous; her progress towards her appointed goal deliberate and seemingly inexorable. On the other side of the line, the exact opposite was the case. The disarray of the Allies at the beginning of 1918 was lamentable, and the fault, regrettably, chiefly of the British Government.

1. One cannot refrain from a comparison with the attitude of Field-Marshal Sir Douglas Haig, who on September 18th, 1916, three days after their debut in battle, demanded 1,000 tanks; and who at the same time fought tooth and nail to retain his cavalry against the day when it would be needed. On September 24th, 1918, Haig appealed to the C.I.G.S. for 'Yeomanry, cyclists, motor machine guns, motor lorries, etc. In fact anything to add to our mobility'. The absence of German cavalry in their great attacks is called by one British survivor 'a crowning mercy'.

We have seen how slowly the forces of America were coming into action. This meant that the control of the war, on the Allied side, remained effectively with France and Britain. But France, in 1917, had been brought nearly to breaking point. The mutiny of a large part of her army on the Western Front in May and June had cast a blight over her entire effort from that time forward. It created a haunting dread which undermined her military capacity. Not even the new men to whom she had turned in her extremity could ignore this fearful, all-too-recent fact of history. Not even her new Prime Minister, Georges Clemenceau, 'The Tiger', could dismiss it from his mind; he was always aware of two enemies; in a speech of November 20th, 1917, he said: 'No more pacifist campaigns, no treachery, no semi-treachery: only war, nothing but war. Our armies are not going to be caught between two fires. Justice shall be established. The country shall know that it is being defended.' So Clemenceau would guard the Army's rear. At its head stood General Pétain, the man who had stopped the mutiny, and who possessed the confidence of the soldiers to a rare degree, but who would never forget that hour of France's weakness. And the Army itself, as 1918 came in, was an unknown quantity.

In theory, at this juncture, the lead among the Allies should have passed to Britain. She had asserted and retained throughout, her supremacy at sea; the most serious threat to it, the U-boat campaign, was in process of being defeated. She had mobilized her Empire on the side of the Allies. She was on the point of overthrowing Turkey, almost entirely by her own efforts. Her Air Force was about to become the most powerful in the world. Her war industry was at last effective. But above all, for a year and a half she had borne the main burden in the decisive theatre, the Western Front. And it was upon her that the great blow was to fall in that theatre. But in this critical hour both her power of negotiation among the Allies and her military force had been dissipated by the long-standing and now embittered conflict between her civil and military leaders.

At the root of this conflict lay a dilemma which expressed itself in many forms, but always came back to the same thing: that Britain had committed herself to an unlimited, continental war, beside continental allies, while at the same time clinging desperately to hallowed traditions and methods—dependence on sea-power as the instrument of force, military commitments tailored to the Voluntary system, the rights of the individual, 'business as usual'. It was well-nigh impossible for the liberal gentlemen of both parties who governed Britain to understand that the Entente had destroyed all these things. The pre-war Governments, wrote

Colonel Repington in *Vestigia* (1919), 'would not look at the big things that lay behind the alliances and groupings of Powers and our treaty obligations to Belgium and other States. They were not fit subjects to drag into the sun because their honest investigation would have entailed a radical change in the military policy of the country, and that change no Party was prepared to face.' This frame of mind persisted throughout the war itself. In January 1916, Lord Esher wrote to Lord Kitchener, Secretary of State for War: 'The assumption that the supreme direction of the war upon its various fronts lay with Great Britain and her small army (only recently grown into a powerful military force) should be combatted and exposed. Had we started with the army we now possess it would have been a different matter. This point never seems to strike the critic.' From beginning to end, British Governments desired to exercise freedom of action, while shrinking from the all-out policies that alone could give it to them. Neither their allies nor their enemies were prepared to be sentimental about this plight.

It was the soldiers—not many of them, but enough—who faced the unpleasant truth best, because it was rammed down their throats each day. Lord Kitchener recognized at once that the war would be a long one, and though he writhed in the toils of it, he also perceived that the Entente must remain the cornerstone of policy. Sir William Robertson, the Chief of Imperial General Staff from December 1915 to February 1918, also understood this central fact, and acted upon it. Sir Douglas Haig, Commander-in-Chief of the British Expeditionary Force in France from December 1915 to the end, perhaps understood best of all. On January 1st, 1916, he spoke to the Head of the French Mission at G.H.Q.: 'I showed him the instructions which I have received from the S. of S. for War containing the orders of the Govt. to me. I pointed out that I am *not under* General Joffre's orders, but that would make no difference, as my intention was to do my utmost to carry out General Joffre's wishes on strategical matters, as if they were orders.' This was the price of junior partnership.

By 1918, however, the partnership was no longer so junior. At a high cost of blood and treasure, the British had progressed to the point when their voice in war councils could have held real authority. They had only to continue as they had begun—to hang on to their gains; but the Government threw them all away, and in so doing redoubled a crisis which the enemy would, in any case, make intense.

The crux of the issue was Manpower. Britain had clung to her cherished Voluntary Recruitment beyond the eleventh hour; it had produced staggering results. Patriotism and religion, in a society which, by

today's standards, was grossly under-privileged, drew in all 3,408,663 men voluntarily to the Services. The overwhelming majority of them went to the Army. But measured by the needs of the British Army (like all others, in that war) this vast total was not enough. Army enlistments in the end totalled 5,704,416—and the balance had to be found by compulsory service. It was Britain's first experience of such a thing; like so much else during those years of deadly experiment, the machinery of national service had to be improvised, and mistakes were



(Australian War Memorial)

German reserves massed in St. Quentin for the great battle of March 1918.

naturally made. The reaction of Public Opinion to an institution so much against British temperament and tradition was difficult to assess, and consequently misjudged. By 1918, compromise, half measures and incorrect application of the machinery devised had produced the inevitable result: the Army in the field was seriously under strength. General Smuts, visiting the Western Front in January on behalf of the War Cabinet of which he was a member, reported that the infantry alone of the B.E.F. was 100,000 below its establishment. In the response to this situation, another grave factor came into play.

The reluctance of successive Ministries to embark upon national service was part of the wider reluctance to face the issues and nature of

the war itself. As these asserted themselves, in the form of the Army's unending demands for men, and the ever-lengthening casualty-lists which resulted when it received them, the conviction grew in Government circles that the great force that was being raised by methods so repugnant was also being appallingly misused. Out of this conviction, which was particularly strong in the mind of Mr. Lloyd George, Prime Minister from December 1916, grew the fatal conflict between 'soldiers and politicians'. This came to its head in 1917 when Lloyd George made his famous pronouncement that he was 'not prepared to accept the position of a butcher's boy driving cattle to the slaughter, and that he would not do it'. When the long-drawn-out Flanders campaign (Passchendaele) guttered out in the mud in November, with a casualty-list of nearly a quarter of a million, this determination hardened into a set policy.

With the turn of the year, the man-power problem resolved itself into two issues: the number of men to be raised for the Army in 1918, and the distribution of the forces already in arms. To resolve the first question, a Cabinet Committee on Man-power was set up; not a single soldier was invited to sit on it. This body had to determine priorities, and its conclusion was that the Navy, the Air Force, ship-building, food production, timber-felling and the provision of cold-storage accommodation should all have priority over the Army. It also concluded that whereas the military authorities, on the basis of past experience and future expectation, were asking for 615,000 men, only 100,000 Category 'A' men should be supplied to them. The Committee based this figure on the belief that defensive fighting—which was anticipated on the Western Front—was less expensive than offensive fighting. 'This argument', commented Sir William Robertson, the C.I.G.S., 'was so utterly fallacious as to be almost incredible, for the losses sustained would depend, as always, upon the intensity of the fighting, and . . . this in its turn would depend not so much upon the policy of the Entente as upon that of the enemy.' It was also, apparently, completely overlooked that, on the authority of a member of the War Cabinet itself, the proposed reinforcement of the B.E.F. for the whole year would barely suffice to cover its existing deficit.

But the Committee did not rest on this. It further proposed that the establishment of British Divisions should be reduced from 12 infantry battalions to 9, as was now the case in both the French and German Armies. Blandly ignoring the deficit, the Committee suggested that the units withdrawn should then be constituted into new divisions to form a reserve. 'But even the Committee', says Robertson, 'though composed for the most part of civilian ministers, should have remembered that about half the personnel of a division consisted of artillery and other non-

infantry units, and that shortage of men in those units was fast becoming as great as it was in the infantry.' A further reason against such a step had already been supplied by Haig: 'any reduction in the present establishment would be extravagant in so far as staffs are concerned, and the question of finding commanders and staffs is becoming increasingly difficult.' But the Committee was not interested.

The Army Council lodged the most vehement formal protest against the Committee's proposals: '. . . the Council would regard the acceptance of the recommendations in the draft report, without further effort to provide the men they consider necessary for the maintenance of the forces in the field during 1918, as taking an unreasonably grave risk of losing the War and sacrificing to no purpose the British Army on the Western Front.' Nothing availed. On January 10th, 1918, the War Office was compelled to order a reorganization on the lines indicated. Thus, as German preparations for the greatest battle of the war remorselessly proceeded, the British Commander-in-Chief found himself forced to disband two out of his five cavalry divisions, and was given a list of 145 battalions of infantry out of which he was permitted to select the 141 that must go, and the 4 that might survive. In the event, 115 battalions were disbanded completely, to provide the reinforcement required to make up the infantry's existing deficit; 38 were amalgamated to produce 19; 7 were converted to Pioneers (of whom the Army was always chronically short). Because the British Army was organized as a 'battalion army' instead of the continental system of 'regiment armies', the dislocation was dreadful. In France or Germany, all that would have been required would be to remove one of the four three-battalion regiments which made up each division. With the British it was much more complicated. The 19th Division, for example, received its orders to reorganize on January 24th:

' . . . All four battalions of the 56th Brigade were to be disbanded and the brigade reconstituted as follows: 8/North Staffords from the 57th Brigade, 9/Cheshires from the 58th Brigade, and 1/4/King's Shropshire Light Infantry from the 63rd Division. The date from which the reorganization was to take effect . . . was the 4th of February. It is impossible to express adequately the heart-burnings which these changes created . . . '

Needless to say, this astonishing and demoralizing exercise took time. In the First Army, it was completed by February 19th; in the Fifth Army, by February 25th; in the Third Army, by February 27th; and in the Fourth Army, not until March 4th—only 17 days before the German attack. And, for the final complication, it must be added that the Governments of Australia, Canada and New Zealand declined to adopt similar

measures, with the result that the ten Dominion divisions on the Western Front retained their twelve battalions each.

So the amazing spectacle is revealed of the British Army, facing the most formidable offensive build-up of the war, actually disbanding units, and disorganized by the ensuing rearrangements. Nor is that all. The actual distribution of the troops available is significant. The B.E.F. in France, on January 5th, 1918, numbered 1,949,100. At home, in the United Kingdom, there were 74,403 officers and 1,486,459 other ranks. This high total requires to be explained: a large number of the men concerned were in hospital or convalescing; others were in training formations; others constituted the Home Forces, the 'second shield' (behind the Navy) against invasion, which was still talked of as a possibility; over 90,000 men were in Ireland, a country still simmering after the 1916 Rising. Nevertheless, there were over 600,000 trained Category 'A' men in the country, of whom the Cabinet Committee considered 449,000 as 'available' for drafts. In addition, there were, in the subsidiary theatres of war, 35,695 officers and 852,620 other ranks. A large number of these were Indian or Colonial contingents; all the same, when the moment of truth arrived, it was found possible to bring approximately 100,000 of these men to France—rather late in the day.

The distribution of the forces with the B.E.F. is also significant. On December 14th, 1917, against the rooted opposition of the C.I.G.S. and the Commander-in-Chief, it had been decided to extend the British front by taking over 25 miles from the left of the French Army. France also had her man-power problems, not to be wondered at, in view of her heavy losses from 1914 to 1916. The French insisted on this take-over on the familiar grounds that the fronts of the two armies were disproportionate, and that only in this way could they form an adequate reserve. The British Government had accepted these arguments, with the result that its already weakened Expeditionary Force was now even further stretched, and found itself faced with the task of building defences from scratch in an area where the French had done little for a long time.

When this take-over, with all its own dislocation and the re-organization of divisions whose evils have already been indicated, were completed, 58 British and 2 Portuguese divisions faced the impending attack. They were organized in four Armies; 42 divisions were in the line, 10 in reserve under the Army Commanders. In G.H.Q. Reserve, under the hand of the C.-in-C., there remained only eight divisions, a pitifully small force. For the time being, until the enemy displayed his hand, Haig distributed his eight divisions evenly along his front, two behind each Army. It was reasonably clear that a heavy blow was going

to fall in the Somme area; but this, for the British, was never their most sensitive point: the vital area for them was to the north, where their zone tapered towards the Channel, where 'there was no room for any "elastic defence", nor for a series of delaying actions; time could be gained only by hard fighting and stubborn resistance.' Haig never lost sight of this potential peril, and events proved his premonitions justified. But whatever happened, it was clear that the British Army was in for a bad time. An officer at G.H.Q. summed it all up: 'So we are confronted with:

- A longer front to hold.
- Reduced establishment to hold it.
- No hope of reinforcements.
- A German attack in greater strength than anything we have yet experienced.

Not a cheerful prospect.'

As the first weeks of March passed by, the imminence of dire events lay heavily upon the whole Army; it was a matter of doing what one could to make ready, and *hoping for the best*.

* * *

'At 10 minutes past 5 I was awakened by the roar of a bombardment, which . . . was so sustained and steady that it at once gave me the impression of some crushing, smashing power. I jumped out of bed and walked across the passage to the telephone in my office and called up the General Staff. On what part of our front was the bombardment falling? The answer came back almost immediately: "All four corps report heavy bombardment along their front . . ."'

So, on the morning of March 21st, 1918, General Sir Hubert Gough, commanding the British Fifth Army, learned that the long-awaited German blow had fallen upon his troops. The attack extended northward, beyond the Fifth Army front, along a great part of the sector held by Sir Julian Byng's Third Army. An officer of Heavy Artillery in the Third Army area, Arthur Behrend, wrote:

I awoke with a tremendous start conscious of noise, incessant and almost musical, so intense that it seemed as if a hundred devils were dancing in my brain. Everything seemed to be vibrating—the ground, my dug-out, my bed. . . . The great offensive had begun.

General Gough alerted his scanty reserves; but there was very little that he—or anyone else—could do. 'All the necessary steps to

meet the storm had been taken: the German infantry would not attack for several hours. I looked out of my window, and in the morning light I could see that there was a thick fog, such as we had not yet experienced during the whole of the winter. We were getting into spring, and it was extraordinary to have so dense a fog at this date. Very dimly I could see the branches of a tree in the garden about forty feet from my window. The stars in their courses seemed to be fighting for the Germans. . . .'



(*Australian War Memorial*)

Troops retiring through Fricourt on 24 March 1918, the day on which the Germans broke through to the old Somme battlefield. (Two Chinese labourers can be seen by the roadside).

In the memories of those who came through the 'March Offensive', two recollections of this terrible first day stand out: the pulverizing weight of the German bombardment, delivered by 6,473 guns and 3,532 mortars, firing at maximum intensity for five hours; and the fog, which blinded the defenders who survived the bombardment. The combination was devastating. The British defence was based on a system of mutually-supporting machine-gun and Lewis gun posts. But when the German infantry came forward through the fog, the *Official History* records: 'the Forward Zone as a whole was overrun at the first rush, the machine guns still in action hardly firing a shot.'

The fate of individual British units in the Forward and Battle Zones was frequently obscure, and generally harrowing. The 7/Rifle Brigade was in the Battle Zone of the 14th Division; the bombardment fell upon it at about 4.40 a.m. 'From that moment nothing was heard of, or from, the Seventh Battalion.' In the 24th Division, the headquarters of 2/8 Lancashire Fusiliers were 'captured in a dug-out before becoming aware that the infantry attack had begun.' In the 16th Division, of two companies of the 7/Royal Irish in the Forward Zone, 'not a man succeeded in escaping'. The Second Battalion of the same regiment had even worse luck: 'after a desperate fight, most of the battalion was killed or captured.' These were all Fifth Army formations—and such episodes could be multiplied all the way along that Army's 42-mile front. In the Third Army, holding a much shorter line with stronger forces, there were nevertheless similar experiences. In the sector of the 153rd Brigade, 51st (Highland) Division, for example, 'the troops occupying the Forward Zone had been mostly killed, buried by the bombardment, or taken prisoner; the few survivors were not capable of much resistance, and none returned to tell the tale.'

In short, a disaster of the first magnitude had struck the British Army. The Germans had achieved the cherished aim of so many attacks during that war—they had reached the gun-line. On March 21st, the Fifth Army lost 382 guns; by midnight on the 22nd, the Third Army reported a loss of 150. This meant a clear breach in the British line, and on the second day of battle the Germans poured through. It was no longer a question of assault: it was pursuit. Arthur Behrend wrote: 'Along the road a slow stream of traffic was moving towards Bapaume and beyond, first waves of the tide which rolled westwards for days and days. Here and there a battery in column of route, walking wounded in twos and threes, an odd lorry or two, a staff car carrying with undignified speed the dignified sign of Corps Headquarters, a column of horse transport, and a biggish batch of German prisoners captured by the 51st Division . . . it was with something approaching shock that I realized everything was in retreat . . . I stood watching the unforgettable scene for ten minutes; it was too sad for words.'

The battle continued inexorably. Day by day more ground was lost, and a situation developed for the Allies more serious than any since the calamitous Battles of the Frontiers in August 1914. The crisis of the war had been reached. Once again, as in 1914, despite the suffering, the heroism, the tension and the drama of the rolling battle, the true point of decision was inside the minds of the generals. The first to meet the test was General Gough. His Army consisted of only 12 divisions, backed by 3 Cavalry divisions (the entire cavalry of the British

Expeditionary Force), holding by far the longest sector of the front. Behind him, there were only two divisions belonging to General Headquarters reserve, both of them immediately drawn into the fight. Opposing him was a force of 43 divisions. No less than 50 German divisions had been identified in action on the first day, against the British Fifth and Third Armies. Gough's prospects were not agreeable:

From the British Army I could expect one division in three days, and one more the following day. From French sources, one division would be with me ready to take its place in the battlefield after two days, and then I might hope for two more after three days; a total of five divisions in action by the fifth day of battle, a help certainly, but—when a front of over forty miles had to be reinforced—still quite insufficient to bring to a standstill the German masses which would also be receiving reinforcement. We must look forward to maintaining the struggle for at least eight days. Our losses in the Forward Zone, where our battalions had so faithfully and steadfastly fought it out, and had been almost annihilated in doing so, had proved what the result of a decisive battle would be.

It was in particular to the French that General Gough turned in this desperate moment. His understanding—shared by British G.H.Q.—was that the French had formed a special Army of Reserve (the Third, under General Humbert) in the area of junction between the British and French Armies, precisely with a view to dealing with this kind of crisis. He was in for a rude awakening: 'Later on, Humbert came in to see me, and when I said something to the effect that it was a desperate struggle and that I was glad to see him with his Army, he replied, "*Mais, je n'ai que mon fanion*", referring to the little pennant on his motor with the Army colours. This, however, was not exactly the aid that we were looking for at that moment!

There was worse to follow; but this time the severest impact was sustained by the British Commander-in-Chief, Field-Marshal Sir Douglas Haig. It was bad enough that the French Army which was to have supported his right did not exist. It was far worse to discover, by the fourth day of battle, that his French opposite number, General Pétain, was convinced that the British had been thoroughly defeated; that therefore it was no longer a prime object to remain in close touch with them; and that the chief task of the French Army must now be the defence of Paris. So the spectre arose of a gap forming and widening between the Allies, through which the Germans would pour their reserves and beat their enemies in detail. This alarming frame of mind was disclosed to Haig at a meeting with Pétain at 11 p.m. on March 24th. 'Pétain struck me as very much upset, almost unbalanced and most anxious . . . In my opinion, our Army's existence in France depends on keeping the British and French Armies united. So I hurried back to my Headquarters at Beaurepaire Château to report the serious change in *French strategy* to

the C.I.G.S. and Secretary of State for War, and ask them to come to France . . . in order to arrange that General Foch or some other determined General who would fight, should be given supreme control of the operations in France.'

This was the end of an old story. If the failure of the British Government to grip the problem of Manpower had created one set of conditions for defeat in the field, the failure of the Allies to evolve effective strategic unity undoubtedly did the rest. By March 1918, the question of strategic control was intimately bound up with the vital matter of Reserves.

All through the war, the Central Powers had enjoyed two inestimable advantages: their central position, which made possible a flexible strategy, and the firm effective control exercised by the German General Staff. There were frictions, naturally; there were divided aims and opinions. Very early indeed, in a bitter moment, the Germans spoke of the Austrian Alliance as being fettered to a corpse. But by comparison with the tribulations of the Entente, the German position was excellent; indeed, it was the dream of every forward-looking person on the Allied side to find some means of matching this powerful weapon of unity.

In a Coalition, however, true unity is the most elusive of goals; much lip-service is paid to it, without a corresponding intellectual effort to understand its foundations. At sea, for example, there was almost perfect 'unity' from beginning to end of the 1914-1918 war. Very few people were prepared to examine what this was based upon, or whether there was any lesson to be learned and applied to the land fronts. The simple and rather daunting truth, of course, is that 'unity of direction' at sea was founded upon the absolute supremacy of the Royal Navy. 'Unity of direction' in the Central Powers was founded upon the absolute supremacy of the German Army. In the same way, there *was*, until well into 1916, 'unity of direction' among the Allies on the Western Front—founded upon the supremacy of the French Army: hence Haig's realistic determination 'to do my utmost to carry out General Joffre's wishes on strategical matters, as if they were orders.' *But this kind of unity, the practical unity that is brought about by the compulsions of sheer necessity, was never what the visionaries had in mind.*

One of the loudest and most persistent advocates of 'unity' throughout the war (until he had to operate within it) was Sir Henry Wilson, who became Chief of Imperial General Staff in February 1918. His definition of the Unity of 'Superior Direction', as he called it, was the most comprehensive: 'Such a Body will be above all Sectional Fronts, it

would view the War as a whole, it would treat the line of battle from Nieuport to Mesopotamia as one line, and it would allot to each of the Allies the part which it would play.' By the time Wilson arrived at this concept, Russia had dropped out of the war. It is worth spending a moment, however, to consider whether there was ever any possibility, at any time while Russia remained a belligerent, of her accepting such a scheme. Russia was never backward in demanding Allied help—and it must also be admitted that she was never backward in sacrificing her men in support of the Allies. But Unity? Is it believable that the most autocratic Government in the world, secretive and always more than a little xenophobic, would ever have permitted foreigners to 'allot the part which it would play'? And if one entertains this doubt about the government of the Tsar, how much more so of the neurotically suspicious Bolsheviks who followed him! The very fact of Russia's existence as a major Ally made true unity impossible. And when America emerged in Russia's place as a mainstay of the Alliance, it was soon discovered that she, too, had the profoundest reservations about unity.

Yet, within limits, Henry Wilson's 'Superior Direction' became a fact, and played its brief but significant part in the conduct of the war. On November 7th, 1917, a Supreme War Council, consisting of political and military representatives of France, Britain, Italy and America, was created, with the duty, in Lloyd George's words, 'of continuously surveying the field of operations as a whole, and, by the light of information derived from all fronts and from all Governments and Staffs, of co-ordinating the plans prepared by the different General Staffs, and, if necessary, of making proposals of their own for the better conduct of the war.' The curious defects in the structure of this body; the peculiarities surrounding the position of the British military representative (Wilson himself), who was expected by the Prime Minister to supply an 'alternative strategy' to that of the Government's responsible advisers, need not be gone into here. What we are concerned with is the direct influence of 'Superior Direction' on the battle that was about to be fought.

On February 2nd, 1918, on the proposal of Lloyd George, the Supreme War Council decided on the creation of a General Reserve for the Western, Italian and Balkan (Salonika) Fronts. An 'Executive Committee', consisting of the Permanent Military Representatives of Britain, France and America, with General Foch for France, was set up with 'the following powers to be exercised in consultation with the Commanders-in-Chief of the Armies concerned:

- (a) to determine the strength in all arms and composition of the General Reserve, and the contribution of each national army thereto;

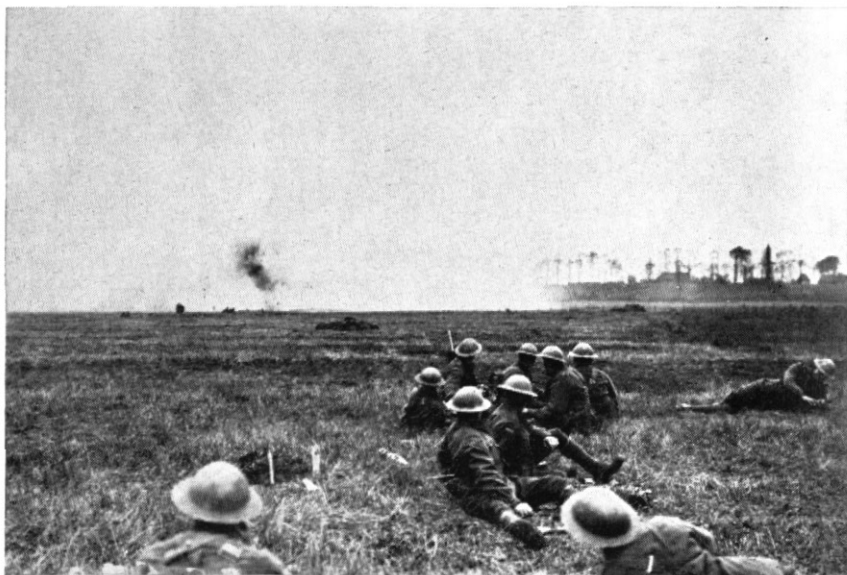
- (b) to select the localities in which the General Reserve is normally to be stationed;
- (c) to make arrangements for transportation and concentration of the General Reserve in the different areas;
- (d) to decide and issue orders as to the time, place and period of employment of the General Reserve . . .
- (e) to determine the time, place and strength of the counter-offensive, and then to hand over to one or more of the commanders-in-chief the necessary troops for the operation . . .
- (f) until the movement of the General Reserve begins, it will for all purposes of discipline, instruction and administration, be under the orders of the respective commanders-in-chief, but no movement can be ordered except by the Executive Committee. . . .

It was also decided that the President of the Executive Committee should be General Foch.

This outcome satisfied many of those present as a day's work well done; others were less pleased. Haig commented with perspicacity: 'To some extent it makes Foch a "Generalissimo".' This was, of course, true—within limits which Haig expressed to his wife on February 5th: 'although it was decided to form an Inter-Allied Reserve, before the Committee can handle it they must form it. Now I cannot part with any of my troops—so if they want a Reserve it must be found from French and British troops in Italy—the five Divisions I sent there are really the Reserves of the British Forces in France—or bring troops from Salonika or elsewhere.' The French Commander-in-Chief was equally clear in his mind: 'Pétain said that he did not mean to allow Foch and Co. to interfere with his reserves.' The British Army Council wanted to know who would now be 'responsible for the safety and welfare of the British Army.' Colonel Repington, the Military Correspondent of the *Morning Post*, was even tarter: 'All these schemes are forms of lunacy . . . This is the gammon that is going on before the German great offensive.' But in the end it was the blunt refusal of Haig and Pétain to risk the safety of their armies by parting with troops that killed the idea. 'That, in effect', wrote Sir William Robertson, 'put an end to the Executive Committee as an organ of command, for as no general reserve was constituted the Committee was left with no executive functions to perform.'

The still-birth of the Committee, unfortunately, meant also the non-existence of the Reserve itself—with fatal consequences on the day of

battle, as we have seen. It is necessary to examine a little further what the basis of military opposition to the Executive Committee was. In the case of the British, every consideration was influenced by the sheer shortage of troops. The *idea* of a General Reserve was not challenged—every lesson of military history taught its value. But British G.H.Q. found it



(Australian War Memorial)

The bombardment here shown occurred during a new German attack east of Hazebrouck in Flanders on 17 April 1918. The 9th Battalion, which suffered casualties from this shell-fire, is seen moving from the village of Borre into open fields.

impossible to accept the proposed *manner* of creating such a force. A G.H.Q. 'Note on the General Reserve' dated March 12th sets out the argument.

'It is essential . . . that unity and homogeneity should be preserved in the formation of a reserve, and that such a reserve should be appointed and handled by a responsible commander.

To weaken Armies in order to place a general reserve wanting in homogeneity in the hands of a Committee composed of members of different nationalities is a complete misunderstanding of the role of a reserve in great modern battles. The modern battle between Armies equally trained and armed and of equal resolution is not generally an affair of two or three days, but is a prolonged struggle lasting for weeks and perhaps months. . . .'

In such a struggle, argued G.H.Q., the Reserve is not suddenly thrown in as a compact formation (as Napoleon, for example, would

use his Imperial Guard); its function would chiefly be 'to secure a rotation of divisions in the combat, so that, as formations become exhausted, they may be withdrawn, rested, and refitted. To do this effectively, reserve divisions must be at the immediate and absolute disposal of the Commander who alone is responsible for the conduct of the operations, and who alone has sufficient local knowledge of the conditions to decide how and when these reserve divisions are to be employed. . . .'

These were powerful practical objections; G.H.Q. added an equally powerful objection in principle: 'to vest in a Committee the power to handle troops, even if such were available, which is not now the case, would be to create, in fact, a Generalissimo in the form of a Committee. History affords numerous examples of the failures of such forms of authority.' This was the position of the British Commander-in-Chief and his Staff. It carried with it certain implications, which the event demonstrated all too clearly. On March 13th, Haig, no doubt fortified by this lucid paper, was talking to Sir Henry Wilson, who had now replaced Robertson as C.I.G.S. 'Douglas Haig . . . said that, if I wanted a General Reserve, I must make some more divisions and I must get more Manpower. I could not get him to see the problem in any other light. I impressed on him the fact that by refusing to contribute to the General Reserve he was killing that body, and he would have to live on Pétain's charity, and he would find that very cold charity. But I was quite unable to persuade him. . . .'

It was this cold charity that General Gough encountered, at the meeting when Humbert told him that he had no Army; it was the extremity of the chill that Haig encountered on March 24th. The shock must have been severe. Haig liked Pétain and always got on well with him. In December 1917 he recorded that 'relations between G.Q.G. and G.H.Q. are better than I have ever known them'—and this remained the case through all the difficulties and disagreements involving the two Governments during the next three months. It was natural to Haig to prefer a direct arrangement with Pétain to any artificial Committee solutions. After all, the large extension of the British front had been carried out in order to permit Pétain to form reserves, and although his Army was also shrinking, this he had done, to the tune of no less than 39 divisions out of the 99 in the French line of battle. Now was the time to use them.

But Haig had failed to take two things into account. For the first he cannot be blamed: it was simply that a German deception plan, calculated to make Pétain believe that whatever happened in Picardy, the

main blow would be delivered against the French in Champagne, had succeeded brilliantly. At their meeting on March 24th, Pétain told Haig, 'he expected every moment to be attacked in Champagne and he did not believe that the main German blow had yet been delivered.' French Intelligence was not functioning well; British G.H.Q. Intelligence had already identified over 50 German divisions in battle, and four days later had identified 78—a reasonable indication of a 'main blow'.

Haig's second error was simply his assessment of Pétain's character. All through the summer and autumn of 1917, Pétain had been free with promises of support for his British allies, but always slow and slight in fulfilment. Yet Haig continued to trust him; not until it was revealed in this bleak moment did he perceive the fundamental pessimism beneath Pétain's mask of cool, ironic realism. Haig did not contemplate defeat; he could not enter the mind of a man who did. But now he knew, and his thoughts turned at once to General Foch, because with all his faults—and both Haig and Sir John French before him had good opportunities of knowing these—Foch, also, was a man who did not contemplate defeat.

On March 26th, Haig got what he wanted. A vital Allied Conference assembled at the little town of Doullens, some 20 miles north of Amiens. M. Poincaré, the President of the French Republic, was in the chair; supporting him were the Prime Minister, M. Clemenceau, Minister of Armaments, M. Loucheur, General Pétain and General Foch. The French Ministers were aware of the nature of their problem. Just before the conference began, Clemenceau took Poincaré aside, and reported, something Pétain had said to him: "The Germans are going to beat the English in the open field, after which they will beat us too." Should a general speak—or even think—like that?

On the British side of the table sat Lord Milner, Secretary of State for War; Sir Henry Wilson, C.I.G.S.; Sir Douglas Haig; his Chief of Staff, Sir Herbert Lawrence; and Major-General A. A. Montgomery, Chief of the Fourth Army, who took notes. Haig opened the proceedings by stating the situation. There were interjections by Pétain, in keeping with the frame of mind which he had displayed to Clemenceau. Pétain, remarked Haig, 'had a terrible look. He had the appearance of a Commander who was in a funk and has lost his nerve'. Pétain concluded: '. . . everything possible must be done to defend Amiens.' Foch broke in: 'We must fight in front of Amiens, we must fight where we are now. As we have not been able to stop the Germans on the Somme, we must not now retire a single inch.' Haig took this as his cue: 'If General Foch

will consent to give me his advice, I will gladly follow it.' The Ministers conferred briefly; then Clemenceau produced a formula, charging Foch with 'the co-ordination of the action of the British and French Armies in Front of Amiens.' 'This proposal', wrote Haig, 'seemed to me quite worthless as Foch would be in a subordinate position to Pétain and myself. In my opinion, it was essential to success that Foch should control Pétain; so I at once recommended that Foch should *co-ordinate the action of the Allied Armies on the Western Front*. Both Governments agreed to this.' Poincaré remarked: '*Je crois, messieurs, que nous avons bien travaillé pour la victoire*'. Henry Wilson commented: 'Douglas Haig is ten years younger tonight than he was yesterday afternoon,' and congratulated himself as a chief architect of what had been achieved. As the years passed, many claims were advanced for this honour; in the immediate sense, Haig's is the best, but there is much in the final comment of Field-Marshal Sir William Robertson: 'A moment's reflection will suffice to show that it was due to no particular individual—unless it be to General Ludendorff—but to force of circumstances.'

So the Allies achieved, after nearly four years of war, formal Unity of Command on the Western Front. So long as Foch remained, the Allies might be defeated, but they would not be divided. This was the meaning of his appointment—almost its whole meaning. As he himself wrote: 'my position did not depend in any degree on my having the right of command over Allied troops . . . common direction is created and maintained above all by the confidence which governments and allied Commanders-in-Chief bestow upon some chosen individual.' Foch himself was an anachronism, a survival of epochs of *La Gloire*, never at home in the new age of mechanistic war. But he was dauntless, which was what mattered on March 26th.

His influence on the battle itself was slight. Already on the day of Foch's appointment, General Byng was able to report to Haig: 'In the south, near the Somme the enemy is very tired and there is no real fighting taking place there. Friend and foe are, it seems, dead beat and seem to stagger up against each other.' And already the fatal opportunism that passed for strategy in the mind of Ludendorff was having its effect. In his original intention, the main axis of his advance, once off the mark, would be westward and north-westward, to roll up the British line. It was precisely along this axis that the Germans made the least progress; on the other hand, the astonishing success of what had been originally intended as a vast covering operation, the south-westward attack on the British Fifth Army, now offered glittering prizes—the chief of them, Amiens. Yet the German Army, strong as it was, could not manage both;

a choice had to be made—but Ludendorff could not bring himself to the agonizing decision. On March 27th and 28th, the Germans attacked both towards Amiens, and northwards towards Arras. It was there, on the Arras front, that they met their first clear defeat. An officer of the Queen's Westminster Rifles wrote:

Quite suddenly the smoke cleared; and there, barely 200 yards in front, were the enemy in full view bearing down on us in a compact huddled mass that somehow, for its lack of colour, in the cold grey of the dawn, reminded one forcibly of a cinematograph picture. . . . I have never been able to estimate the numbers . . . but, as the smoke lifted . . . I counted five lines, each, I calculated, five deep, so deep, in fact, that I had to rub my eyes to make sure that they were not new belts of wire grown up in the night!

The attack on Arras was smashed, and on the 28th formally abandoned by the German Supreme Command. Now Ludendorff turned to other expedients: the offensive in Flanders, already partially prepared, with a final desperate attempt to take Amiens in the interval required to switch his artillery to the north.

It was too late. The German impetus was dying. 'Our advance', wrote Field-Marshal von Hindenburg, 'became slower and slower. The hopes and wishes which had soared beyond Amiens had to be recalled. Facts must be treated as facts. . . . We ought to have shouted in the ear of every single man: "Press on to Amiens. Put in your last ounce. Perhaps Amiens means decisive victory. Capture Villers-Bretonneux whatever happens, so that from its heights we can command Amiens with masses of our heavy artillery!" It was in vain; our strength was exhausted.'

The 'March Offensive' ended on April 5th. This was the sixteenth day of terrible battle, and on it Ludendorff concluded: 'The enemy's resistance was beyond our powers. . . . O.H.L. (the German Supreme Command) was forced to take the extremely hard decision to abandon the attack on Amiens for good.' The German achievement had been great: a vast bulge was driven into the Allied line; nearly a quarter-of-a-million casualties had been inflicted. The majority of these, of course, were sustained by the British: a total of 178,000, of whom over 70,000 were prisoners. The French had lost 77,000. These figures were a savage commentary on the widespread (and still prevalent) belief that the defensive is less costly than the offensive. In the three-and-a-half months of their Passchendaele offensive in 1917, the British lost 244,000 casualties; in the sixteen days' defensive in Picardy, the British and French together lost 240,000. Fortunately, due to clumsy tactics, lack of mobile troops for exploitation, to having out-run their artillery, and to the heroic defence of the British Fifth and Third Armies, the Germans lost about as many.



(Australian War Memorial)

From this wood (Bois L'Abbe), which was the limit of the German offensive near Villers-Bretonneux, the British batteries were forced to withdraw on 4 April, 1918. The capture of the village and wood, however, was averted by the 9th Australian Infantry Brigade and British cavalry.

They would attack again, in Flanders, in April, and the British would have their 'backs to the wall'. In May and June, the German Army would summon up the strength to deliver mighty blows against the French. But the 'March Offensive' was the 'Emperor-battle'—and the Germans had lost it.

Nevertheless, the British Government—and the nation—had received a fearful shock. The Government, which had deliberately weakened its army in the face of the German attack, which had dangerously extended its front, and which had disregarded and set aside its responsible military advisers, now sought a scapegoat. The unfortunate General Gough was selected as the sacrificial victim; voices of the ignorant were even heard blaming the Fifth Army as well as its general. So Gough may now have the last word:

'There is a broad wreath of British dead in that desolate land. . . . The rows of crosses mark for ever the scenes of their valiant deeds: history at least will give them the great honour they earned.' □

A man does not flee because he is fighting in an unrighteous cause, he does not attack because his cause is just; he flees because he is the weaker, he conquers because he is the stronger, or because his leader has made him feel the stronger.

—Quoted in Field-Marshal Earl Wavell's *The Good Soldier*.