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AUSTRALIAN ARMY JOURNAL

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GENERAL ROWELL SAYS "GOODBYE"

☆ ☆ ☆

The Editor has asked me to write a farewell article for the Australian Army Journal before my retirement. The problem for me is to single out, from a mass of impressions resulting from nearly 44 years' service, some worthwhile thought which I can pass on to those of you who are still serving.

The history of the Australian Army from 1911 onwards presents a fascinating study of the changes which can occur in the Armed Services of any democracy. There was the appearance, almost overnight as it were, of Universal Training before World War I, followed by the establishment of the Australian Imperial Force. Then came the decline of the Australian Army in a period when depression was with us and appeasement and disarmament were the order of the day. World War II saw a new peak, when the overall strength of the Army touched half a million men. I have no doubt that, but for the circumstances of the times, we should have seen the Australian Army almost completely swept away after World War II. However, in 1946 our responsibilities for the British Commonwealth Occupation Force in Japan imposed severe limitations on demobilization, while the events in the world from 1950 onwards have seen the lifting of the Army, both Regular and CMF, to an establishment we had never previously contemplated in time of peace.

I have perhaps rathered laboured this historical survey, and I have only done so to emphasize the point that there are stresses and strains which no Service can take and still remain effective. Nothing is more harmful to morale and welfare, and indeed to efficiency, than violent fluctuations in strength and organization. If we are to have a well formed, contented and able Service there must be a certain minimum organization and establishment which on the one hand offers the prospect of reasonable activity and career prospects while at the same time being large enough to take the strain of expansion in an emergency. I believe we have this, and no more, today.

In this period of our history I have had something to do either as one of the rank and file or as an onlooker, or as one who has been in the very centre of things. There has been the stimulus of expansion and the disappointment and frustration of reduction or retrenchment. I have seen great changes in systems of organization, administration and training and have had the privilege of leading the Army in the past 4½ years and of seeing it reach the standard it has attained today. There is not the space to record these changes and I only tell two stories to illustrate my general statement and not because the matters to which they relate were either the only changes or even the most important.

The improvement in the standard of Army catering will be apparent to any whose service goes back to World War I. Then we ate in our tents out of a bucket of stew, conditions as far removed from the modern kitchens and dining halls as the poles are apart. I cannot recall one meal when I was a cadet at Duntroon which would pass muster today in any Army establishment. As a matter of fact, the Australian Army made a laudable attempt in 1920 to improve its system of catering when it sent a senior officer to England to study the whole problem. When he came back he set out to issue what he called "Standard Menus," which were menus for 100 men or multiples thereof. One of these was for "Currant and Rice Pudding." He was dictating to a Sergeant Major this menu, which included so many pounds of rice, so many ounces of currants. He then added, "and throw in an Army bicycle, Sergeant Major!!!" The Sergeant Major wanted to know what the bicycle was for, and the reply was, "So that the soldiers can cycle round and find the currants!!!"

Then there was the case of the ordnance officer long ago in the days when some ordnance officers at least preferred to see the stores on the shelves rather than in the hands of the troops. An armourer came to him one day in Victoria Barracks, Melbourne, and said he must have some oil if he was to keep the rifles in order. The ordnance officer protested that he had no oil. He then looked up at the armourer and saw that he was wearing an incredibly dirty hat. His decision came in a flash. "If you want oil, boil your hat and you'll get a gallon!!!" The Ordnance Service has certainly moved a long way since those days.

I would like to make just three points in relation to the Army today.

First, I believe we only have one Army and not two. We have got away from the useless hostility between Regular and CMF which existed. There was never any need for it, given a proper degree of tolerance in our outlook. And here I should like to pay tribute to the work done by the CMF volunteer officer and NCO, work which is by no means adequately appreciated by the general public. If the CMF is to continue to flourish, we must have a steady flow of young men who elect to serve on as volunteers after the completion of their National Service. We will only get them if they are conscious that the country as a whole appreciates their efforts.

Second, we are closer today to the people as a whole, the people who nourish us in men, money and

material. No armed service can be of high morale unless it has this public esteem. It is something which cannot be purchased; it is only acquired by great efforts and it can be quickly written down by acts of ourselves or our troops which do not conform to the highest military standards.

Third, we have a system of fair and impartial administration in which merit ultimately reaps its own reward. The individual no doubt at times feels that he has been hardly done by, but that does not invalidate the truth of any general conclusion. To those of all ranks who are prepared to work hard, the opportunities of advancement in all fields were never brighter.

As to the future, we, in common with other Armies, face great problems. We have in the first instance to refresh our accumulated store of knowledge of warfare in tropical countries. Then we must find the answer to the problem of preparing for, and of fighting, war under the new conditions imposed by the use of A and H weapons. There is room here for all of us to exercise our imagination and our skill to the fullest extent.

In conclusion, I want to wish this Journal continued success. I was happy to be able to launch it on its way some years ago and I am glad to see that it has taken its proper place in the scheme of things as we expected it would. But it can only flourish as long as it can find enough contributors within the Service to give it a flow of informed and thought-provoking matter.

Lieutenant-General,
Chief of the General Staff

The PROBLEM OF THE WEST

This paper was written by a syndicate of students of the 1954 Course at the Australian Staff College. The task set the syndicates was to prepare a paper on: "The Appeal of Communism and the ways in which this can be counteracted by the democratic nations."

The names of the officers who comprised this syndicate are: Major J. Fooke, Royal Autralian Signals; Major P. W. Cook, Royal Australian Infantry; Major L. Franklin, Royal Australian Army Ordnance Corps; Major R. I. U. Khan, Pakistan Army; Major R. H. Bourne, Royal Australian Armoured Corps.

IT has been suggested that the present state of tension in the world may be interpreted broadly in two ways. One way is to regard the Cold War as a moral struggle between two ways of life, between freedom and tyranny, between good and evil. The other is to consider it a struggle for power between Russia and the U.S.A., with the remainder of the world tending to one side or the other with varying degrees of eagerness or reluctance. In support of the latter case it is sometimes argued that Russia would have attempted expansion in Europe and Asia whether the Communists ruled the country or not, and that the U.S.A. would have resisted that expansion regardless of the political hue of Russia's rulers. Those who support this view conclude, therefore, that Communism is a secondary, if not irrelevant, issue in the Cold War.

This interpretation underestimates the importance of the communist ideology in the struggle for power. In some countries now under Soviet domination the way was prepared by local groups which claimed adherence to Marxist doctrine. Communist groups throughout the world follow policies laid down in Moscow. The existence of such groups indictates the power of Marxism. The appeal of that doctrine can lead to disruption, subversion or to revolution. In the present circumstances such activity amounts to aid to Russia.

The first step, therefore, must be to analyse the appeal that communism makes to the Western world and to the countries outside the Soviet bloc.

The Appeal of Communism.

The Russian Example.

Russia claims that her unprecedented rise to power is due to the fundamental truth and virtue of her doctrine. The extent to which the acceptance of Marxism is stimulated by these claims can only be conjectured. Nonetheless, Russia stands as a concrete example of a

state professing to conduct its affairs on communist principles. The implication is that the first step, at least, towards the classless society envisaged by Marx is a practical possibility. Whether that ultimate goal can ever be reached is also conjectural. Despite their confidence in the final result, the Russians are willing to admit that the present system operating in their country is but a phase in their development. However, they are quick to point out comparisons favourable to themselves between the living standards under the Bolsheviks and those under the Tsars, and this despite civil war, invasion and a generally hostile outside world. The magnitude of the Russian achievement in industrialization, the mechanization of agriculture and in various major capital works cannot be disputed. Moreover, there appears to be no reason to doubt that, given a reasonable period of peace, those standards will greatly improve.

The fact that Russia is a ruthless dictatorship by Western liberal standards is viewed with equanimity by her admirers. They aver that, in Russia, even the dictatorship of the proletariat is necessarily a gradual process; the initial burden of illiteracy, ignorance and peasant hostility, among other obstructions, cannot be cast off in a few minutes. The burgeoning of the Machine Age, the vast works already accomplished, are due to the enlightenment of the Kremlin and the power of communism. Communism irrigates the desert, brings flowers to the wilderness, stands for the life of plenty for Everyman.

The picture of Russia as a land of hope and of fulfilment has been delivered to the world by every possible propaganda means. To the unemployed, the under-nourished and the under-privileged of other lands such a picture can exert an attraction. The attraction does not necessarily lead to a desire for emigration to the Soviet; the result may be an examination of local conditions in the light of the Marxist critique. The outcome of such an examination is considered further in the following paragraphs.

The Moral Appeal.

"Before Marx the theory of communism was but a series of moral aphorisms. Marx supplied it with a strategy. Lenin and his disciples have turned it into an applied philosophy."

In these words Laski indicates a way in which communism can exert its appeal. There is a streak of utopianism in most men; it is the driving force of most reformers. Whether guided by religious dogma or by mere self-interest, the power of righteous indignation is very great.

Barbara Ward, no fellow-traveller, has written: "The Western world is struggling with an irrational and intractable contradiction at the very centre of its political system, between the pretensions of a nation state and its inability to meet the reasonable demands made upon it. . . . The traces of economic instability and national conflict at the very heart of the Western system cannot be dismissed as minor blemishes . . . They are the most effective entry-points for communist propaganda."

The energy of Western society has unleashed nationalism, science and industrialism in the world, and has not yet succeeded in bringing those

forces under rational control. Some effects of this failure will be considered later; for the present it is sufficient to observe that the honest reformer as well as the habitual malcontent will not be short of reasons for complaint. In consequence, either may be tempted to compare the practices of his society with the precepts of communism.

Communism is more than a mere political programme. It is a philosophy and a creed, an attempt to establish a comprehensive body of doctrine covering the whole of man's social, economic, political and intellectual life. In this its claims are parallel to those of the Roman Catholic Church and its priests are no less loyal, self-sacrificing and skilful than the Jesuits. A creed capable of arousing such devotion and enthusiasm, aided by all the modern resources of propaganda, must win converts unless opposed by an equally fervent faith. To those whose faith in older creeds has been shaken or shattered by rationalism the new beliefs may be attracted as by a vacuum. It may be significant that in Catholic France and Italy the percentage of communist votes recorded in recent years has been about 25 per cent. of the poll.

The Ideological Appeal.

The philosophical basis of revolutionary communism is materialism combined by Marx with the dialectical and relativist rationalism of Hegel. Materialism was a revolt against Christianity and against a metaphysical idealism which believed in spiritual values and pure ideas as the ultimate reality behind the material universe. Politically, it attacked the privileged classes on the ground that their solicitude for men's souls formed a convenient pretext for neglecting the requirements of underprivileged men's bodies. The Marxist variation teaches that the ultimate reality is material and, above all, economic.

The primacy of economics in Marxist theory and the great importance placed upon economic studies in modern life may be coincidental. But it cannot be doubted that the material standards of living of the masses and the economic foundations of the social order occupy a prominent place in contemporary life and thought. Marx's acute awareness of the implications of industrialism and the thought contained in the statements of Barbara Ward quoted above may make an interesting comparison to the seeker after knowledge or to our newly-awakened rationalist.

The Marxist philosophy is also dialectical. For the Hegelian conception of the conflict of ideas from which a new synthesis emerges Marx substituted the conflict of classes and their interests. It was asserted that both processes move along certain lines which can be determined by rational investigation. From the concept of the class struggle, together with the recognition of the essentially dynamic nature of social phenomena, Marx deduced that history is the key to reality. This led to the doctrine of the inevitability of socialism. This idea, combined with the opinions of prominent non-communist economists that capitalism must decay because of its intrinsic contradictions, provides a powerful weapon for communist proselytisers. If economics has a profound effect upon the life of the West in modern times, and if the economic position

of the West is founded on capitalism, and if capitalism is doomed, and if socialism is inevitable, where does the West go from here? Such might be the discourse offered our earnest student by a dialectical comrade.

The relativist element in revolutionary communism is ideologically the most destructive Marxist weapon. By removing all absolute values and making everything relative to a given stage in the historical process, the actual foundations of liberal democracy can be dissolved. The relativist view of history has gained wide recognition in modern times even among non-communists. "By (this view) the reason of the individual can have *no* independent validity. His thinking is conditioned by his social situation, and that situation in turn is determined by the stage reached in the historical process." (E. H. Carr). Accordingly, the sanctity of the individual personality fades and the welfare of the class assumes its place.

Liberty and equality are revealed as mutually exclusive and the only practical proposition in the triumvirate of ideals is fraternity. The universality of the communist appeal is derived perhaps from this source, the tenet of the brotherhood of man. An appeal based on such a basic Christian ideal, an appeal for the fraternal partnership of the working people of all nations, may explain, to some extent, the willingness of communist groups in the Western world to abandon patriotism and similar loyalties. Also implicit here is the moral principle of non-discrimination on the grounds of race, creed or colour.

The Political Appeal.

Lenin has said: "Proletarian democracy is a million times more democratic than any bourgeois democracy; the Soviet power is a million times more democratic than the most democratic bourgeois republic." "The Soviet system is the maximum of democracy for the workers and peasants; at the same time it means a break with bourgeois democracy and the rise of a new universal-historical type of democracy, namely, proletarian democracy or the dictatorship of the proletariat."

It is a mistake to condemn these statements as mere propaganda. They show that the Communists recognise degrees of democracy. They do not despise democracy; they claim to have the only genuine variety. The distinction to be drawn is the difference between political democracy and social democracy. "The challenge which Soviet democracy presents to the West is a challenge to complete the unfinished revolution of Cromwell in England and Robespierre in France."

The Communist argument is that democracy in capitalist countries is, in the final analysis, democracy for only the propertied classes. To the Communist the antithesis to democracy is plutocracy or aristocracy, not dictatorship, as many in the West are apt to consider. In the "century of the common man" it is possible for alien interpretations of these loose terms to creep in unsuspected.

Under the political heading it is convenient to consider nationalism even though that subject might well have been treated under different heads. It is not intended to deal with European nationalism despite

the interesting trend towards "supra-national" authorities and talk of federation. The principal concern here is with the rapid rise recent years have seen in movements for national sovereignty and self-determination in Asia and Africa.

In the face of these movements the colonial powers have been compelled to withdraw, more so in Asia than in Africa. It is difficult to establish the extent to which communist ideas are responsible for these awakenings. But it is easy to see the use communism may make of them.

For these peoples who have achieved independence from the West and for those who sooner or later will wish to follow their example, the words "imperialism" and "colonialism" are anathema. It is significant that in all cases there is little industrial development, agricultural methods are primitive and wide extremes of social and economic inequality exist. None of these countries has been reared in the liberal democratic traditions of the West, so that democracy of any kind is little more than an academic expression. The masses aspire to release from poverty and hope that their independence will bring it. To date it has been convenient to hold the colonial powers responsible for their penury. The inexperience of governments and the lack of trained administrators are now important factors. If the aspirations of the masses are not satisfied, at least to some extent, the appeal of communism, carried, perhaps, by intellectuals trained in Europe, may sway their countrymen to further experiment.

The Economic Appeal.

The idea of the Welfare State and the policy of full employment are comparatively recent innovations to the West. As avowed governmental policies they illustrate the modern realization of the dependence of the individual upon the adequacy of the state to foresee and prevent economic instability and personal insecurity. Critics of these policies claim that by them individual initiative is sapped; advocates claim that the citizen requires these insurances and that it is a recognition of the modern trend to mass civilization. The communist interpretation which might be offered to our patient student is that these concessions on the part of Western governments are not so much in the line of liberal democracy as unwilling expedients to bolster a failing cause.

In preceding paragraphs mention was made of irrational elements in the economic system of the West. The trade cycle, the alternation of boom and depression in, roughly, ten-year periods, is one such element. It is only in relatively recent years that economists have made any claim to understanding the causes of this cycle. The effects are, however, well known. These effects constitute one of the most powerful weapons of communism.

From economic instability stems fear of unemployment. When unemployment is widespread and the reasons for the recession are not apparent, or are incomprehensible, communism gains strength. Because of the far-reaching effects of fluctuations in the economy of the U.S.A., resentment readily arises against that country in these circumstances.

Summary.

In the foregoing paragraphs no attempt has been made to argue the case against communism. On the other hand, it has not been possible to do more than suggest some of the ways in which communism exerts its appeal. This appeal is not only to idealists, psychopaths and would-be dictators. It may touch a responsive chord in many of those who consider either themselves or others underprivileged or improperly neglected. As such people constitute a considerable proportion of the world's population, the task of countering communism is a considerable one. The task is rendered more difficult by the validity of some communist criticism of Western democracy.

"Marx's strength lay in what he attacked, not in what he promised."

The Counter to Communism.

It would be presumptuous to suggest that there is an easy way to combat communism. As suggested above, the communist appeal is most complex, affecting, as it does, every aspect of our way of life. But before examining the problem further, one point should be made clear.

In the opening paragraphs of this essay a distinction was drawn between the moral and power politics interpretations of the Cold War. At this juncture it appears desirable again to clarify our purpose. If communism is taken to mean Russia then the principal aim of our policy is political. If it is taken to mean Marxist ideas then the moral aim is predominant. At times these aims may appear to clash. For example, the assistance given to Yugoslavia, an avowed communist state in the Marxist sense, is a political action. To ensure clear thinking it is necessary to keep firmly in mind the particular aim in a specific situation. In the limited space of this essay only generalizations are possible. However, it is true that considerable confusion does arise from misunderstanding of aims.

To halt expansion either directly by Russia or indirectly through her associates the immediate political policy must be one of containment. Militarily, the West holds the advantage on paper, although far greater Communist forces are deployed at present. It is therefore necessary to increase the standing forces of the West, both in Europe and around the perimeter covering the heartland of Russia. It is not possible to defend the whole of this perimeter, so that the establishment of highly mobile reserves in places of strategic importance may be necessary. Partial mobilization may be required. In furtherance of this defensive policy, regional pacts of collective security such as NATO and the proposed SEATO may prove advantageous. In the latter case the full and willing co-operation of independent Asian countries appears to be necessary.

Containment in the military sense is a negative policy. More positive is the attempt to remove the poverty and other difficulties of underdeveloped countries by financial and technical aid. In this way the breeding grounds of communism may be destroyed. No one can pretend that this is a short-term policy. It requires large capital investments and loans, educational and training assistance, the provision of machinery for industry and agriculture, and so on. In short, spectacular developments are required if the political aim is to be achieved.

A shorter-term policy and one requiring immediate attention is the provision of adequate food and employment for these peoples. It is desirable from every angle that such aid is rapidly followed by the establishment of sound trade relations with the peoples of these under-developed countries. By trade the national pride of newly-independent countries especially is not affronted and the burden to assisting nations' economies is reduced.

The burden of providing aid will be heavy in any case. The expenditure by Australia of only £3 millions a year on Colombo Plan aid is quite futile. The Cold War on the political front cannot be won with anything short of an all-out effort.

There is no less a problem with many of the developed countries, especially in Europe. The economic situation of the West generally is so dependent on stability in the U.S.A. that international agreements to eliminate the fluctuations of the trade cycle must be arranged. Governments must ensure their own stability so far as it lies within their power. If this requires the acceptance of the principle of "planning" in economic matters, then that principle must be accepted.

The counter to the appeal of communism arising from the picture of Russia as a land of hope and opportunity is necessary more in the tired and dispirited countries of the Old World than in the young democracies. In France the importance of full employment and balanced trade accounts cannot be over-stressed. It is within the power of the other Western countries to arrange this.

The distrust and suspicion existing between the nations is a strong deterrent to harmonious action. In this regard the existence of international bodies such as the United Nations provides something like a safety valve. But more is obviously required. If most distrust arises out of fear for national security then security must be ensured. In the short run this may mean military measures. In the long view the wider interest may demand the abandonment of restrictive national sentiment.

The ideological pressure of communism may well compel modification to our social and economic system before such changes would have occurred in the evolutionary process. How to achieve this whilst still maintaining the elements of individualism considered essential to our way of life is an urgent problem for the best brains available to the West. For the moral issues involved call for the illumination of our ideals and a fervour for their achievement or pursuit.

In this struggle for the hearts and minds of men all of our moral and material resources are required. If co-existence with the Soviet bloc is to be achieved—and this is vital if suicide is to be avoided—then the West must win the willing co-operation of the rest of the world. It can do this by demonstrating that it offers a better, fuller, richer way of life than communism.

INFANTRY AND AIR POWER IN MALAYA

Brigadier F. H. Brooke, DSO.

THE campaign in Malaya, now in its sixth year, has had the natural result of developing techniques of all kinds. Those of the ordinary infantry battalion are by now well known, and much has already been written about jungle operations by infantry. The work of the other arms follows a more or less normal pattern, with the possible exception of the Royal Artillery, whose small force of one battery is almost always employed on harassing tasks rather than direct support.

It is the air forces from both Royal Navy and Royal Air Force, which provide the essential, day-to-day support without which the Army could achieve little. Their contribution to this long-drawn-out war is one that is too often taken for granted. Their tasks are the usual ones of reconnaissance, transport support and offensive support, but the methods developed in the last few years are in many ways unusual, though striking in their effectiveness.

First, reconnaissance in its two main forms — visual and photographic. In both cases the object is to discover and pinpoint the enemy's camps or the cultivations that he uses in deep jungle to supplement his food supplies. No other type of target is discernible in the jungle, and even these are difficult enough to see and pinpoint. The photographic cover provided is of an amazingly high standard, particularly in view of the cloudy weather, which often persists for long periods. The normal scale is 1:10,000, which gives good definition and excellent results with the ordinary pocket stereoscope, which is much used at brigade and battalion level. In addition, expert interpretation is available in the normal way. Battalions are normally supplied with loose prints or mosaics for all major operations.

Visual reconnaissance is flown by the Austers of the A.O.P. or Light Liaison Flights, which support brigades. Most missions are flown with a definite object in mind, and are often "follow-ups" of information gained from air photographs or other sources, such as captured documents or surrendered bandits. In addition, the Austers may be required to find landing zones (L.Zs.) for helicopters, drop our propaganda leaflets and also occasionally to drop supplies on a small scale. Another fairly frequent task is the "contact recce" to find a missing patrol or to

—*From "The Infantry Bulletin," U.K.*

give an exact fix to a patrol which is in wireless contact but not too sure of its position. This is achieved by the simple process of putting up smoke from a No. 80 grenade or smudge fire when the Auster is heard overhead. This is, of course, a revival of the "contact patrol" used in the first World War to pinpoint the position of the leading infantry.

The next type of support is transport support in the three forms of supply dropping, casualty evacuation and troop lift. Supply dropping by Valetta aircraft has been brought to an even higher stage of development than was usual in the later stages of the Burma Campaign. It is, in fact, the normal means of maintenance for any troops operating in the jungle for more than a few days at a time. Drops to individual platoons are quite normal, and are carried out with clockwork regularity and precision. It is indeed bad weather which defeats a Valetta pilot, and it is extremely rare for a platoon or company to miss a drop or have it delayed for more than a few hours. The whole process is so good that the infantryman tends to take it for granted. Indeed, the complete dependence on air supply is the finest, if silent, tribute to the Air Forces.

Casualty evacuation by helicopter has been a feature of the jungle war for some years, and a very important one. The morale value of knowing that if one is wounded, sick or injured by accident one can be taken to hospital within perhaps an hour or two needs no stressing. Many hundreds of soldiers have been lifted out of tiny jungle clearings, and in not a few cases a life has been saved. At the least, a man, say with malaria, has been saved days of miserable marching, and, most important, the patrol can carry on its task unencumbered.

The advent of the larger troop-carrying helicopter has almost revolutionized the jungle war. Carrying four or five fully equipped infantrymen, the helicopter can deliver them to a point in a few minutes which would otherwise take hours, or, more likely, days, of marching. Not only is surprise achieved, but the troops arrive in the area perfectly fresh, with their rations untouched and with no "lame ducks." Forces can be moved quickly to cut-off positions, and withdrawn without loss of time for fresh operations elsewhere.

It has been found by experience that no special training is necessary apart from five minutes' briefing and practice at the actual emplaning point. Deplaning is perhaps a little difficult sometimes, as the helicopter may be unable to touch down and be forced to hover above obstacles such as tree stumps or boulders. In this case, troops may have to jump from about four to six feet up, swarm down a ten-foot rope or even be winched down from above the level of the tree-tops. In many cases, Malay, Gurkha, African and British troops have done all these things for the first time on an actual operation. Winching is, of course, the most difficult and the slowest, but is quite practical where no suitable L.Z. exists. Soldiers of all races have taken very kindly to "helicoptering," and they are naturally only too appreciative of the fact that one minute's flying is generally the equivalent of anything up to two or three hours of hard marching. Provided that the distance of the lift is less than, say, 20 miles, it is pos-

sible for two helicopters to transport a complete company in a day. The normal planning figure is nine or ten sorties per aircraft per day, but this is often exceeded when conditions are favourable.

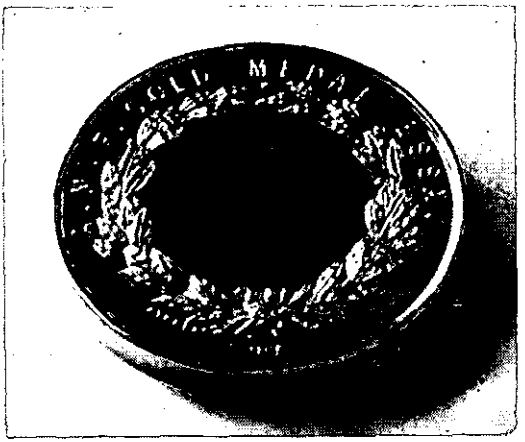
The last type of support to be discussed is offensive. This can take the form of strikes with cannon, rockets or bombs by Vampire or Comet fighter-bombers, deliberate attacks by Lincoln medium-bombers or harassing attacks with anti-personnel bombs by Sunderland flying-boats, which can stay in the target area for many hours. All these forms of attack have their special uses, but all suffer from the fact that worthwhile targets are rare and that when they do exist they are both difficult to pinpoint and extremely hard to identify from the air.

Many different devices are used to overcome these difficulties. These range from the use of searchlights at pre-determined positions for night bombing to target marking by Auster aircraft at low altitudes, using smoke bombs to indicate the target to the attacking aircraft.

Casualties to the enemy have naturally been small, but the moral effect of air attack is very great, particularly when the terrorist has been on the move for some time and is short of food. A successful air attack near a bandit camp has often resulted in individual surrenders—the bomb, rocket or cannon-shell representing the last straw to a weary and semi-starved man. As far as offensive air action is concerned, the jungle is certainly not neutral—it is positively on the side of the enemy! *But air attack is an* essential component of the whole effort.

Enough has been said to show the many and varied ways in which the Royal Air Force and the Fleet Air Arm helicopters can and do help the Army, and in particular the infantry, in Malaya. It only remains to say "thank you" to our friends in our sister Services.

GOLD MEDAL ESSAY



THE AMF Gold Medal Essay Competition is held annually with the object of encouraging the study of military subjects, stimulating thought, and providing all ranks of the Australian Army with an opportunity to express their ideas in a useful and constructive way.

The subject for the 1955 competition is:

"In World War I Australia provided a voluntary expeditionary force for service primarily in Europe and the Middle East. There was no direct threat to Australia. The expeditionary force was composed mainly of fighting units; it was organized on the lines of the U.K. Army, which provided most of the Communications Zone troops.

"In World War II a voluntary expeditionary force was raised for service initially in the Middle East. There was no direct threat to Australia and the U.K. again provided Communications Zone troops. When Japan became an enemy, the situation changed. There was a direct threat to Australia. Our Army was required to fight in tropical conditions, and our organization, equipment and training procedures had to be modified. The U.S. Army provided the bulk of the forces in the theatre, but we did not adopt their basic organization or equipment. To a limited degree we developed our own Communications Zone units.

"We now have a small Regular Army Field Force for active service under cold or hot war conditions. We have a CMF organization of fighting formations and Communications Zone troops nominated in peace, and

these can be available for war in a shorter time than would be necessary to form an expeditionary force. We are parties to three international treaties or arrangements, ANZAS, the Manila Pact (South-East Asia Collective Defence Treaty) and ANZAM. The U.S. is a party to ANZUS and the Manila Pact, while the U.K. is a party to the Manila Pact and ANZAM. It is improbable that we will be required to fight in Europe or the Middle East; the matter of our immediate defence lies in South-East Asia."

What are the problems involved in this situation, and how do you think the Army should be organized and equipped to meet them?"

The rules for the competition are:

The right to compete will be limited to officers and other ranks on the Active and Reserve List of the Australian Military Forces.

The essays submitted for the prize may be of any length, but must not exceed 10,000 words; if possible, they should be typewritten and submitted in quadruplicate. If this is not possible, essays may be submitted in written manuscript for typing at Army Headquarters before submission to the referees. In these cases, handwriting must be legible, as it will not be possible to refer queries back to the author.

The authorship of the essays must be strictly anonymous. Each competitor must adopt a motto and enclose with his essay a sealed envelope with his motto typewritten on the outside and his name and address inside.

The title and page of any published or unpublished work to which reference is made in any essay, or from which extracts are taken, must be quoted.

The judges may withhold award of the prize if in their opinion no essay reaches a sufficiently high standard.

The essays will be addressed to Secretary, Military Board, Victoria Barracks, Melbourne, S.C.1, the envelope being marked "AMF Gold Medal Essay," and must reach him not later than July 31, 1955.

The ARMY ESTIMATES

IN explaining the Army Estimates contained in the Budget for 1954-55 the Minister for the Army, The Hon. Jos. Francis, said:

"Federal Government has made provision this financial year for the expenditure of £72,185,000 by the Australian Army. It may be of interest to know why, and how, this money will be expended, and of the advantages it is hoped to gain.

"There are likely to be many changes in organization, equipment and tactics of fighting units with the introduction of more modern means of defence. The changes have become necessary because of strategic problems linked with the present international situation, and the possible use of atomic weapons in field operations.

"Details of the specific changes have still to be worked out. This problem will form the major subject for study by the Chief of the General Staff (Lt. Gen. Sir Sydney Rowell) and all senior Army officers during December next.

"General Rowell has made it clear that within the Army in the field there must be greater simplification of tactics and administration, and a restoration of mobility of the fighting soldier. This will lead to some streamlining of the administrative services, the most important element of which will probably be some replacement of road transport by helicopters and fixed wing aircraft for supply purposes.

"The second aspect of the change relates to the area of strategical importance, which is closest to us, and which is vital to Australia. The area is South-East Asia.

"It will be the constant aim of the Army general staff to gradually orient its tactical thought, its organization and equipment, towards the possibility of having to operate in this area.

"The re-establishment of the jungle warfare training centre at Canungra is directly related to this aim.

"Capital expenditure on arms, armaments, ammunition, mechanization, and equipment generally, including reserve equipment for mobilization, will this year reach the all-time high level of £18,402,000. This represents more than a 50 per cent. increase on last year's figure.

"Orders have been placed for the new 120 mm. infantry anti-tank weapon, in addition to the 3.5 Rocket Launcher and the Enfield Rifle Grenade. These weapons are standard equipment within the United Kingdom, and are capable of effectively engaging the most modern tanks and armour.

"The Army is also procuring new types of ammunition, including that for the new anti-tank weapons, and

20-pounder ammunition for the Centurion Tanks.

"It is also intended to procure this year quantities of special service jeeps and one-ton vehicles. These are essentially combat vehicles which will facilitate training in the latest techniques of war, in which mobility and cross-country performance will play an important part.

"The proposed expenditure of £4,273,000 on capital works, after providing for current projects, will permit continuation of the construction programme, to provide for the major accommodation needs of the Army.

"The requirements planned for this year fall broadly into the following categories:

Improvements to the living accommodation for the Regular Army;
New CMF training depots;
Improvement of existing CMF training depots, and provision of additional CMF camps;
Accommodation for technical base and training projects;
Improvements to accommodation for National Service Training Battalions;
Provision for married quarters.

"While there has been a big increase in the provision for capital expenditure, there have been decreases in some sections of Army activities.

"Estimates for civil services have been reduced by £250,000 to £3,775,000. Civilian services embrace a big component of technicians and tradesmen, and other specialists, working alongside soldiers in workshops, maintenance and servicing establishments.

"There is also a reduction in the estimate for general services by £419,000. Funds under this heading provide for £1,800,000 to cover expenditure of a general nature, which may be attributable to the administration of Army activities, or otherwise not specifically allocated to projects such as camps, the Royal Military College, Duntroon, and similar establishments.

"Estimates for the Royal Military College provide for expenditure this year of £224,000, which is a slight increase on last year's provision.

"The Government's policy has been planned to raise the status of the man in uniform; to make him contented in his environment, and secure in the knowledge that he has a career, and is playing an important part in the life of the community.

"Moreover, enlightened methods of training and instruction have removed much of the monotony that characterized the Army of yesterday. The need for specialization and the use of highly skilled aptitudes has completely changed the outlook of the Australian soldier.

"To provide for these services £18,500,000 will be paid in salaries and allowances and £2,650,000 for general expenses.

"Some idea of the administrative load which will have to be carried by senior officers becomes obvious with an analysis of the commitments for the CMF, which involves the movement of personnel, and the issue, return and overhaul of stores and equipment for 466 CMF units attending annual camps and weekend bivouacs. This work will entail the expenditure of £6,048,000 in pay and allowances, and £2,600,000 in general expenses."

DIEN BIEN PHU

Captain M. Harrison, Army H.Q., Eire.

PART II

This article, which is reprinted by courtesy of the Irish Defence Journal, was written before the Indo-China cease fire agreement was reached.—Editor.

Second Assault.

After 30 minutes' pre-H-Hour bombardment of all localities, an assault was mounted on *Isabelle* on March 30. This effort—probably a feint—was not pushed through.

At 1700 hours *Dominique* and *Elaine* were attached, while 105 mm. guns laid down fire. By 1900 hours the wire was cut and avenues opened by assault engineers. In far greater strength than previously, the infantry moved in, one division to each locality, making a total strength of some 10,000 men.

The object of this assault was soon noted to be the biting-out of a semi-circular wedge on the east side of the fortress amounting to about one-third of the entire fortress area.

On the ground the objective was *Baldhead Hill,* an area which, if taken, would dominate *Huguette* and *Claudine* and would provide sites for close observation of the southern end of the airfield.

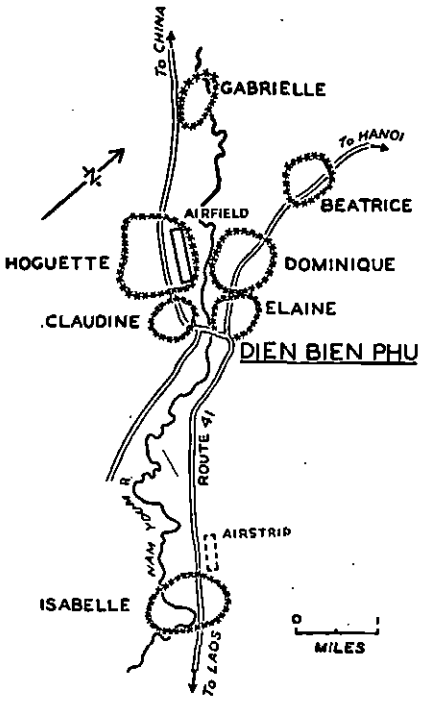
In one hour the Viet Minh divisions had gained the objective, a very limited one, but were then subjected to an all-out air assault. Everything that could take the air, from B-26s to Hellcats, was employed to pound the forward elements and to cut them off from their reliefs and supplies, which were still a little way back.

On that night successive counter-attacks were put in by Moroccan infantry supported by tanks, and by first light the situation was stabilised.

On March 31, *Elaine* was clear of Viet Minh, but *Dominique* was still occupied. The day being clear, air strikes were concentrated on the re-organizing infantry in *Dominique.* As the light began to fail, the defenders mounted a counter-attack on the areas pulverised by air strikes and succeeded in re-occupying *Baldhead Hill,* driving the Viet Minh back north-east, but not entirely out of the locality.

The succeeding day and night (April 1) were spent in attack and counter-attack to restore the situation in *Dominique;* it ended in stalemate, with the French tightening their eastern lines and conceding some ground.

A new area, *Huguette,* the north-west locality, came under assault



THE FORTRESS OF DIEN BIEN PHU

Situated on the border of North Laos and Tonking, the fortress controlled important Viet Minh routes leading south from China.

by the third remaining Viet Minh infantry division. Attacking shortly after midnight, on April 1, this formation soon overran the entire locality and exploited well in to the fortress but only in small groups, which were pinched out by an emergency rally of administration and staff personnel.

If General Giap had had sufficient reserves to back it up, this assault might well have spelled the end of the defence.

Aircraft were again out in force, bombing by flare light.

Between first light and midday, on April 2, repeated French counter-attacks were mounted in greatest possible strength, but without budging the Viet Minh, whose trench system now straddled the north-west end of the airfield.

For the second time the French found that even by day and at times of their own choosing they were unable to iron out the enemy lodgement.

During the night of April 2-3, a French attack north-west into *Huguette* was successful and at first light an attack into enemy positions in *Dominique*, in the north-east, also paid dividends, clearing the Viet Minh finally from *Baldhead Hill*. During this day the greater part of one battalion parachuted in.

To sum up, after this second assault the Viet Minh had pushed in the perimeter in three areas, *Elaine*, *Dominique* and *Huguette*. In the two latter areas the dent was about 800 yards deep.

The fortress, now reduced to a triangular area of some 2,500 yards side, was, however, still intact.

The greatest loss to the defenders

was the northern half of the airfield, now held by the Viet Minh. From then on, the parachuting of supplies (from a height of some 1,500 feet) called for great skill; in fact, appreciable amounts of supplies were lost, which meant for the garrison a diminution in effectiveness below the essential required to survive.

During this time the French were able to keep about 60 aircraft constantly over the fortress. But while there was some evidence that air power had slowed up the Viet Minh there is no evidence that General Giap's objectives had to be abandoned; his troops, in fact, appeared not to be affected by the massive strikes which caught them on the move. Conditions were very favourable for air strikes and, considering the absence of air opposition, concentrated nature of the targets, and small area of operations, it is a matter for wonder that air support did not play a more vital role.

It is not irrelevant, in view of this, to consider the question of what amount of conventional tactical air power will be sufficient to counter the horde tactics of Asiatic Communists.

The Second Lull.

On April 6 some 25 B-26 bombers began the long-term task of blocking-off the Viet Minh from their supply bases. Used in this role, the B-26 should have been far more efficient than the PB4Y Privateers and fighter types which had been diverted for the task. The total force of Marauder B-26 bombers then in action in Indo-China amounted to about 50, which were serviced entirely by U.S. technicians.

The advent of the Marauders was the climax to the build-up of air power for the support of the Dien Bien Phu.

All the other combat types were naval aircraft which in 1943 would have been rated first-class. They included, in addition to the Privateers, bomb-carrying Corsairs and Helldivers, Bearcats and Hellcats—all U.S. planes.

In Hanoi a new plan was formulated to counter the unexpected features of Viet Minh activity. These features included:

(a) The presence of a regiment of anti-aircraft artillery;

(b) The existence of truck convoys to supply those heavy items of equipment which could not be ported in man-packs;

(c) The complete change-over from their hit-and-run tactics of previous campaigns to the type of formal warfare waged by the Chinese in Korea, i.e., mass fire support for mass infantry assaults.

The new French plan was designed to seal off the supply routes and destroy the anti-aircraft guns. To effect this would require a sustained heavy bomber offensive and dive-bombing.

The aircraft best suited for these tasks were not at hand and for reasons not pertinent to this story were not made available.

Obviously, at this time a strong support drive from the Delta overland was considered. Nothing was done, however, to translate the consideration into reality, and while General Navarre's forces remained idle the fall of Dien Bien Phu was inevitable.

On April 7, an additional two companies of paratroopers joined

those dropped four days previously to bring them up to battalion strength.

As the interlude lengthened from days to weeks the French became optimistic. Most likely cause of the continuing lull was considered to be General Giap's inability to muster sufficient forces to break it. A contributory cause was, perhaps, one not much adverted to, the imminence of the rains, which would put an end to systematic air operations.

Air sorties, massive by any standard considering the size of the force supported, continued to grow in intensity. Upwards of 200 were flown daily.

The air plan of early April was shaping up well with its two objectives being implemented. Viet Minh gun sites and troop concentrations were incessantly plastered and simultaneously roads, dumps and depots on the routes from the north were destroyed.

Day and night an air umbrella was maintained to assist the ground forces. Flareplanes remained permanently on station during darkness to light up the area as an aid to defence. Supply aircraft increased the lift above the standard drop of 200 tons daily.

By the last week of April the dominant Viet Minh activity was that of burrowing, elevated to the level of a tactical operation and popularly called "nibbling." As they had done since the first days of the siege, every night Viet Minh sappers drove trenches from their lines 800 yards distant from the outer defences. They covered the completed works with the top sod so that by day they were invisible. As the pattern of the terrain in no man's land changed from foliage to scorched and pitted earth, so did the camouflage. By digging innumerable concealed saps and traces from rear to front the Viet Minh ensured that their assaults would have the advantages of cover from view and from fire.

The long saps ended in bunkers and fire positions, camouflaged and concealed, from which fire could be directed or brought to bear, or from which infiltrating patrols could depart.

The French countered these activities by sorties to fill in the saps and destroy the bunkers, or, where this was too hazardous, by constructing counter saps into no man's land.

Despite French effort, however, the Viet Minh burrowed right into *Huguette*, reducing it progressively.

This type of mole-like operation does not appear to have been a spur-of-the-moment development but rather a recognized technique resorted to when conditions demanded. From the very start it proved a great danger to the defence, but neither its extent nor purpose appear to have been appreciated.

Various writers have likened the "nibbling" tactic to the trench warfare of 1914-18, without harking far enough back to its true origins. The siege of Troy must have seen such digging, and down through the ages, when walled fortresses had to be reduced without the aid of gunpowder, the main task of the engineer was to build saps to the selected points from which the assault would eventually debouch.

Third Assault.

For three days prior to the attack on May 1, Viet Minh artillery

saturated the defenders; also used for the first time were multiple rocket-launchers firing eight rockets per salvo.

The third attack was according to standard procedure. Two hours before last light in dull and cloudy weather the avenues of approach were prepared. At 2200 hours—without artillery since the attackers were too close—all centres of resistance, including *Isabelle*, were assaulted.

At first light on May 2, *Isabelle* continued to hold out, but all other areas were severely beset. *Elaine* was in best shape and *Claudine* was half gone. The northern positions were untenable and had to be conceded. All remaining areas were now capable of close engagement by small arms fire.

A French counter-attack on this day resulted in the lodgment of the counter-attack force in pockets distributed among the attackers.

As the mists cleared, all available aircraft took to the air, but no close support was possible since friend could not be distinguished from foe. In an effort to buy time, General Giap's reserves and artillery positions were saturated by B-26's, Corsairs, and all types which could carry bombs.

At the end of the day the Viet Minh were some 500 yards from fortress H.Q.

During the night of May 2-3, the rains came and flooded trenches, bunkers and staff installations; but there was no renewal of the attack.

On May 3, General Giap called on the French to surrender, but they refused.

Between 0100 and 0400 on May 4, pressure from the north on *Claudine* heralded a renewal of the fighting. Volunteer paratroop reinforcements helped to thicken up the phalanx, but the remaining days were spent in hand-to-hand combat until at 1800 hours on May 7, formal resistance ended with the destruction of their dumps by the French.

In one last gesture *Isabelle* emptied its two-battalion garrison into the plain in a charge against forces which outnumbered it by ten to one.

Some Lessons.

Various Western commentators, more sympathetic than accurate, have seen the massacre of the defenders where none existed.

It is an axiom that, where modern defence is based on fortifications which are not to be outflanked, attack must be "set-piece," i.e., planned, rehearsed (where possible) and mounted with a preponderance of all arms, including specialist equipment and overwhelming infantry.

Where "set piece" attack is not to be mounted (the defence not being so secured as to warrant it), the attacking force needs a superiority of about three to one locally in order to be reasonably sure of success. This is standard Western doctrine.

Against the 10,000 French combatants so prepared and so supported by aircraft, General Giap would have been violating Western doctrine if he had launched his assault with less than 30,000 troops. Prudence and experience would demand of a Western general in Giap's position that he wait for some 100 tanks and a tactical air group. Prudence would also demand an eye rearwards to ensure adequacy of supplies. All these requirements being fulfilled, the Western general

might then commit his 30,000 infantry as part of an all-arms force and expect to overcome the opposition in two to three days.

Without benefit of these refinements and ingredients for success, General Giap did attack and was victorious. His assault technique, dictated by the nature of the defences, had to be based on: (a) very limited objectives, and (b) mass manpower—both resorted to as the next best thing to firepower, mechanized, airborne, and man-carried. The Viet Minh, too, had to select the dirty nights when minimum air support would be available to the defenders. In retrospect it appears they made a virtue of this necessity.

The employment of mass against a limited objective can be studied well in the second assault, since coherent accounts, based on hindsight, have been released.

Thrust in from the west, this two-division operation aimed itself at *Baldhead Hill,* committing one division to each of the localities *Elaine* and *Dominique. Locally, the effect* must have been overwhelming; the zone of action being so narrow and the objective so close, the attackers must have been echeloned in great depth. The popular newspaper terms, "horde tactics," "human sea charges" and the like, applied to the Viet Minh tactics, express the idea of savage abandon and fail to convey that this is deliberate tactical policy to which there is no better alternative.

The tactic called "nibbling" has been referred to in previous pages.

The suggestion by a staff officer to a Western commander faced with the task of destroying a fortress such as the Dien Bien Phu, that he resort to medieval saps, traces and burrows in order to gain a start-line or take ground would be sufficient reason for the initiation of a psychiatric report on, if not the prompt removal of the staff officer. Yet the Viet Minh commander, deliberately using this tactic from a very early date (during which its intent was not appreciated) must have reckoned on its value and considered that it would repay him. That it did repay him, not alone as a means of approach but as a means of capturing and occupying ground, is clearly evident. Like mass manpower, it was not a primitive subterfuge but the best means at hand to achieve the end in view.

Both these techniques, while they were eminently successful in this one instance, are hardly likely to be employed again in combination in Indo-China, for it is inconceivable that the French will again permit the same set of circumstances to arise. The answer, of course, to such siege tactics—if it cannot be atomic air power—is speedy relief by a large diversionary column of all arms. Long periods must interpose between attacks while the attacker gathers up more masses and makes more complex his warrens. During these periods the attacker must be put on the defensive by an adequate threat to his build-up. There is no evidence that air power alone can constitute that threat.

The prolonged resilience of the garrison proved that they were neither overawed by the "human seas" nor seriously disconcerted by the underground penetrations, and intensive artillery and mortar fire. If any relief had been afforded them by a diversionary column the internal evidence points to the distinct

possibility that they would not alone have broken out, but, such was their mettle, that they would have wrested from Giap, however temporarily, the initiative he had so long enjoyed.

It is not easy to understand why no relief column ever took the field.

Air Power.

French domination of the air over Indo-China was all promise but no achievement. A reader of the reports might be excused if, generalizing, he condemned the efficacy of air support as a whole and for all operations.

Air power cannot be represented by aircraft which are few in number and inadequate in quality for the role thrust upon them. Tactical air support, in the modern sense, was absent at Dien Bien Phu; there were too few aircraft and even these were of a poor vintage.

If it is conceded that air power did not exist in Indo-China, then the plain inference is that such power is an expression of military strength so demanding as to be incapable of attainment by any but the few major powers.

Late in the siege the French asked for a hundred B-29's—a force which would have provided a bomb lift of at least 500 tons. These bombers, if made available, would have been used to support the French garrison indirectly by destroying the Viet Minh lines of communication, their dumps and depots. To be really effective, however, such an effort should have been mounted in anticipation of the situation. By the time the need was realized, it was too late.

One probable effect of such bomber raids would have been the incursion of Chinese MiGs.

Apart from the heavier bombers, a strong element of up-to-date tactical aircraft was required. Fighter bombers and dive-bombers in appreciable numbers, say, 200 of each, would have found useful employment.

The cargo and transport aircraft available, which must have amounted to some 250 machines, were adequate.

Of course, the idea of placing on aircraft the onus of breaking a stranglehold, such as was maintained by the Viet Minh, was a misconception of the capabality of tactical air power operating with conventional armament.

Means certainly exist, in the form of atomic weapons, to neutralize, if not to destroy, such concentrations as were made by the Viet Minh, but even so the task would have been no simple matter of a few hours' bombing. The fact remains that with the means available—some 200 combat aircraft—the desired end could not be achieved.

There are some valuable lessons to be learned from the use of aircraft at Dien Bien Phu. Until we read what the acknowledged commentators on air matters have to say, the average infantryman can see in the story only the failure of air power.

Conclusion.

The final word has to do with appreciations or estimates of the situation. The French in Indo-China consistently have had as their military object or aim the *neutralization* of their opponent's power. They were bent on rendering ineffective and impotent all Viet Minh effort;

in pursuit of this object, they fostered every means, political, economic, educational and military.

For their part the Viet Minh had, in previous years, no particular overall object, their forces being used mainly as agencies of political conversion and consolidation. This year it is plain the Viet Minh commander has a clear-cut object. It is the destruction of the French military forces.

As Dien Bien Phu bears witness, General Giap appears not alone to have the plan to implement his aim but has also the means to achieve it.

Admittedly, war is not an exact science. Its principles cannot be considered to be laws in any mathematical sense. They do not constitute a specific theory or a method, and they cannot be applied with equal value at all times. Indeed, in many cases one principle must be applied at the expense of another.

Classical authorities have long realised that despite established doctrines and principles designed to assure military victory, war is frankly a gamble. War will continue to remain fraught with possibilities of errors, miscalculations, and ultimate defeat. Its elements are simple, yet their interplay is complex.

—*General John E. Hull, U.S. Army.*

What Education Does a Soldier Need, Anyway?

Warrant Officer C. M. D. Flinn,
Australian Army Educational Corps.

ONE does not need to pose the question, for it is asked enough in messes and canteens, and not only by those whose need is obvious—to others! Therefore it is worthy of close scrutiny. The ability to read and write is a basic one, and need not concern us. But what of that considerable group who can just read and write? How much frustration is caused at all levels by that near-illiteracy which fails to attach correct meanings to simple words contained in an order, which garbles the simplest applications and falls short at any demand in the way of framing a report or writing a letter. There is no universally accepted interpretation of literacy but mere ability to write one's own name is not literacy in an Army sense.

Communication is the basis of Army cohesion. Admittedly, much of the communication affecting the soldier in the ranks will be oral. Clear orders, cleanly delivered, are as essential to the commander at his command post as to the telephonist relaying them in the gun pit, where comprehension must be instant. It is worse than useless for an officer or NCO, after the event, claiming that a direction meant something to him, if to the troops hearing it meant something else. In this connection, affectation in speech is as much a barrier to understanding as mumbled or slurred speech; the goal is split second understanding, therefore the manner of delivery as well as the matter is of importance. The soldier must cultivate the virtues of clear thinking, direct speech and immediate response, for in his calling, when the pressure is on, after-explanations can easily involve post mortems. Fortunately the training ground in which such habits may be inculcated is already in existence. Modern instruction methods recognise the desirability of group participation; it is to the interest of everyone to improve his capacity for self expression, and the need is recognized in Army Trade Schools just as much as in Army Education Centres. The written and printed word plays such an obvious part in the organization of an army in its higher reaches that the point does not need to be stressed; some other ranks need read little but routine orders, but if their role is to be fully effective not many are limited to this requirement, and their numbers are fewer each year as war becomes more technical.

It is recognized that armies require non-specialists as well as technicians; it is maintained, however, that there is an irreducible minimum of knowledge which a soldier in a modern army must possess, and without which he will be likely to develop personality defects which will militate against his effective use in any category. An ignorant man is a suspicious man—in the closed environment of a camp, a tendency to concealment of a basic lack of understanding may easily involve a soldier in disciplinary consequences from an action not necessarily rooted in delinquency. An inarticulate man fails notably in any effort at self justification. Furthermore, the ignorant will be exploited by the unprincipled in the army or out of it—suspicion in the victim hardens into moroseness. The primary requirement of a soldier—ability to work with others to a common end —becomes less possible to the man forced back on himself; he gravitates in self-defence towards the company of others with a grudge. His private and social life is determined by his company; his narrower outlook delimits the score of all leisure activities too. He broods, he blames the army for a hemmed-in feeling which is real enough. Not unnaturally, his ego asserts itself in an outbreak — a more or less serious breach of civil or military discipline. For a brief period he has the limelight, but in paying the inevitable penalty he is driven in on himself still more. Need this happen? The answer must be NO. For a man so placed, it is probably easier to help him in the controlled environment of an army than it would be in civilian life. The solution, however, is not easy. One hard fact emerges: Despite universal compulsory education in this country, many a youth still leaves school ill equipped to cope with civilian life. How much more must he learn to become a really effective soldier? Perhaps in giving him an appreciation of what is demanded of a soldier, it is possible to give him, too, that sense of belonging and of self respect which will pre-dispose him to self improvement. Troops more than civilians live in a world of air travel and helicopters, time and space relationships. Let us review briefly what minimum knowledge a young soldier must have if he is not to become a menace to his comrades.

Take the infantryman. What the infantry rifleman knows, he must know thoroughly and apply instantly—he more than others may find himself utterly dependent for survival on what he carries in his head. Terrain and contours and their interpretation on ordnance maps must be intimately known, i.e., he must know his scales, which means he must be no stranger to ratio and proportion, to multiplication and division. He is taught to estimate ranges. All his basic concepts involve measurements and must be thoroughly known. A driver may not need much mathematics, but the irreducible minimum of braking distance relative to speed is a mathematical relationship, and average mileages are not what they seem to the uncalculating. Caterers and cooks working in rationing schedules are dealing all the time with weights and measures, fractions, percentages and rations. If their knowledge is hazy, waste or deprivation will result. A storeman needs his mensuration in estimation of storage space and his weights to calculate load limits.

In the field mortar-men are dealing all the time with angular measure, anti-tank gunners and machine-gunners with distance, range and the speed of crossing targets; the signalman who provides their communications requires an understanding of simple, or not so simple, electrical formulae. All need the basic equipment of the rifleman —all need to be able to find their way about, to interpret maps, to obtain a grid bearing from a compass bearing, allowing correct magnetic variations. Engineers and Artillery, working hand in glove with Survey, co-operate in terms of mathematical calculations; to all the application of any angle, whether it be a line of sight, the adjustable arm of a clinometer, the barrel of a gun, or the traverse of a Bren, involves the realization that something turns on a radius. Computation of line, range and angle of sight involves solution of right-angled triangle by the use of log tables, and a Technical Assistant (RAA) is all the better for a working knowledge of algebra, geometry and trigonometry. The interdependent cluster of men who constitute an AA gun site, comprising radar station, command post, height finder and predictor crews and gun numbers are all working on complex instruments—each man in his function subserves the functions of all the others; an error anywhere along the line could nullify the desired result in an action. More than an elementary appreciation of mathematical data is necessary for AA personnel to remain efficient—and as interchangeable as circumstances might render necessary.

All soldiers have their private lives, which they keep to themselves, but smooth adjustment in that side of their lives has an important bearing on their effectiveness as soldiers. Almost all have, or anticipate having, budgetary problems, insurance problems, property problems; into all these calculation enters. Most soldiers overseas have been confronted with the necessity of assessing monetary equivalents. When it dawned on them for the first time that Australian money was not universal money, how many among the less literate thought that someone was "getting at" them? What! £1/5/- Australian worth only £1 sterling! How many drivers in World War II found themselves driving trucks with kilometre speedometers? How many gunners for long or short periods were estimating speeds in metres per second instead of miles per hour or measuring 100 grades to the quadrant instead of 90°?

In the supporting workshop units, of course, measurements and calculation are the prerequisite for everything that is done. Marking out, the reading of machine drawings, the use of verniers and micrometers, knowledge of angular measures for estimation of the cutting edge of a lathe tool, the list might be multiplied ad infinitum. Instrument mechanics, vehicle mechanics and electricians require all that a fitter knows of mathematics, plus the theory and working of the instruments under repair and the ability to calculate in optics, electricity or magnetism. In the framework of telecommunications, control equipment and the electronic group in general, an extensive knowledge of mathematics is necessary to keep abreast even of new developments.

What, then, of the motives of the soldier? In these days of psycho-

logical warfare, can they be ignored? Only to our peril. Surely we need something better than passive order-takers lacking all conviction, who "pack up" and whose negative attitude is a burden to their betters when danger threatens. In the early days of the Korean war it was suggested that many UN troops, sapped by easy living, proved unfitted for the task confronting them, and fell easy prey to the weapons and propaganda of the enemy. The fierce glare of publicity has been focussed on their subsequent behaviour as prisoners of war. It must be pointed out, too, that much of the criticism daily levelled at most of our institutions in the day to day controversies in the press have a dissolvent effect on the loyalties of those who have no idea of the long climb upward and the arduous struggle of our forebears to obtain the institutions which are still free to be criticised. It is a notorious fact, easily demonstrable, that many of our soldiers have left primary school with an abysmal ignorance of the past history of their own stock.

Well aware of the "catch" in things and highly aware of trends in the sport and entertainment world, their knowledge of the real world of human beings is very sketchy and largely negative. We are living in days of passionate propaganda; at the same time, the nature of modern warfare, with its enforced dispersion and greater subdivision of effort and interdependence, make the integrity of the individual soldier a matter of far greater concern than in the days when intensified drill and the moral support of his comrades at his elbow fortified his will. The modern soldier, by force of circumstances, is a lonely man; the slit trench and the fox-hole have replaced the continuous trench of World War I.

In an article developing this theme, "Bridging the Gap," in AAJ of September, 1954, the following points are brought out in quotations:

> "The more men think themselves isolated, the more need they have of high morale";

and again:

> "If a man knows what he is fighting for and has an intimate personal need to win, his personal zeal in battle will tend to triumph over his fear . . . the soldier must have the war aims within his skin, operating as personal motives to fight."

We live in an age when ideas are weapons and words are winged and barbed. They may serve us in explaining our way of life and how it has been attained, or they may be used by an enemy to confuse the minds and destroy the will of men already hopelessly muddled in their thinking.

In all armies of the past it could have been maintained that education was theoretically desirable; in the army today education is so heavily involved in all its basic training requirements that it cannot be divorced from them. Of necessity, the positive dynamic security based on conviction is needed in our fighting forces, as never before, and the individual must be made aware of his "place in the scheme of things" and the part he can play in his service to his family, his community and his nation.

TWO SHILLINGS WORTH

Captain J. H. A. Young,
Royal Australian Infantry.

FOR the then comparatively large sum of two shillings, in September 1912, could be purchased the Commonwealth Military Journal. It was edited by the General Staff (Training Branch) Headquarters, Commonwealth Military Forces, Melbourne.

This edition was Vol. 3, No. 3, and its list of contents may arouse the interest of present-day readers. The table of contents reads:

1. Some Features in Squadron Training.
2. The Army and the Signal Service.
3. A Graphical Means for Avoiding Some Computations in Topography and Artillery.
4. Hints on the Solution of Tactical Problems.
5. Motor Cyclists—A Reply to Major A. A. Holdsworth, AIC.
6. A comparison of British, French and German Methods of the Employment of Artillery (Duncan) (Gold Medal Essay, 1912).
7. A Plea for the Better Training of the Battery Signaller.
8. Progress in Aeronautics.
9. Higher Tactics in Manchuria.
10. The War in the Mediterranean.
11. The Strategical Action of Cavalry.
12. An Account of the Battle of Liao Yang.
13. Notes.

One hundred and fifty-four pages of small type, including maps and diagrams were required to convey the articles to the 1912 reader.

Item 11, The Strategical Action of Cavalry, was originally delivered as a lecture at the Royal United Service Institution, London. In the chair at the meeting where it was presented was Major-General E. H. H. Allenby, CB, Inspector of Cavalry, in a few years to be conducting cavalry operations in the Middle East.

Apparently in the August issue of the same journal a Major Holdsworth had managed to arouse first the interest and then the ire of "Critical," who hastened to reply with Item 5, Motor Cyclists. He listed the Major's advantages of these new-fangled additions to the art of war against his declared disadvantages.

Advantages.

Do not stampede.
Do not neigh.
Easy to conceal.
Need not be tied up.
No feeding or watering.
Not vicious.

Noise of exhaust can be throttled down.
Rapidity of marching.

Disadvantages.

Won't always start.
Very noisy in motion.
Difficult to conceal in numbers.
Tied to roads.
Grass and water more easily found than oil and petrol.
Take up great road space.
Slowness across country.

"Service in the Royal Flying Corps should offer opportunities of a useful career, compressed into a few short years of strenuous endeavour on a high plane of human effort—the cause of unselfish patriotism—while full of adventure and with considerable possibilities of scientific and mechanical attainment, following on the preliminary acquirement of manual dexterity in a fascinating pursuit. The risks involved in a practical study of aerial navigation in its present stage of development—not mere flying as a mechancal art—are likely to be considerable, and the appointment of flying officer would seem to be hardly open to a poor man . . ."

So wrote Major Bannerman-Phillips in Progress in Aeronautics (Item 8).

Major Ellershaw in "A Plea for the Better Training of the Battery Signaller" (Item 7) introduces it by saying:

"The gunner appears to me to be somewhat in the position of a board school child, for whom a paternal Government provides a feast of education in a variety of subjects extending from the alphabet to the piano, none of which can be digested in the short time available."

The War in the Mediterranean (Item 10) was a continuation from a previous edition of the Commonwealth Military Journal. A complete excerpt makes interesting reading:

"TOBRUK. On the morning of March 11 two battalions of the 34th Infantry and a mountain battery moved out from the trenches as escort to a company of engineers, who were to trace out a new fort. About midday a considerable force of Turco-Arabs advanced to within 2½ miles of the work. The mountain battery and some guns in a fort opened fire, and two and a half battalions of the 20th Infantry were ordered to advance against the enemy's left, whilst the 34th Regiment made two successive frontal attacks with the bayonet, and the 20th Infantry moved up and checked a turning movement against the Italian right. At about 4 o'clock the impetuosity of the enemy's attacks diminished and shortly afterwards they withdrew.

"The Turkish reports assert that the Italians were driven back with a loss of 2,000, but the Italian official account states that 1 officer and 12 men were killed, and 3 officers and 70 men wounded."

"The Higher Tactics in Manchuria," by Major Redway (Item 9) was introduced by the following paragraph:

"As time goes on and more is learnt about the Russo-Japanese War—the Japanese story is still to be told—the more profitable becomes our study of the events that fill up the period between February, 1904, and May, 1905, in the region between the Yellow Sea and the Sea of Japan, where the Tartar and Mongolian civilization came into

collision on territory that was essentially neutral. Even within living memory there have been wars that lasted longer, wars that employed larger forces, wars that cost more money, wars that yielded greater military results; but this, the latest international struggle, appears to involve, if not solve, most of the questions that agitate statesmen, soldiers and sailors, who are concerned in what nowadays is euphemistically called national defence; and as the dust of controversy clears away and the battle of the books dies out there emerge the salient features of what will prove to be the historical conception of the conflict."

The artillery corps members of today may read the following excerpt with professional interest tempered with thought. Captain Wynter's article, "Employment of Artillery in the Field" (Item 6) produced it.

"Yet tradition had its bad side. There are professional prejudices which die hard, the outcome of the gunner's inclination to feel that 'he is not as other men are.' Prince Kraft, in his letters on artillery, shows how deleterious was the effect of this feeling in the Prussian artillery during part of the 19th century, and that its survival led to the complete failure of the arm in 1866. Speaking of artillery officers, he says, 'The little they had to learn more than other soldiers was exaggerated by them into a great science . . . . and surrounded by an impenetrable veil of mystery. . . . They also found pleasure in posing . . . . as members of a "scientific" arm and as something "peculiar." Naturally this led to dislike on the part of their comrades in arms. The artillery, too, regarded themselves tactically as an independent arm, and in 1866 used to leave the firing line to "refit" when they came under infantry fire. To their own infantry they failed almost always to give any support whatever. This spirit has not been peculiar to German artillery.' "

The Notes, Item 13, contain much of interest. The following examples are thought-provoking.

Aviation in America.

General Allen, the Chief of the Signal Corps of the United States Army, recently took a flight around the Statue of Liberty in a Glenn-Curtiss hydro-aeroplane. He states that in the near future 120 of these bat-boats will be purchased for coast defence, while the Army will have 15 squadrons of 8 planes, with 285 officers and 720 men. Five training schools are to be established. The original outlay is estimated at £800,000, and the annual cost £200,000.—Army and Navy Gazette.

The Gyropter.

"The aeroplane or gliding machine has several essential defects which limit its military utility. It can neither hover over one place to observe, nor can it ascend nor descend vertically. For years past we have been promised a machine which shall sustain its own weight without moving forwards, but the helicopters and winged machines so far tried have been failures. The 'gyropter', designed by two French engineers, Messrs. Papin and Rouilly, promises better results. It is propelled and sustained by a large two-bladed screw of novel pattern. The shaft and the midribs of the blades are hollow, and the screw is revolved by compressed

air, which is blown into the shaft and escapes tangentially at the end of the blades, on the principle of the reaction wheel or Barker's Mill. Good results have been obtained experimentally, but it has yet to be determined whether the gyropter will prove to be any more than a scientific toy. But any attempt to improve upon the present type of gliding machine is to be welcomed."—Army and Navy Gazette.

The War Shot in the Making.

On page 426 of this number of the Commonwealth Military Journal is a diagram which was recently used by Major F. B. Heritage, Commandant, School of Musketry, Randwick, to illustrate a lecture delivered by him on the above subject. The diagram conveys to the mind at a glance the different stages through which a soldier must pass before he can be considered thoroughly qualified in the use of his rifle under all circumstances.

One page of this journal was devoted to information relative to the Gold Medal Essay Competition. The then Chief of the General Staff chose the following as the subject for 1912-1913:

"As far as can be foreseen at present, upon what systems of organization, administration and command, will the rapid mobilization of an Efficient Field Army in Australia be dependent, after the Universal Training Regulations have been in force for eight years? And by what administrative arrangements will units best retain their territorial connection, in order that they may be kept up to war strength in the field?"

Whilst reflecting that the winning essay would make good and interesting reading today, the thought comes to mind, "Who was the winner, what was his subsequent career, and where is he today?"

"As we told you the other day, we shall stand by you and Wilson in any well-conceived action irrespective of results, because no-one can guarantee success in war, but only deserve it."

—Winston Churchill to General Wavell on Nov. 26, 1940.

BOOK REVIEW

THE MEMOIRS OF FIELD MARSHAL KESSELRING (William Kimber and Company, 46 Wilton Place, London, S.W.1).

To read the memoirs of a number of Hitler's generals one would think that they led very sheltered lives. They proclaim their failures as being due to Hitler and their successes to their own mliitary brilliance. The latest addition to the chorus is the work of Field Marshal Albert Kesselring, who was released in 1952 after serving a sentence for his war crimes, and whose memoirs have recently been published.

Originally an Army Officer, Kesselring transferred to the Luftwaffe in 1953. Second only to Goering in the Luftwaffe, he made a name for himself in the Polish campaign and commanded an Air Fleet in the invasion of France. In 1941 he directed the Air Fleet co-operating with Rommel's Africa Corps in the Western Desert, and was often personally in the midst of the fighting. As Commander-in-Chief in Italy in 1943 and 1944 all German Forces in that theatre were under his control. For the war crimes they committed he was, on the cessation of hostilities, tried by the Allies and sentenced to death.

This autobiography of one of the foremost military leaders of the Third Reich, who by his own admission "enjoyed Hitler's unreserved confidence," throws much light on the German method of making war.

"Smiling Al," a wartime nickname still retained, lacked the dash of Rommel, the Prussian vigour of von Rundstedt and the inventive flair of Guderian, yet by sheer diligence he fashioned a military career almost as brilliant as theirs. In his story Kesselring describes in a rather stolid style his progress through the war, and through his often complex narrative there shines the concept of the soldier whose chief duty is to obey orders—ALL orders.

Kesselring claims that he was above politics, and seems to have felt only slight qualms about the rising power of the Nazis before the war. When the Army's Chief of Staff, General von Fritsch, was railroaded out of his post on trumped-up charges of sexual perversion, Kesselring's conscience was easily salved when Goering told him, "with satisfaction in his eyes," how he had secured the information. Kesselring continued: "I had not the slightest doubt that Goering's hands were clean. I presumed the same of Hitler."

In Kesselring's opinion one man alone had unclean hands—Ribbentrop. Who was responsible for the war? Smiling Al says: "I must lay the blame on one man—Ribbentrop—who gave Hitler irresponsible advice . . . and, what is more, Goering agreed. . . . When Hitler announced

September 1, 1939, as D Day, Goering rang up Ribbentrop and howled into the phone, 'Now you've got your —— war. It's all your fault.'"

Kesselring argues that the Luftwaffe was not defeated in the Battle of Britain because even after the engagements of September, 1940, German aircraft continued their attacks on British industry into the spring of 1941. He says that aircraft were squandered, and would have been better employed in a co-ordinated assault by air, land and sea, but hastens to add that it was not his fault. The reason why the invasion of Britain—Operation Sea Lion—was not seriously planned still puzzles Kesselring. He attributes this to "Hitler's fondness for the English" and his hopes for a negotiated peace. Once, when he was discussing Britain's plucky defence, Hitler remarked: "Of course, they are a German people too." To write like that now may be expedient, but the truth would be more enlightening.

Kesselring exhibits only contempt for the Italians with whom he worked for three years. He says they showed poor fighting qualities and that "Allied assaults on Italian divisions invariably resulted in loss of the position." He goes on to say that "It was only to be expected that as the war went on the Italians would try to make things easier for themselves by ratting to the other side." He claims credit for averting the destruction of many of the culturally rich towns of Italy and denies that the Germans ever put the monastery of Monte Cassino to military use.

Early in March, 1945, Hitler appointed Kesselring to succeed Runstedt as Commander-in-Chief in the West. Even at this late stage he still apparently had faith in the Fuhrer, for, with the German armies in a state of collapse he could write that Hitler's analysis of the situation was "lucid," that the Russians would be crushed and after that the Germans would sweep the Allies into the sea.

After the war Kesselring was tried before an Allied War Crimes Tribunal, found guilty, and sentenced to death on the charges that he was responsible for the reprisal massacre of 335 Italians in the Ardeatine caves and more than 1000 Italians elsewhere. His defence rested on the grounds that: (a) Reprisal action was in the hands of the SS; (b) Partisan warfare is not covered by the rules of the Hague convention; (c) Hitler had ordered an arbitrary 10 to 1 reprisal rate. Points (a) and (c) at least are unconvincing, since in evidence he said: "If there is any guilt, it is mine and mine alone." His death sentence was commuted to life imprisonment, but in 1952 he was released on the grounds of ill-health.

As President of the "Stahlhelm," one of the largest groups of German ex-servicemen, Kesselring still wields considerable influence. He strongly supported EDC, saying: "The war opponents of yesterday must become the peace comrades and friends of tomorrow."

Formerly an ardent Nazi, Kesselring is certainly no democrat today. The spirit of his writing is clearly expressed in his closing lines: "I made the decision in order to contribute something towards a truthful record of a good piece of German history, to the raising of a monument to our magnificent soldiers, and to helping the world to recognize the face of war in its grim totality."

—J.G.S.

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