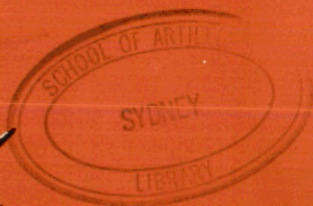


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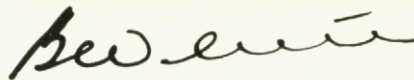
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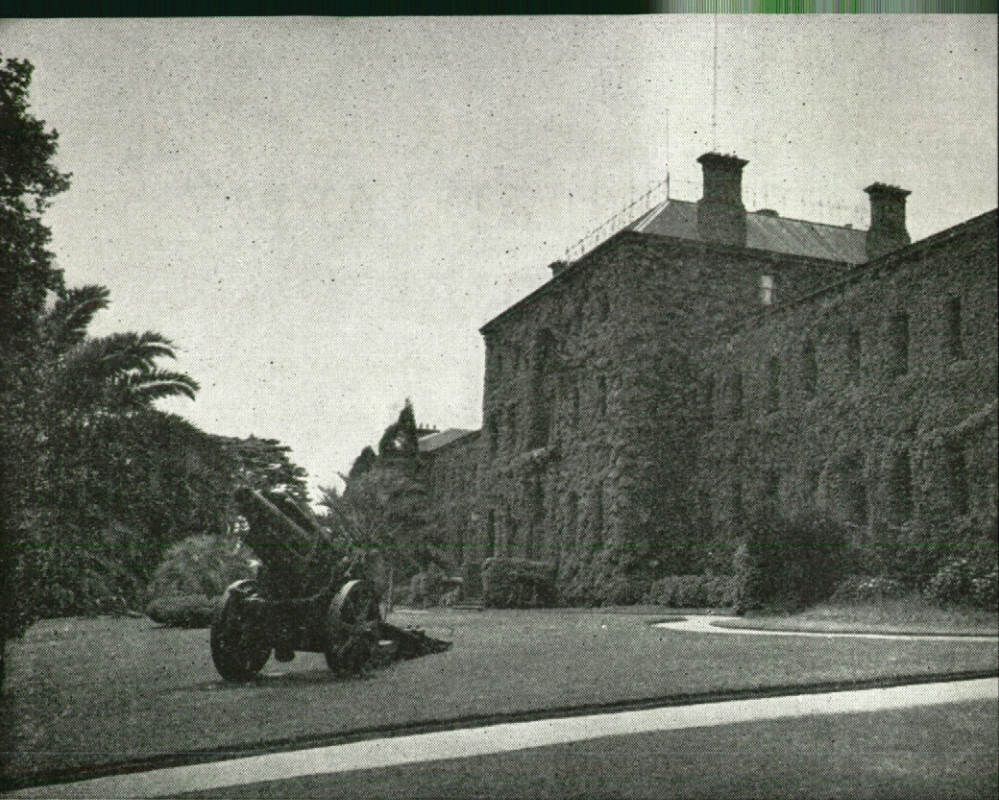
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The Pattern of War in South-East Asia

LIEUTENANT-COLONEL M. P. O'HARE, OBE

Royal Australian Artillery

"Words must have no relation to actions . . . sincere diplomacy is no more possible than dry water or wooden iron".

— Stalin

Definitions

THE following terms with meanings shown are used in this paper:—

- (a) *Cold War* The current world-wide struggle between the ideologies of the Communists and the Free World, waged by all means short of international armed conflict.
- (b) *Global War*. All-out war between the USA and USSR and their allies, which could involve every known weapon system, including gas and bacteriology.
- (c) *Limited War*. A conflict which is less in scope and scale than a global war. It is a war of limited aims, and cannot include the intention of total subjugation of the enemy nor the acquisition of any of his basic ethnological territory. Typical examples of limited wars are the Crimean War 1854, Franco-Prussian War 1870, Russo-Japanese War 1899, Spanish Civil War 1934, and the Korean War 1952. (As there is a tendency to speak of limited wars as if they are minor and unimportant, the costs of the Korean War are shown at Table A).

- (d) *Nuclear Weapons*. All fission or fusion weapons however delivered, or any deliberate use of radioactive contamination by air, land or sea. For further shades of meaning Kiloton Weapons are used to mean the smaller atomic types and Megaton Weapons for the larger, so called, Hydrogen types.

Aim

The aim of this paper is to deduce the more likely type of conflict into which Australia could be drawn in South-East Asia with the view of ensuring a reasonable uniformity of our concept of operational doctrine.

Introduction

In any field of human endeavour, and particularly in war, it has not been possible to predict the future with complete accuracy. The most elaborate military appreciation and plan is at the best an estimate, and can never be more than an estimate, as basically it depends on what its authors deduce the enemy has, and what he will do; on their estimate of the sustained performance of their own troops, equipment and factories, and generally on forecasts on such matters as weather and civilian morale.

THE KOREAN WAR

(a) Personnel (42 active allied Divisions)

Nation	Killed	Wounded	PW or Missing	Total
ROK	47,000	183,000	70,000	300,000
USA	25,604	103,492	10,748	139,844
UK	749	2556	1146	4451
Turkey	717	2156	236	3109
Canada	294	1203	47	1544
Australia	253	1018	61	1332
Greece	169	543	3	715
France	150	740	6	896
Netherlands	122	432	3	557
Belgium — Luxembourg	100	350	6	456
Columbia	100	300	—	400
Thailand	64	547	4	615
Philippines	59	219	55	333
Ethiopia	50	150	—	200
New Zealand	32	78	1	111
South Africa	14	—	23	37
TOTAL	75,477	296,784	82,339	454,600

(b) Aircraft

	Destroyed	Probably Destroyed or Damaged	Damaged	Total
Enemy	1018	177	1027	2212
Allies	110	—	889	999
Allied Naval Aircraft	—	—	—	541

(c) Destruction Claimed by Allied Aircraft

Vehicles	81,890
Rail Cars	10,480
Bridges	1100
Tanks	1300

TABLE A

There are numberless examples to prove that in spite of overwhelming superiority, the forecast of events in the strategic field is seldom, if ever, accurate. The problem is even greater and accuracy less likely in attempts to predict policy and grand strategy.

At no time, then, has a nation been certain of the military future, yet the national planners must always prepare and maintain a basic defence policy in order that defence preparations are aimed at the most likely threat. The solution adopted is to forecast the most probable course of events and prepare for war with sufficient flexibility to meet the inevitable violent changes imposed both by the enemy and by factors which could not be foreseen.

The basic defence of the West rests politically on a series of regional defence organizations. As UNO becomes increasingly ineffective as an instrument of peace, pacts such as NATO and SEATO permit the alliance of smaller powers to their Western neighbours under a system of guarantees. This ensures that a small nation can rely on powerful support if it dares to resist Communist efforts for its assimilation. Certain countries have elected to steer the course of neutralism and others, such as Tibet, are geographically so remote from Western influence that no action can be taken to help them. Thus it is certain that Communist action against a pact member could lead to war, but some neutrals are strategically so placed that Communist domination of them would so prejudice the security of adjacent pact members that counter-measures, perhaps leading to war, would be inevitable. In dealing with these uncommitted neutrals the safest Communist method is to foster a pro-communist revolution or *coup d'etat* which apparently represents the will of the majority. The disruption of the Baghdad Pact has not yet caused war but the Western position in the Middle East has further deteriorated. On the whole periphery of the Eurasian continent

there are potential political stresses which could lead to war. Lead to what sort of war?

Before considering the position in South-East Asia it is necessary to examine the problem of a future war from the global viewpoint. There is a wide divergence of opinions on the pattern of another war. These vary, on the one hand, from the opinion that nuclear weapons will not be used at all, just as gas was not used in World War II, and that limited wars of the Korean type are the only possible future conflicts, on the premise that nuclear weapons will create such chaos that organized warfare is not possible. On the other hand there is a large group who envisage wars in which nuclear weapons are used on suitable targets as an extension of conventional fire-power, and consider that it is only necessary to develop organizations, methods and means to cope with this situation in the same way as armies learned to cope with the replacement of muzzle-loaders by long range artillery and machine guns.

These extremes are only part of the argument and are the views held by the single-minded thinkers at either end of the scale, who reduce any problem to two courses and select one. The great majority fail to reach any valid conclusions on the form of a future war because they find it difficult to comprehend either of the above conceptions without an answer to the following basic questions:—

- (a) Is it possible to wage limited nuclear war without the areas, aims and targets extending until inevitably there is global war with the resultant destruction of most of the world's resources?
- (b) In the event of a global war is it possible in terms of material, political aims, and morale, to continue to fight a "broken-backed" war after the initial nuclear exchanges?

- (c) Would a nation, possessing nuclear weapons, accept or admit defeat (failure to achieve even a limited aim) in a conventional, or limited nuclear war, without in desperation making use of the full scale of, or an increased scale of, nuclear weapons?
- (d) Would a neutral prefer help to Communist domination? That is, if we are to act as policemen against Communist burglary, our weapons should be congenial to the helped.

Factors

An argument must proceed from one or more basic premises. Agreement as to what are the basic premises is however, difficult, but as a starting point, the following factors are postulated as the basis of a future war situation.

- (a) Under conditions approaching technical parity, global war would bring such universal disaster on both sides that the deliberate initiation of such war is an unacceptable course for both USA and USSR. All war is political in origin and is fought for a political aim: no rational political aim could be served by global war. Therefore, USA and USSR will try to avoid political or other action which could lead to global war. Irrational action cannot, however, be discounted completely.
- (b) Australia is unlikely to fight alone; our policy will be to operate in the framework of a regional alliance in conjunction with the USA and, if possible, the United Kingdom.
- (c) Australia will not have nuclear weapons of her own production, nor be in a position to decide unilaterally on the use of any such weapons placed in support by allies.
- (d) Except for the possibility of local trouble in such places as New Guinea, Australia will be drawn into war as a result of the world-wide struggle between Communism and the West. From the Australian point of view any war will be strategically defensive, with the aim of halting Communist encroachment into the free world, and not for the purpose of converting forcibly some existing Communist country.
- (e) The aim of the Communist powers is world domination and they will press this aim by every means short of global war. The world-wide political, economic, psychological and ideological struggle will continue on an increasing scale. The present atomic stalemate or balance of terror lasts, however, only as long as the USSR estimates that the USA holds the technical advantage. If at any time the Russian leaders conclude that a surprise nuclear attack could lay waste both the USA/UK potential, and all but an absorbable amount of the USA/UK capacity for retaliation, then the Russian leaders would commence immediately a global war. It is folly to believe that such factors as humanity, mercy or justice ever occur to a Russian or Chinese leader except for propaganda purposes. Again it is almost as certain that if the USSR considered that the state of technical parity was such that the USA/UK did not dare to initiate nuclear warfare, world-wide conventional war would be started to conquer in the first instance the Afro-Asian world island.
- (f) Any relaxation, or any concessions or negotiations entered into by the Communists will be purely tactical for the purpose of dividing, confusing and weakening the military potential of the free world.
- (g) Communist propaganda will continue to stress that limited war

is certain to expand into global war, and concurrently they will strengthen their own capacity for limited war.

(h) Communist methods. There are four methods by which a power can apply pressure to achieve political aims —

- (i) Overt military activity.
- (ii) Covert military activity, subversion and *coup-d'état*.
- (iii) Propaganda and psychological media.
- (iv) Economic pressure.

When any one of these means seems unlikely to achieve results at acceptable cost and risk, more emphasis will be placed on one or more of the remainder.

Consideration

Armed Forces

The West must reach any likely area of conflict by air and sea, and maintenance of forces engaged must be by air and sea. As yet air is not economic in manpower and material for major movement and logistic operations. Consequently naval forces are required to provide escort and protect the shipping necessary to move and maintain any force overseas. Again circumstances can arise in which missile support of land forces can be provided effectively only by naval units.

The employment of air power in limited war is complex. When the ground forces are committed in an undeveloped theatre as is likely for Australia, the necessary air support for that theatre will be largely based outside it. Due to difficulty of movement within the theatre and the distance from the main support areas, a considerable degree of air support will be essential not only for logistic purposes, but extensively and imperatively for reconnaissance and direct support both nuclear and conventional.

Thus the employment of sea and air power, without which our ground forces are helpless, automatically extends a

theatre of conflict to the surrounding seas and to the adjacent naval and air bases. This is likely to be a vital factor in any attempts to confine geographically a future conflict.

People

The greatest danger is that a little war will get out of control. The probability of this must increase with the length of the conflict. There are no formulae for the stability of limited war. The longer the struggle goes on the more likely are the political aims to assume an exaggerated significance, consequently preventative action by the West must be quick and decisive to stabilize a situation before the servo-mechanisms of limited war lose control.

A democracy has to convince its citizens that they are getting sufficient security at minimum cost, but the outward signs of power are becoming increasingly confusing to the people. Rising costs, the conflicting claims for military power, and the known capacity of weapons, intensify their longing for security and safety and, therefore, democratic governments in matters of defence prefer to stress decrease in costs without reminding the voter of the increase in risks. Four matters bear on the democratic problem in computing policy and strategy for the future —

- (a) The accelerating development and snowballing cost of military technology.
- (b) The importance of the political and psychological effects which armed forces exert short of war.
- (c) The radical and rapid changes in political relations with and among new countries and newly independent peoples.
- (d) The increasing pressure which can be exerted by economic and geopolitical methods.

If a country goes to war with obsolete weapons it is facing defeat. However, to arm and train completely a nation at any one stage can only be done at the

cost of industrial development, and this armament could well be ineffective when war actually starts. The greater and more diversified the industrial development of a country, the greater is its military potential. When does design cease and quantity production begin? In this matter the aggressor has all the advantages.

Deterrence

Deterrence in some form or another has been the mainstay of Western policy since World War II, and has been reasonably successful in preserving some peace for the hard core of the free peoples. Neither the USA nor the UK have acted as if they were convinced that any deterrent can indefinitely prevent war. From 1945 the US possession of the atom bomb was an effective deterrent; the explosion of the Russian atom bomb in 1949 added limited conventional war as a keeper of the peace. After the USA hydrogen bomb in 1954 Massive Retaliation was cited as the safeguard. The Russians had the hydrogen bomb in 1955 and the USA defensive concept then adopted the idea of limited nuclear war. We are, both technically and strategically, on the defensive.

Deterrence is not only a matter of massive retaliation, it is based on the whole defence structure. The quality, strength and versatility of the armed forces and the known determination to use them must be such as to convince the enemy that he cannot profit from military aggression in any form. Defence by deterrence removes all hope of ideological victory. Military power is provided by the three services in combination, and the moral, economic and spiritual factors which compose the nation. The press-button weapon age is not yet here and is not likely in the foreseeable future. Events in Korea, Viet Nam, Hungary, the Middle East and Taiwan indicate that conventional forces will be the mainstay of deterrence for many years to come.

The Sino-Soviet *Bloc* is maintaining its cold war pressure on all fronts and is engaged in continuous aggression, direct

and indirect, to harass, divide, impoverish, confuse, dismay, weaken and destroy the free world. The *Bloc* has 8,000,000 men under arms, organized into 400 divisions, and these are backed by 500 submarines and 25,000 aircraft. Russia alone plans to mobilize 500 divisions in the first year of war. Some planners stress the assumption that a war may not last a year, but in the past technological improvement has not resulted in shorter wars. Hitler's blitzkrieg war lasted 5 years for 40,000,000 casualties.

It seems then, that the ultimate dilemma is a global war which both sides lose, or a conventional war which the West cannot win. The best course is to avoid war. Therefore, we must supplement massive retaliation with lesser deterrents and if this fails we must be able to repel lesser aggression by means commensurate with the threat without bringing on total war, whether conventional or nuclear. It follows, therefore, that the policy of the West should define —

- (a) In what contingencies do we rely on massive retaliation to deter?
- (b) In what circumstances are we determined to fight a limited war and with what tactics, forces and weapon systems?
- (c) What is our aim in limited war?

However, international war with conventional weapons is conceivable only by ignoring realities; history does not appear to support attempts to turn the clock back.

The New Weapons

For exercise purposes in the past we have assumed a low rate of fire for nuclear weapons. The sponsored reasons, which have varied annually, included shortage of ammunition, difficulty in target acquisition, survey problems and computation, difficulties in handling and movement, and the problem of dealing with liquid propellents. Today, with the introduction of solid

propellents and mobile launchers, the rate of fire is comparable to that of heavy artillery. Any limitations in rate of fire in future will be imposed only by political considerations and tactical policy. Before examining the use of nuclear weapons in tropical warfare it is necessary to take cognisance of two developments now coming forward. Firstly there is the anti-missile missile system. This is likely to be effective in operations with narrow fronts where enemy missiles can arrive only from a restricted arc. Secondly there are now in service effective homing ground-to-air missiles of the HAWK type which would rarely miss a slow flying aircraft at 30-50,000 yards. These developments mean that —

- (a) Only a proportion of missiles will get through.
- (b) The mass use of helicopters, drones and slow flying aircraft in the forward area may be extremely hazardous.

At this point it is desirable to recall briefly several other well-known factors which affect the tactical employment of nuclear weapons —

- (a) *Flash.* Unless time is wasted, or a costly and complex radio system, including an unjammable receiver for each soldier, is adopted, a serious number of our own troops will be incapacitated by flash. Very few serious burn casualties are enough to swamp the medical capacity of a whole modern nation.
- (b) *Fall-Out.* Contamination of our own areas, of neighbouring and neutral territories, and of the indigenous population is likely to proscribe the unrestricted employment of nuclear weapons under all weather conditions. Fuses are not infallible and a proportion of ground bursts are inevitable.
- (c) *Blowdown.* In timbered country blow-down is likely to have a very serious effect on movement.

Particularly will the movement of counter-attack forces be restricted, and similarly that of attacking or advancing troops unless the terrain permits them to encircle and seal off the target areas. Resupply and casualty evacuation will also be hampered.

- (d) *Casualties.* Following a severe nuclear exchange in populated areas, the treatment and feeding of casualties and displaced persons is likely to present a task out of all proportion to our forces and facilities in the area. This situation may well be accentuated in the advance.

Geography

The terrain, vegetation and climate of the South-East Asian area and of the Island Chain need not be described in detail in this paper. The problems of blow-down, visibility, accurate and timely meteor, prolonged cloudy conditions, mud, poor communications, disease and prevailing winds are obvious and have been met before. For nuclear war there is the matter of target identification in terrain where the enemy's characteristics of rapid foot movement and infiltration will make it extremely hard to find out where he is, or where he has concentrated if he is attacking; and his skill at concealment and capacity for digging will make it equally difficult for us to locate a suitable nuclear target when the enemy is defending unless we are in a position to locate and pin the enemy by a series of conventional company or perhaps battalion attacks which could well be unacceptably expensive. In World War II in New Guinea and Burma the accurate location of enemy concentrations sufficient now to constitute a nuclear target were rare events. With the nuclear threat, the possibility of the enemy concentrations for attack, or his main line of resistance, being found by conventional patrolling is even more remote.

When we defend it will be necessary for us to hold, in sufficient strength, a position which cannot be outflanked in

order to force the enemy to concentrate. This is a real problem at any time in jungle, and in open country would require massive obstacles the adequate defence of which may well cause us to present the enemy with a profitable series of targets. Again we are not likely to have troops on the ground when the enemy attacks and as our buildup will be slower than his, our power to force him to concentrate in order that the score can be evened by our use of nuclear weapons is severely limited. If the indigenous forces do not impose some delay it seems improbable that the West can intervene effectively in the early stages; even nuclear attack on his lines of communication beyond the borders of his homeland may not impose sufficient delay. The enemy will plan for speed, he will have detailed local knowledge and an effective fifth column, and he has the choice of time and place. It is difficult to see how we would position sufficient strength in time to compel the enemy to form a satisfactory nuclear target. Our necessarily small initial forces could well become a series of Dien Bien Phu islands in the invading sea. We cannot afford to squander a company, the enemy is prepared to sacrifice brigades.

The Australian troops are not trained in nuclear war, nor are they equipped to fight it. The majority of our commanders and staffs will be unfamiliar with the practical use of nuclear weapons and not enough of us are inured and practiced in mobile operations in rough country.

From the above it can be seen that the tactical use of nuclear weapons in the initial stages of a war in South-East Asia is not such a simple solution to the problem as we have been hoping. The problems of logistics, movement, protection of launching sites, the machinery for command, survey, blow-down, the civil population and morale are so great that suitable nuclear targets must be found and adequately engaged to compensate for our disabilities.

If tactical use of nuclear weapons in the initial stages is not certain to halt the enemy, it is for consideration whether

nuclear interdiction could be effective. Targets such as headquarters, ports, depots, railways, airfields and communication centres would appear to offer a better return for a given missile effort. But as we reach the area from overseas the certain retaliation would have a greater effect on our operations. The enemy is supplied through China, and south of the Chinese border, despite the limited number of traditional routes, nuclear action unless on an enormous scale, with complete disregard of the civil population, against the L of C would be comparable to throwing hand grenades at an ant-track.

Summary. The foregoing paragraphs indicate that the problem of stabilizing aggression on the periphery of Asia is a difficult matter irrespective of the scale or type of war. The problem is not insoluble. We have to ensure that the free countries in our area are helped to raise strong, loyal defence forces to the aid of which we are able to come immediately.

Doctrine for Limited War

If limited war is possible, if aggression can be repelled without global war, then there must be found a valid difference between limited and unlimited operations. The Communists intend to dominate the world and make no secret of this intention. Therefore, as the political aim of the Russo-Chinese *Bloc* is inherently unlimited, the onus for prescribing and conducting limited war is placed on the West. From past experience it seems that the Communists will conform to limitations subject to the conviction of their technical superiority.

In the technique of limitation it is necessary to decide on the most likely way a war would start. Firstly there is the deliberate expansion of troubles inherent in the civil war, *coup d'etat* and political chicanery so likely among many of the newly independent countries which are neither experienced nor educated in self government. Secondly, and most likely, is the situation where a dictatorship

or an oligarchy considers that the opportunities for territorial, economic or political gain are great, and believes also that limited objectives can be taken and held without danger of defeat. France, Germany, Italy and Japan used this method with success in the past 150 years; not until the initial limited aims were extended by over-confidence did retribution arrive. However, the USA was successful in her aggressive wars with Mexico and Spain and in freezing Europe out of South America; the UK had secured most of Africa and much of coastal Asia by 1918. The expansion of the British Empire in the Victorian era was achieved by the gaining of a succession of limited objectives, no single one of which cut across the vital interests of any other country and thus major war was avoided by, for example, a limited war in the Crimea to keep Russia out of the Mediterranean, and negotiation after Fashoda to keep France out of East Africa and the upper Nile.

Today the political and economic repercussions are so intense from any pressure in the closed geographical circuit that almost any aggression could be assumed to threaten the vital interests of the opposing *Bloc*. Then for a dictatorship or oligarchy to act at all they will see the need to act quickly. We accept that no country, unless it has the necessary nuclear superiority, will provoke deliberately a global war which can only result in mutual annihilation. Therefore, the intending aggressor will select a limited objective. Next, following the maximum political confusion, the operations will commence on the blitzkrieg lines, with relatively small mobile forces racing to link up with fifth columnists, armed dissidents, guerillas and members of their own forces previously introduced as civilians or students to seize communications centres and personalities. There will be no defined front, the invasion will be like irrigation water pumped into a paddock. Nuclear weapons would be used only as a last resort on strictly military targets to keep the blitzkrieg rolling. The enemy will rely on the political pressure of the

influential peace-parties in the West and on the vociferous progressives to inhibit the use of nuclear weapons in the defence. In fact the enemy would ensure that public opinion in the West opposed nuclear war as a prerequisite of attack. On the other hand the allied build-up against such an operation, unless it was staged in Eastern Europe where strong ground forces are comparatively ready, would be so slow as to force us to use nuclear weapons in the earliest stages and to use them on territory we are claiming to protect. The West then stands committed in the eyes of the world as the nuclear aggressor. The first principle of limited war, then, is that we must maintain both the strategic deterrent and the capacity for immediate, effective, conventional participation in small wars.

Our participation in any armed conflict must not appear to jeopardize the basic strength of the opponent, nor seek to threaten the strategic balance of power. The second principle, therefore, is the selection and maintenance of a clear, limited, reasonable, well-publicised aim. Once there is tacit acceptance of limitation, the forces and methods used should be the minimum to achieve the aim. The third principle is economy of force, both in numbers, methods and weapon systems.

For a war to be limited it must be confined geographically — the fourth principle. In Korea this was achieved by the shape of the peninsula and the limited objectives of each side. The UN did not operate beyond the Yalu and the Communists did not attack seriously by air the UN forces nor by air or sea the UN supply lines. It seems unlikely that a limited use of tactical nuclear weapons would have expanded the Korean war beyond the peninsula unless one side or the other had been thereby placed strategically at a serious disadvantage. However, it must be remembered that the USA then had overwhelming superiority in nuclear weapons and the means of delivering them. In the end both sides accepted something less than the original limited

objectives. The problem of geographical limitation seems to be incapable of solution in the event of war on the European frontier, and almost as complex in the Balkans and the Middle East. In our arc, from Formosa to Burma, geographical limitation of war should be possible. In Europe the stakes are so high that perhaps any war must be global war. In his speech on 17 March 1959, President Eisenhower made it only too clear that the USA had no intention of fighting a conventional war in Europe; he stressed that even the 130 divisions he commanded in 1945 would now be quite inadequate.

A limited war will be fought on the territory of a peripheral state and not on the mainland of a major contestant, consequently there is no point in, nor justification for, wholesale destruction. The fifth principle is that targets for nuclear weapons must be field forces or strictly military installations which have a direct relationship to the tactical operations. In the same way the weapon system employed must be just sufficient to achieve the aim and should have no other by-products such as fall-out on the host country or its neighbours. Obviously this matter is the basis of the war of nerves and a new element of risk arises in any expansion of the area, in alteration of the type of targets being attacked and in the weapon systems involved.

Air Power and Limited War

The reconciliation of air power with geographical limitation will be the most delicate problem. In Korea the enemy were quite incapable of offering any serious challenge to allied air supremacy. Today air power is in a transitional state from manned machines to missiles, but our forces require certain services from the air force which missiles or drones cannot yet provide. In an undeveloped theatre the Western way of life will depend on air transport; flexibility is lost if we must depend on existing roads or on the construction of new ones. Again the bulk of our air power and its support will be based outside the theatre,

but the only effective way for an enemy to cripple an air force is to strike at its factories, fuel, fields and facilities for rebuild, training and maintenance. These factors apply in a degree to the enemy, but in general he is better able to operate without air support than we are.

From the air force Western armies require the following:—

- (a) Sufficient command of the air to use air transport, to and within the overseas theatre.
- (b) Adequate reconnaissance of the enemy within the overseas theatre.
- (c) Air delivery of nuclear weapons, this depends on:—
 - (i) The non-availability of an effective alternate delivery system.
 - (ii) The ability of an alternative system to engage a suitable target before that target can move.
 - (iii) The need for emergency support of small forces threatened with disaster, or the engagement of penetrating enemy forces which are moving rapidly in unsurveyed territory.

It could be argued that in advance or attack we have also a requirement for the employment of airborne forces to cross obstacles or to offset the paucity of communications, also there are circumstances in which we could well require a non-nuclear direct support capability.

It seems that an effort by either side to achieve air supremacy over the whole theatre is very likely to expand a limited war, but it is probable that there could be tacit acceptance of a situation in which each side had air supremacy over its own territory with a capacity for limited intrusion into enemy air space. South-East Asia is likely always to be regarded by the USA and USSR as a subsidiary area and although the air struggle is almost certain to increase in scale and

significance with the length of the war, neither side will, nor can afford to, reduce significantly its air potential on more vital fronts. In the use of air power, therefore, strict adherence to the principle of economy of force and the acceptance of a degree of control over his own air space by the enemy will be necessary to avoid geographical expansion of the war.

Naval Power and Limited War

To maintain an army in an overseas theatre we require control of the local seas and the routes from the main support areas. Should the enemy—whose naval threat is increasingly a submarine threat—interfere extensively with our shipping en route to, or in waters adjacent to, the theatre, then expansion of the naval war to include attacks on his submarines anywhere is most probable. Obviously indiscriminate submarine attacks on allied shipping engaged in its normal overseas trade would almost certainly result in expansion of the conflict. It seems probable then, that in exchange for relative freedom of naval action in the waters adjacent to the overseas theatre we must forgo any temptation to blockade or to interrupt the coastal shipping of the Sino-Soviet *Bloc*.

Summary

The principles of limited war are —

- (a) Rapid participation with maintenance of the strategic deterrent.
- (b) Selection and maintenance of a limited aim.
- (c) Economy of force.
- (d) Geographical confinement of the conflict.
- (e) Minimum destruction of civilian targets.

Great care will be necessary in the employment of sea and air power.

These principles are political rather than military, the normal principles of war will continue to govern tactical operations.

Reported USA policy indicates that they envisage the use of nuclear weapons in any future war. They accept the conception of a limited nuclear war and this policy is reflected in the military training of the members of NATO and SEATO. As limited nuclear war is accepted so widely as a probability and appears to be a satisfactory deterrent to war of any kind, the question may well be asked why it is necessary to labour further the pros and cons. The reason is that many have doubts. If war can be graduated from police action with minor weapons on one hand, to global catastrophe on the other, and the last type is the least attractive, then the commonsense plan is to enter at the lowest possible graduation on the scale. Logically, only when one side holds a monopoly, or lead, in weapons, can that side rely on being able to set the pointer on the scale. We have, we believe, the technical lead at present but in the long run the enemy will close the gap. When the technical margin is small, is a limited nuclear war possible? We must assume that it is, for a small margin is not enough to affect the final outcome of a global holocaust. In matters of such import there are, and always will be, grounds for doubt.

Tactics

As this paper is written for a specialized reader, in order to save space it will be assumed that exceptions and inaccuracies inherent in wide generalizations will be taken into account, and that allowances will be made for the fallacy known in logic as "Begging the Question".

Provisionally we accept that a war in South-East Asia could be confined to limited forces operating in a defined area, and that these operations may be conducted under moderating influences applicable to both sides, even though these influences could be removed suddenly. If nuclear weapons were used in such a war it is not impossible that there could be tacit restrictions on the size of such weapons, and on the location and type of target.

Tactically, all war is a struggle between fire and manoeuvre. The VTOL/APC transport and the nuclear weapon now present the extreme of each element. If there is limitless use of nuclear weapons, then fire dominates manoeuvre to the degree where, literally, no manoeuvre is possible. When small nuclear weapons are used sparingly or discriminatingly, manoeuvre is the most important tactical element. These simple facts will be the basis of nuclear war.

The defender will have the greatest cause to adopt a limitless nuclear policy. From the point of view of defence, no movement at least maintains the *status quo*. We must, therefore, evaluate continuously the relation of fire and movement within the pattern of operations. Tactics and techniques will vary with the —

- (a) Strength of our forces.
- (b) Relative proportion of various allies.
- (c) Structure and equipment of our forces.
- (d) Nature and methods of the enemy.
- (e) Local geography.
- (f) Political situation.
- (g) Estimated global nuclear situation.

The wide variations in, and possible combinations of, these factors mean that no instructions could meet all cases. We require such inherent flexibility as to be able to interpret our basic doctrine according to the situation.

Deductions

The nuclear threat enforces rarefaction of deployment. Space must exist between elements of the defence and of the attack. Each side will seek to dominate the empty spaces in a zone which could be 20 miles deep. Should the nuclear action not materialize or be very discriminating, then operations will tend continuously towards those of 1945; a situation in which there is no substitute for manpower. (There was the equivalent of 42 Allied Divisions in Korea).

Effective reconnaissance may well be the most difficult single problem.

Any occupied position must be —

- (a) Dug in as deeply as possible.
- (b) Protected by a strong deep screen to prevent location of main positions.
- (c) Difficult to outflank.

Manoeuvre is necessary to achieve any objective. Mobility is relative; mobility will come from exploiting the appropriate means — vehicles, railways, APC, aircraft of all natures, small ships and the others. In many conditions infantry on foot will be the fastest troops, and at all times we must be faster than the enemy or be capable of reducing the enemy below our best speed to retain the advantage in manoeuvre. Limitless use of nuclear weapons will stop all movement.

A commander can no longer take a detached view of operations. Vital, rapid changes in the situation mean that he must be in the immediate picture; this postulates command, staff, reconnaissance and signal procedures capable of giving immediate information and of reducing reaction time.

It may not be practicable to use light aircraft and helicopters in the combat zone on the scale we had anticipated.

Conclusions

- (a) Limited war, including the use of nuclear weapons, is possible in South-East Asia.
- (b) We must continue to strengthen our regional defensive alliances and assist to create stable government and reliable defence forces in the countries to our north.
- (c) To be of any value, adequate armed forces must be immediately available, and the military organization of any force must contain all those elements required for reconnaissance, logistic support and movement.

- (d) Nuclear warfare in forest areas will practically halt movement as will extensive use of nuclear weapons in any terrain.
 - (e) Forward troops can no longer rely completely on supply or transport by air. This means that they require light equipment and a very high standard of fitness and endurance.
 - (f) We may have to accept a degree of air superiority below that prevailing in Korea or in the closing stages of the 1939-45 war.
 - (g) The qualitative level of the infantry has to be raised. The best men in the country must be in the Battalion Groups or Battle Groups. So much will depend on these men that consideration is required of such matters as special pay and distinctive uniforms.
 - (h) There is a need for frequent skeleton exercises to train potential commanders, staffs and signals (additional to those of the Brigade Group) in rapid movement and in the handling of fast changing situations in rough country.
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In no other profession are the penalties for employing untrained personnel so appalling and so irrevocable as in the Military.

— General of the Army, Douglas MacArthur

FROM OUR OWN POINT OF VIEW

LIEUTENANT-COLONEL J. B. ROBERTS
Royal Australian Infantry

IN the February, 1959 issue of the *Australian Army Journal*, Major J. C. F. Moloney gave us a very full and interesting dissertation on the Australian Army from the enemy's point of view. He admitted that these thoughts were based on a dream. ("From the Enemy's Point of View", *Australian Army Journal*, No 117).

However, the writer also stated that since the dream he "couldn't help wondering", which seemed to indicate that some of the things he had dreamt were, in his opinion, perhaps close to the truth.

I feel qualified to disagree only with the CMF portion of the article; and I make these comments firstly as a warning to young officers who, although they may be fortunate enough to find time to sleep, should realize that there is considerable danger in allowing themselves to dream, and secondly in an attempt to start some up to date thinking regarding the CMF.

It is not possible for me to provide any firm statistics covering the CMF as a whole, but I venture to say that the impression gained by Major Moloney during his dream that today the percentage of volunteers in the CMF is precariously low, is quite incorrect.

If an analysis were made, I think it might reveal that since the reduction in NS call up, CMF units have been able to maintain their original strengths by voluntary enlistment, and some instances would be found where 1956/1957 figures have been increased.

I am certain that from about the time the NS intake was reduced there has been a gradual change in the thinking of the Australian male of training age. The number who have enlisted voluntarily in the CMF because they missed the NS ballot is considerable.

Other volunteers are enlisting in very satisfactory numbers and there seems to be no reason why this trend should not continue.

It was unnecessary in the 1938/1939 era to condition the mind of the man in the street; world events were doing that all the time. To a certain extent that is happening again. Even if it is not quite so marked, a similar feeling is apparent and it would not require much conditioning to ensure that recruits come forward in similar numbers to the period above-mentioned.

The dream of Major Moloney likewise seems to have led him astray regarding the volunteer spirit. We are made to

believe, from the enemy's point of view, that to revive the voluntary spirit some effort would be necessary. Let us assure the enemy, and Major Moloney, that the voluntary spirit is with us in large chunks. It may need a kick along here and there but in general it is urging to go, and with the right treatment it can be exploited and made a vital force in raising the strength of the CMF.

I think perhaps we have not been sufficiently vocal on what the CMF can offer the individual and what it can do for the youth of the nation as a group, and I firmly believe that now is the time to raise our voices to that end.

Consider for a moment the conditions under which the CMF soldier serves today. There is nothing wrong with the uniform. It is the best the Australian soldier has ever had, and bear in mind the CMF man is dressed exactly the same as his ARA mates. The new uniforms being tested might bring some improvements in due course, but in the meantime we are comfortable and as smart as we have ever been. Remember that before 1939 we were not even issued with shirts and for CMF to wear shoes was quite unheard of!

On the equipment side, we may not have caught up with the latest weapons

being issued in other parts of the world but we can produce some very fine soldiers using those which we have.

In camp, a large proportion of the CMF eat better food than they do for the other fifty weeks of the year, and it is served in conditions of comradeship on which they thrive. It would be a very hard Commanding Officer indeed who could visit his mess huts on the last evening meal in camp and not be moved by the spirit which exists.

The volunteer puts in some time of course, but not sufficient to keep him away from home or other activities too frequently.

For all these advantages, the member of the CMF is then handed quite an important amount of folding money which, incidentally, always seems to come at a time of year when it is most useful and needed.

These thoughts lead me to the belief that dreaming should be removed from syllabi forthwith, and that our efforts should be turned to proving that we have something to offer. Our target should be the establishment of a waiting list for those anxious to enjoy the privilege of being members of the Citizen Military Forces.



Strategic Review



Mao-tse-Tung

CHINA OPENS A NEW CHAPTER



Chou-En-lai

Reprinted from *An Cosantoir*, Eire — April, 1959

CHINA dominates the Orient. Its compact terrain is in the centre of an area extending from India to Honolulu and from Siberia to Australasia; its dense mass of population and resources overshadows the under-developed states of Asia and its Red Army looms over the whole area like a colossus. Because the Tibetan revolt and its suppression by Peking opens a new and dangerous chapter in Asian history, now is a suitable time for a review and re-appraisal of the "Yellow Peril".

Imperial Dynasty

By the early 19th century the imperial dynasty which ruled this rich and powerful land was already far decayed. Its overthrow, from the outside by the colonising Western powers and from the inside by progressive Chinese dismayed

at its cowardice and corruption, was only a matter of time. The Republican Government which succeeded it in 1911 was unable to arrest the slide into anarchy and by the middle nineteen-twenties China had reached the nadir of its fortunes.

At this time the Russian revolution had not struck any answering note in China but Russian aid, encouragement, sympathy and equal treatment (whatever the long term motives) made a favourable impression on influential Chinese. Thus, the reorganized Koumintang (or Nationalist Party) accepted the aid of Russia and the alliance of the infant Chinese Communist Party, which had been founded in China in 1921 and almost simultaneously in Paris by some Chinese students there. Among its founders were Mao-tse Tung, a library assistant in Peking and, in Paris, Chou-En-lai.

Chiang-Kai-Shek

By 1928 the Koumintang armies under General Chiang-Kai-Shek had brought almost all the country under the control of the central government. The general had been sent for advanced training to Moscow and on his return had created and commanded the military college at Whampoa. (From this college have come not only the leading generals of the Nationalist armies but also their rivals and victors, the leading Communist generals).

When complete success for Chiang seemed to be in sight, a part of the 4th Army, one of the best fighting units, mutinied under its Communist officers and after an unsuccessful attempt to oppose the Nationalists in normal warfare, took to the hills where it was eventually joined by such of the Communist leaders, including Mao-tse-Tung, as had managed to escape Nationalist vengeance.

The many vicissitudes of the Communists from then until their triumph in 1949 have become part of Chinese legend and folklore and do not concern this article. What is important is Mao-tse-Tung's success, firstly, in adapting the rigid Marxian theory to a system which was likely to succeed in China and, secondly, in formulating a theory and practice of guerilla warfare which has since become a successful blueprint for revolutionary "freedom fighters" throughout the world.

Revolutionary War

Generally, in modern war the civilian population does not constitute the main, and certainly not the first object of attention. It is usually thought necessary to deal with the enemy's armed forces and his war-making potential before the population, as such, can be subjected to direct pressure.

In revolutionary war this order is reversed. Revolutionary war has as its aim the take-over of power in the state. It is internal conquest, made possible

through the active help of a population that the insurgents have physically and morally conquered. Military power plays a secondary role in such a contest; the decisive factor is the population which is both the strongest force in the struggle as well as its primary object. Marshal Chu-Teh summed this doctrine up as "The people are the sea, we are the fish; as long as we can swim in that sea we shall survive".

The conquest of the population is, therefore, the indispensable opening of insurrectional war. Once this has been achieved, once the population has been schooled and organized for revolutionary purposes, it becomes possible to go on to a second stage—open warfare—under conditions which are unfavourable to the enemy even though his military forces may be larger and, according to traditional standards, better trained and equipped than those of the insurgents. The unusually close connection and interdependence of military, political and psychological means constitute an outstanding characteristic of this type of war which in recent years has generally proved superior to the orthodox methods opposing it.

It was not only the Western democracies who did not realize the scale and significance of this doctrine. After the war in Europe was over, it is said that Stalin sent Mao-tse-Tung a Russian book on partisan warfare, the fruit of Russian experience during the German invasion. Mao showed it to Lin Piao, his best commander and the greatest expert on guerilla warfare in China who, having read it remarked, "*If we had had this as our textbook we would have been annihilated ten years ago*".

New Regime's Aim

The Chinese Communists were not annihilated. They conquered the population to such good effect that within two years of their triumph in 1949 the whole of China was under a stronger and more centralized government than ever before. Their aim was to give

China an industrial and technological society so powerful as to assure for it the hegemony of Asia. To do this, and at the same time keep China's enormous population from starving, required a huge increase in both consumer and capital goods. Such an increase, of course, is the traditional problem of under-developed countries and its solution usually envisages massive injections into the economy of money and "know how" by some outside agency.

Apart from a modicum of Russian aid no such Santa Claus was available to China. Of the traditional factors of production, land, capital and, to a lesser extent, enterprise, they were in in-elastic supply.

Labour alone was susceptible to increase and this factor China pushed to the limit. Men, women and children were everywhere substituted for capital equipment until they literally got in each other's way. Low wages and military-type organization ensured that the system worked, and production in China rose. What is more, throughout Asia it was *seen* to rise, particularly in those countries where the best capitalist efforts did not give an equally good result.

Armed Forces

What of the cutting edge of China's power, the armed forces? When the civil war ended the Red Army comprised three or four million men. There was practically no navy or air force. With the intervention in Korea the army exchanged its successful guerilla tactics for training in sustained positional warfare and was equipped with automatic weapons and AFVs on a large scale. A vigorous recruiting campaign, especially for new officers, was also conducted and the air force was rapidly expanded using Soviet jet aircraft.

In keeping with tradition the navy lagged behind but was reportedly equipped with Russian submarines.

After Korea drastic reorganization took place. The army was reduced in size from about five million to its present

strength and conscription was introduced on a regular basis with an annual intake of 450,000 men. Officers were given standard ranks and uniforms. The country was divided into military districts on the Soviet pattern; separate artillery and airborne units were set up. Russian help was given to build up an armaments and aircraft industry and, in August 1958, Russia supplied China with atomic bombs.

Current Strengths

Best current estimates place the land army as between 2½ and 3 million men, the air force has some 2000 to 3000 aircraft and the navy — still lagging — about 300 warships. These figures are not accurate and give little reliable idea of the strength of the Chinese forces. Their real strength is to be found in the integration — born of Communist guerilla days — of the army and the people. Everyone is both soldier and civilian. The Chinese army is still committed to the concept of numbers over that of strategy and armaments, just as the Chinese economy is committed to labour over enterprise and capital. Fortunately for the West the type of war which a Chinese army so organized is likely to win is becoming increasingly anachronistic.

Revolt Unlikely

In summing up it is possible to list Communist China's advantages and disadvantages as of now. Politically the balance is favourable. The Chinese people have never known true democracy and informed observers consider that despite the incredible hardships they are at present suffering in the cause of economic advancement, a major internal revolt is unlikely.

Economically, in spite of its tremendous efforts in raising itself by its bootstraps, most of China is still only emerging from the wheel-barrow age. The economy is in no position to support a major war effort in the near future and even a limited war could cause tremendous economic strains and set-backs.

Militarily, the Chinese Red Army is best equipped to fight a limited conventional war on the lines of Korea, or a semi-guerilla operation on the classic Communist model as in Viet Nam. The former is largely ruled out now by tactical atomic weapons while an increasing awareness among China's neighbours of the realities of Communism makes the latter less and less of a possibility, especially if these neighbours can call on the West for aid. The Chinese certainly do not possess the air and naval strength necessary to menace the Pacific island chain or the Continental US itself. However, the Chinese leaders dispose of one great asset. They are not deterred by the "great deterrent". They calculate that in a nuclear attack, of the 650 million or so Chinese peasants scattered over 3000 square miles of territory, 100 million more or less would

survive to inherit the earth. This gives Chinese foreign policy a certain hardness and quality of "brinkmanship" which the West — and Russia — find difficult to match.

Conclusion

Finally, it should be admitted that an attempt to reach conclusions on China is to aim at a swiftly moving target. Very little was known about what went on inside Russia until *Sputnik 1* went into orbit. Even less is known about what is going on inside China but it is impossible to shut one's eyes to the existence of the largest, hardest, most fertile, and potentially most productive, nation on earth. The unchanging East is so no longer.

R.A.H.

THE PENETRABLE SHIELD

KEEPING step with world events and changing, chameleon-like, to meet each political nuance, the shadow of the Cold War has loomed ominously since the end of World War II. NATO, the watchdog of the West in the European theatre, has been on guard since 1949, and from time to time its fangs have been sharpened but, nonetheless, there is a vast area to defend and many weaknesses are apparent in its defensive powers.

To the north lies Sweden, a neutral by preference — and a determined one — with a long coastline to defend and an inadequate navy for the job. Sweden is not included in the NATO defensive strategy because, in 1949, the United States declined to supply arms to a

Scandinavian alliance that would not be joined to her in a collective security agreement. The absence of the co-operation that might otherwise have followed the arming of such an alliance may well cost NATO dear in any future conflict. There is every reason to believe that, should it prove expedient, Russia would be uninfluenced by a declared policy of neutrality and the Swedish forces, conventionally armed, may not be sufficiently well equipped to offer more than a token resistance to a calculated aggression.

Baltic Command

The inferiority of the Baltic Command of NATO to the Soviet forces in that area underlines NATO's weakness in the north. The Soviet Baltic fleet greatly

outnumbers the combined fleets of Norway, Denmark and West Germany which at the present time would hardly be capable of fulfilling their allotted tasks: (i) to keep the Soviet fleet, especially its one hundred and fifty submarines in the Baltic area, out of the Atlantic; (ii) to protect communications; (iii) to prevent landings on the Danish islands and the German Baltic coast, and (iv) to menace Soviet shipping in the Baltic.

Aggravating this situation is the strategically awkward division of command between German and Danish troops in the Jutland area. The Danes come under NATO's northern headquarters at Oslo while the Germans are under the command of General Speidel of Allied Land Forces, Central Europe. The West German Government has pointed out the vulnerability of NATO under this arrangement and has suggested that either Denmark and the Hamburg area come under the Central European Command or that a separate unified command be created in the Baltic area to be directed from headquarters of Central European Command or Northern European Command.

Unfortunately, this realistic approach is unacceptable to Denmark which is reluctant to place her troops under German or German-influenced command since, in common with some other states, they believe that closer integration would give Germany a military predominance. This lack of co-operation and goodwill is further demonstrated by a recent Danish decision to reduce her armed forces thus further weakening NATO's northern flank.

In the vital Central European sector the actual strength of NATO forces falls considerably below declared requirements. The Supreme Allied Commander in Europe (SACEUR) insists that he needs thirty divisions in this sector; he claims to have slightly over twenty-one but, of these, it is doubtful if the seven German divisions at his disposal are up to strength or if the

two French divisions are present in more than nominal numbers. The other three French divisions earmarked for NATO are in Algeria and there is no likelihood of their immediate release from current commitments.

French Attitude

Generally speaking the French attitude towards NATO has been one of patronage rather than co-operation. Her national needs, and national ego, have at all times been given priority over the requirements of NATO. She has refused to accept rocket bases in her national territory, except under French control; she is not willing to place her air defences under an integrated NATO command and, finally, she has recently notified NATO that she intends to retain her naval forces in the Mediterranean under French command even in the event of war. The obvious aim—to assert herself as a major power in NATO councils—is hardly being furthered either by her parochial attitude or by her unwillingness to pull her weight militarily.

General Norstad hopes to have a further five German divisions in the near future; and the not very likely settlement of the Algerian question would release a further three French divisions, but it is idle to speak of NATO preparedness when promises and prospects deputise for reality.

Yugoslavia's military flirtation with NATO through the medium of the Balkan Pact is now positively over and her assistance (which was always problematical) may now be entirely discounted. The remaining two members of the defunct pact, Greece and Turkey, have temporarily settled their differences and the Greek echelon at Izmir (NATO Headquarters in Turkey) which was withdrawn in 1958 as a result of increasing tension between Greece and Turkey over the Cyprus question, is again in operation. Although this rift has been patched it is not certain that the solution proposed for Cyprus will ensure a lasting peace there. ENOSIS is not dead.

It is clear from the attitudes of the Danish, French and Greek Governments that the member states of NATO are widely separated in racial, cultural, political and economic outlook. Collective security is the thread that holds them together, but this thread will remain unbroken only for as long as it suits each individual state. National interest will invariably take precedence over the general welfare, even at the cost of jeopardising the entire organization.

NATO's troubles, however, are not confined to regional instability. She suffers the disadvantages of any purely defensive alliance in that the initiative always rests with the potential aggressor. Soviet technological advances, as exemplified by the Sputniks and the sun-satellite, have kept pace with the modernization of her military thinking which is no longer hidebound by the conventions of party mumbo-jumbo. The Soviet world is co-ordinated under single leadership; if it strikes it will strike uniformly, without an ultimatum and without an attempt at justification (which may come later). The Cold War is merely a device for creating uncertainty, for probing weak spots and promoting division, and for scouting the possibilities of piece-meal and bloodless aggression.

Europe Unprepared

It is doubtful if Europe is prepared for a sudden outbreak of war there is no general agreement—even within individual countries where every politician is an armchair strategist—as to whether stress should be placed on conventional or nuclear weapons. Uncertainty as to what Soviet action would provoke “massive retaliation” has not been resolved by General Eisenhower's recent pronouncement that NATO cannot and will not fight a ground war. This statement is hardly consistent with SACEUR's appeal for an increase in ground forces and will certainly not reassure those countries whose proximity to the Soviet Union is now as was that of the Maginot Line to Hitler's Germany.

The “wait and see” policy of the President of the United States is much too evasive and inconclusive and to those who look for protection reprisal is a poor substitute.

At the moment the United States alone of the NATO powers possesses the so-called “ultimate deterrent” and its employment, or indeed the employment of tactical atomic weapons, is reserved to political rather than military decision. Europe is only a few minutes flying time from Soviet or satellite bases and almost defenceless against air attack; her radar network is still patchy and her interceptor missiles too few to be effective. Above all, civil defence has been recklessly neglected. In an era of fantastic military budgets the almost fatalistic attitude towards the protection of the civilian population and industry is difficult to understand but is, nonetheless, characteristic of the individual NATO country's approach to the question of collective security.

It is now axiomatic that the collapse of the home front presages the failure of the entire war effort. An untrained, unorganized civilian population cannot survive the shock or the losses of an unexpected air assault and the populations of Western Europe's towns and cities are, in the main untrained. A naive faith in the “deterrent” is no good preparation for a thermo-nuclear war.

The Cost

Finally, the growing cost of defence expenditure is undermining the economy of most NATO countries. The protection of “deterrent” bases in Great Britain at present costs £150 million per annum, and it was recently suggested in a parliamentary debate that the provision of an effective air defence would be beyond her means. Other countries are faced with similar difficulties and the net result may be that an economic collapse will eventually accomplish Soviet aims without the necessity for a recourse to arms.

Conclusion

NATO has assumed a tremendous responsibility in Europe; on it lies the onus of providing the correct answer to the Soviet threat. To base defence solely on massive retaliation is to rely on an untried weapon which may only be released in a particular set of circumstances which has not been clearly defined. The build-up of conventional forces to augment the "deterrent" is the only alternative, if apathy and fatalism

are to be avoided. Civil defence must become an integral part of the national life in every NATO country. Above all, individual national interests must be subordinated to those of collective defence and each member nation must fulfil its obligations to the organization, regardless of other considerations. If a unified and prepared NATO faces the Soviet war machine it may prevent total war. If not, the outlook is very bleak indeed.

R.G.E.

COMPETITION FOR AUTHORS

Each month a prize of £5 is awarded for the best original article published in the Australian Army Journal. This practice will be continued.

In addition, an annual prize of £40 has been awarded to the author whose article, in the opinion of the Board of Review, was the most meritorious of the twelve monthly prize winners. For the financial year 1959 - 1960, the Annual Awards will be —

First Place £30

Second Place £10

The Maxim Machine Gun

and Other Matters

LIEUTENANT-COLONEL J. J. BALLARD, OBE
Royal Australian Signals

"A terrible weapon" — *The Queenslander*

The Source

MIXED up with articles on Cure for Warts on Fowls, A Suicide's Advice, Vital Statistics (no connection with a Nineteenth Century Marilyn Monroe), Railway Traffic Earnings (the Mackay Railway earned £49 during the week ending 10 Feb), *The Queenslander*, of 1889 included two articles on the Maxim Machine Gun.

Incidentally, the London Wool Sales notices show 5½ to 14d per lb for wool, and the Waterbury watch was selling for 13/6. One other delightful paragraph must not be passed unquoted — "The Marquis of Donegal recently stated in the Bankruptcy Court that his liabilities amounted to £518,885, and his total income to only £680 a year. He attributes his insolvency to the fact that his expenditure has exceeded his income." A logical deduction.

And a gem of reporting under the heading of "Horrors of War" dealing with the Crimean Campaign reads, "The first commandant at Sebastopol during the siege was the gallant Admiral Korniloff who was killed. To him succeeded Admiral Nachimoff, who was knocked off too, by an English shell".

Before we start on the "Terrible Weapon", we might have a look at another that was described very briefly.

A Carbolie Acid Shell

"The accounts of a carbolie acid shell invented by a German gunner are not too explicit," remarks the *St James's Budget*, "but he fills the projectile apparently with some new powerful explosive manufactured from carbolie acid. Even after the shell has burst, the scattered remnants of the mixture go on exploding in a way that cannot fail to inconvenience and disconcert an enemy. It may be inferred, too, that the peculiar smell generated by the explosion will be very distressing; though no doubt the wounds caused would be less dangerous, from the antiseptic properties of the acid. Perhaps, indeed, we are a step nearer to the invention of an explosive shell which would put the enemy *hors-de-combat* without inflicting unnecessary slaughter. Not that the world has yet reached a stage of civilization in which such a device would be used in warfare, which still requires bloodshed; but for what might be called domestic purposes it would be altogether suitable. We should then know exactly what to do with our burglars". Presumably putting them *hors-de-combat* in the dining room and delivering the antiseptic still breathing remains to the local gendarme.

Now for the Maxim Gun. The two articles in *The Queenslander* deal with a description of the gun, some tactical

implications resulting from its use, and reports on trials held on the Toowong Range in Queensland and the North Williamstown Range in Victoria.

The Gun

The *Observer* notes that, "The gun is so small that in an emergency it might be drawn by one man, but is moved about comfortably by two. What one sees of it externally is a large brass barrel some four inches in diameter, and about two feet in length, with a lesser barrel of about muzzle width, but thicker in the metal than an ordinary rifle barrel, protruding a couple of inches beyond the end. This large brass barrel is a water holder to keep down the heat of rapid firing. Outside the fact that the firing of one shot provides the force for loading and firing the next, and so on *ad infinitum*, the two great points in the Maxim are the feeding belt and the contrivance to prevent a too great heating of the barrel".

Then follows a detailed description of the belt and water cooling arrangements quoted from the pamphlet on the subject. Its terminology differs little from that used today, and is just about as dull.

Trial at Toowong

"Several hundreds of persons assembled at Toowong Rifle Range early yesterday week to witness the experiments with the Maxim Gun, conducted by Major-General Strange. Amongst those present were His Excellency the Governor, Colonel French, Major Grieve, Major Des Voeux, Captain Baden-Powell, and other officers, and a number of members of both Houses of Parliament. The gun arrived at about 2 o'clock, but considerable delay ensued, and it was nearly 3 o'clock before the actual demonstration". We can imagine that hour.

"At first it was taken to the 800 yards range, and here General Strange explained the mechanism to the Governor and to the officers and civilians who

surrounded him. The peculiar belt feed was shown in operation by means of dummy cartridges, and the various parts of the machine were exhibited. A move was then made to the 700 yards mound, and here the belt with loaded cartridges was placed in position.

"Colonel French laid the gun, and fired two shots, making two direct hits on the iron targets, and after another slight adjustment the weapon was fairly on the bulls-eye.

"Then Sir Henry Norman took his seat on the trail of the gun and fired twenty-nine rounds, all the bullets striking within the magpie and many of them hitting the bulls-eye. Mr Archer, MLA, and Mr T. Macdonald-Paterson, MLC, both fired a number of rounds". The results of the efforts of these two gentlemen were not recorded.

"It is stated that at 1000 yards the weapon has a sweep of half-a-mile, and the ease with which it could be turned in all directions whilst the firing proceeded was remarkable". No doubt the onlookers were suitably impressed when the weapon was turned in their particular direction.

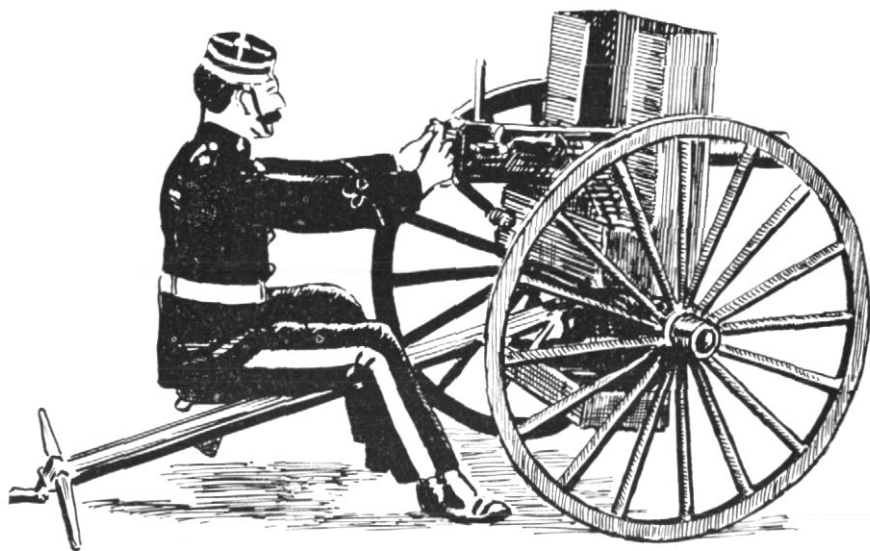
Tactical

The reporter starts his tactical remarks with this introduction, "A great military authority has said, 'The general who first discovers how to use a machine gun in the field will gain a great victory'"! He follows this choice platitude by continuing —

"To realize fully the revolution in war likely to be produced by the introduction of automatic guns would require a prophetic vision accorded to few; but some changes must be patent to many. The statement may seem strange, but from its broadest point of view the introduction of these murderous weapons is a boon to civilization in general, and to the peace-loving practical Anglo-Saxon race in particular. They alone of all the advanced races have steadily refused the blood tax of conscription,

and concentrated their energies on the development of commerce and the mechanical skill necessary for that development. To protect the wealth they have created, they must submit to the inevitable tax of blood and iron, ie, universal conscription, or the application of superior science and mechanical skill in furnishing to our voluntary defenders

the terrible weapons which will enable the dauntless few to face the hordes of a conscripted Europe or of an irresponsible despot". I wager the writer then drew a deep breath and cried "Hoorah". We also seem to have heard similar statements made in a more recent context. In fact, *mes braves*, the "Massive Deterrent" would appear the modern cliché.



From the Original Illustration in "The Queenslander"

Cavalry With Galloper Guns

"As the first advance of an army is discovered by the cavalry, aptly called the eyes, ears and feelers of an army, but hitherto unable to retain what it touches, so now the swift advance of cavalry, with its quick-firing galloper guns can seize and retain strategic points of importance, bridges, fords, railway depots, etc.

"The grand charges of cavalry across the necessarily open country in which alone they could be executed ('too right!') would be utterly impossible."

Mounted Infantry Camel Corps and Mountain Mule Guns

"A camel corps so armed becomes a means of striking such swift and terrible blows in an otherwise inaccessible country as would certainly have saved the gallant Gordon at Khartoum.

"Mule batteries of automatic mounted guns would be our prime factor in rolling back the inevitable Russian advance across the Hindoo Koosh, down the slopes of which the Cossack cavalry will descend, also with automatic guns". The question is, "Who has the automatic guns?"

Infantry With Automatic Machine Guns — Outposts

Here the writer appears to have latched on to a statement in a previous article that reads, ". . . . the French authorities, who have recently adapted the guns to the Lebel cartridge, which contains smokeless and nearly noiseless explosive resembling coarse sugar in appearance, and entirely destitute of sulphur".

He writes, "The intensity of attack has generally been measured by the volume of fire sound, and indeed the absence of this sound, which has hitherto been a large factor in guiding the movement of troops, and may in great measure be absent in future, will necessitate other means of communicating with supports and compel the first lines being made more self-sustaining, by means of the automatic gun, whose smokeless and noiseless fire would permit its being easily concealed and add inconceivably to the tenor of its destruction, which would check advance by the most resolute troops and gain ample time to communicate with the rear". Sort that out Seymour!

Infantry Attack

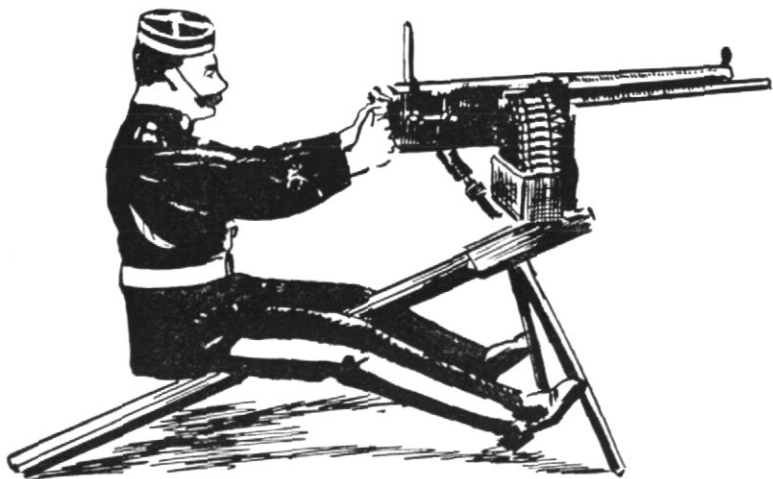
"In fact, all direct attack across the open seems impossible, and turning movements under cover must be resorted to, as well as night attacks, which would, however, be met by the automatic guns of the defence flashing electric lights to discover the enemy, while a hail of bullets would penetrate the outskirts of a wood, which is a favourite place for a skirmish line". Now we know where the multi-purpose machine gun originated.

Field and Horse Artillery

"There is no concealing the fact that both field and horse artillery have been driven from the line of battle by the increased range, accuracy, and rapidity of infantry fire, much more so by automatic machine guns". According to the writer, artillery will be limited to driving troops from the shelter of villages, and other menial tasks.

Fortresses and Entrenched Posts

"Twenty minutes with a spade would, in average soil, make a shelter trench sufficiently deep for a machine gun to



From the Original Illustration in "The Queenslander"

fire out of, and the fresh sod laid on the out-turned earth, or a few branches stuck into the loose soil, make it nearly invisible". Tell that to the modern Digger. "Twenty minutes — turn it up Skip!"

Boats Landing

"Its use as a boat gun in the exploration of rivers in hostile regions is manifest, as well as its adaptability for jungle or bush warfare, as exemplified in its extremely successful use by Sir Francis de Winton in the Gold Coast region". Another titled gentleman muscling in on Surfers Paradise.

Ships

"... as well as a cheap, complete, and easy protection of the torpedo fields of harbours, which, with disappearing quick-firing guns and position finders, will lead to the abandonment of costly structures in granite and iron".

This hasn't stopped the concrete gunners from carrying on for another seventy years!

Trial at North Williamstown

"There was a large attendance of officers of the Defence Force to watch the firing. Otherwise the attendance of persons more or less interested in the test must have numbered at one time close upon 100". The usual percentage of bored spectators.

"A lady present was asked to fire the first shots, the gun having beforehand been laid on the target. She seemed to hold the handles for a second only, but in that brief time thirteen shots were fired, nine being on the bulls-eye and the rest just outside. A second lady took the gun and, holding the handles a couple of seconds longer, put about thirty shots on the target, thirteen being on the bulls-eye, the rest just above it on the left".

"After descriptions of practices by Colonel Bingham and Petty-Officer

Edwards, the reporter then has a shot at describing his impressions of the effects of the weapon, and spectator reaction.

"There could be but one opinion amongst those present as to the efficiency of the Maxim, and that opinion was variously conveyed in such exclamations as 'Wonderful!' 'Terrible!' No doubt preceded by other exclamations so dear to the Australian heart.

"At a little distance the noise of the gun suggests in some degree the rapid puffing of a railway locomotive, while an awesome humming is kept up by the stream of lead pouring from the muzzle; indeed a terrible weapon!"

Delinquent Tailpiece

Advertising was as amusing as it is today: here is an example —

"ST JACOBS OIL PERHAPS YOU HAVE

"If you have a son who earns about 12/- or 15/- a week, who dresses well at your expense, and spends his own magnificent income on his own personal adornment, who wears Afghan gold rings on each hand, and smokes cheap and vile cigarettes to enforce his claim to manhood, you don't want to waste time talking to him. Just look up the few remarks offered by Solomon in all his glory for your guidance, and wade in. The ordinary cutting whip of commerce is about the best sort you can use for that kind of fool, and be careful not to leave the St Jacobs Oil bottle about handy. He can deaden the pain in about half a minute with a single application".

Administrative Tip

Without a radio or a motor vehicle this wasn't a bad sort of job.

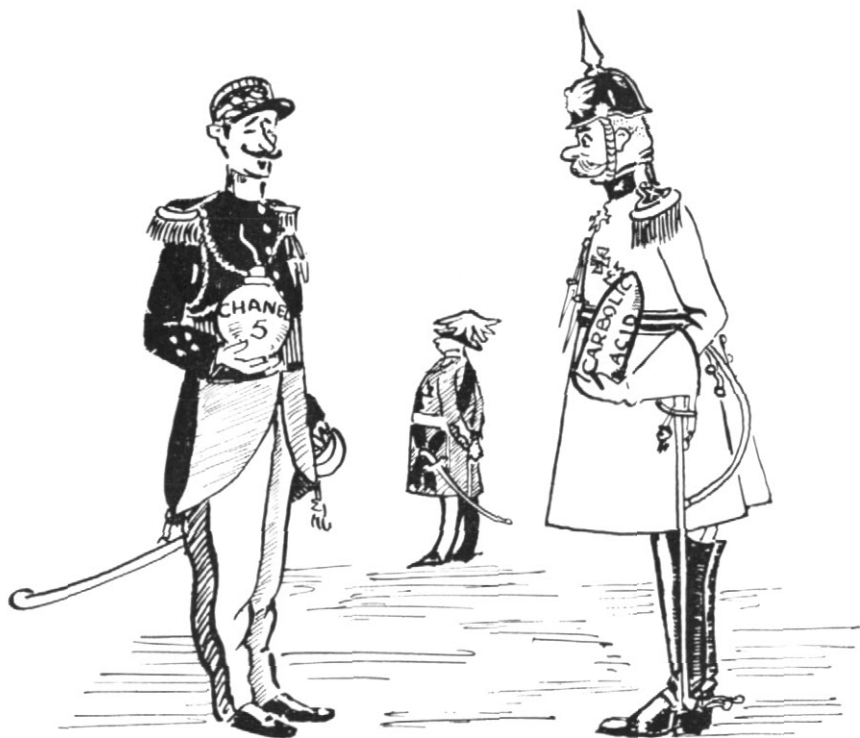
"It is no easy feat of administrative ability to conduct an army of 16,000 men of all arms of the service over six miles of desert without a tree or landmark of any kind, on a pitch black night, and place them at a fixed hour in their

precisely appointed places at stated intervals without hesitation or mistake; and this is what Sir Garnet Wolseley so ably did the night before Tel-el-Kebir. They steered by the stars, and their astronomical lore was never for one moment at fault.

"It is worthy of note also that Sir Garnet Wolseley is the first General who has had a British force under command in which discipline had to be maintained without recourse to the lash. This fact, it is said, is mainly attributable to the teetotal principles inculcated by the General. The supply of tea was liberal,

and beer was allowed on the march, while spirits were positively interdicted to men and officers alike. 'Fire water' appears to be the most active agent in leading our men into acts of insubordination, and commanders in future campaigns will do well to note the example set by Sir Garnet Wolseley".

They noted it all right. As an old sweat who was lucky if he got one bottle a month in the last conflict I'd say they even improved on Sir Garnet's idea: makes me thirsty to think about it. Thank you, I don't mind if I do.



Australia and Nuclear Defence

STAFF-SERGEANT P. G. GITTINS
Royal Australian Engineers

In our forward thinking we must put the emphasis on organization, on tactical conceptions, and on the weapons and equipment that are necessary to enable us to fight in the way we want. All our future depends on getting the right answer to the problems we now have to face.

— Field Marshal Montgomery

WITH the threat and counter-threat by the Communist bloc and the Western world, one is left with the conclusion that the only defence against nuclear warfare is diplomacy, deterrence, and counter-destruction. Since diplomacy has been replaced by public name-calling in the UN and the exchange of abusive threatening letters between heads of state, and since counter-destruction would build up into universal genocide, it would seem that defence would rest on deterrence, or perhaps more crudely, the "Balance of Terror".

With its rocket range, uranium fields, and the largest steelworks in the southern hemisphere, Australia could be classed as a "legitimate" target area in any future war.

Naturally Australia would have all the military and economic support of the Western world in the event of any nuclear attack made on her territory, but this reassuring thought is not sufficient to overcome the death and destruction resulting from such an attack. We must, therefore, take more positive measures.

The Selection of Targets

If the Russo-Chinese bloc in Asia made an attack on Australia, how would they budget their supplies of nuclear bombs?

Let us suppose that their plan is to produce the maximum possible immediate paralysis — primarily by casualties, panic anarchy and starvation. For this purpose their prime targets might presumably be of the following general types, in descending order of importance:—

- (a) Australian air bases — including aircraft carriers.
- (b) The Federal and State capital cities.
- (c) Population centres.
- (d) Vital transportation centres and resources.
- (e) Electric and hydro-electric power sources.
- (f) Industrial centres.

Obviously the apportionment of bombs to these different types of prime targets

is a highly complicated problem — a problem to which Communist military experts would devote (and doubtless are devoting) extended study.

The Communist Capacity to Inflict Damage and Destruction

According to the most reliable and non-classified information available to us at present, the destructive area which a Communist attack on Australia might inflict is growing with swiftly accelerating speed.

This growth is due to two basic factors —

- (a) The accelerating increase in the power of individual bombs.
- (b) The accelerating increase in the total destructive power of nuclear bombs available to China from Russia, that could be delivered on Australian targets.

China's capacity to deliver the bombs (with both Russian approval and assistance) is reckoned to be considerable. She has been given long range bombers, and as a substantial backing, Russia has available long range missile carrying submarines, as well as reported ICBMs.

There is a possibility also that the Antarctic, in one sense, may be destined to become the Communist heartland's answer to the SAC bases that encircle it. The Antarctic could provide her with a landing or launching site, and thus pose a threat to Australia from the south.

Proposals to Reduce the Damage From Nuclear Attack

If it is agreed that the Communist *bloc* has the rapidly accelerating power to destroy, the death of our nation can be avoided or prevented in only two ways —

- (a) By factors preventing the launching of a nuclear bombing attack, or
- (b) By factors reducing the damage of the attack if and when it comes.

Let us consider the second of these two possibilities. The major proposals for reducing damage to and the destruction of Australian cities and resources are as follows:—

- (1) A radar screen in depth, ie, successive circles of radar installations so that, if an enemy plane or missile is missed by the outer radar screen, there will be a good chance of picking it up by one of the inner circles. Furthermore there will be the opportunity to track the plane as it proceeds towards its target. One of the first requirements of guided missile defence is that the defending weapon controller has early enough radar warning for him to launch his defence missiles. This radar screen will provide that warning.
- (2) The provision and issue of all types of missiles to the Australian Defence Forces, with installations at strategic points for launching interceptor missiles (or planes). Already this is in the preliminary planning stages, and last March a mission to both America and Great Britain examined various missile systems with a view to establishing a highly mobile ground-to-air rocket defence system for the industrial centres of New South Wales.
- (3) An adequate Australian strategic bombing force capable of delivering nuclear weapons to enemy targets. This helps to achieve the deterrent effect of the threat of reprisal.
- (4) Ample anti-aircraft defences surrounding important target areas and along important approaches, with trained civil defence plane spotters to announce the approach of enemy bombing armadas.
- (5) The creation of a national civil defence/disaster corps. Inexpensive but effective civil defence would save literally

millions of lives. The extent of survival would depend directly on the organization, training, and preparations made in advance. The fear of nuclear warfare effects, ie, heat, blast, and radiation can only be allayed by a nation-wide education programme preparing people for the nuclear era.

- (6) The dispersion of vital industries (including operating personnel) so as to reduce the concentration of populations and structures below the level justifying nuclear bombing.
- (7) Personnel shelters at important centres and installations, amply stocked and provisioned with food, water, and medical supplies.
- (8) A speedy population evacuation scheme from target areas.

(9) Emergency control and administration centres.

- (10) Last, but not least, a comprehensive training scheme for all civilians over the age of 16, and all members of the Defence Forces, in civil defence and survival in nuclear attack.

Conclusion

Dangers from atomic and nuclear explosions, both to personnel and equipment, can be very greatly reduced by planning and training based on knowledge and experience. If we are not completely up to date in all that this implies, we will suffer huge penalties in the event of war.

Clauswitz' old saying "Defence is the stronger form of war" still remains valid today.

Speaking of a training exercise in which a tendency developed for tanks to be used singly, Lieutenant-General Sir Michael West, commanding 1 Corps, British Army of the Rhine, said —

"I should like to go on record as saying that the use of tanks singly, except in the most amazingly exceptional circumstances, is unethical, despicable and absolutely plumb crazy."

FINANCE AND CMF TRAINING

LIEUTENANT-COLONEL E. G. WILLIAMS
Directorate of Military Training, AHQ

SINCE CMF units were reactivated after the 1939-45 war, it has generally been considered by all officers associated with the training of the CMF that funds allotted for this training would always be ample.

In the process of building up the CMF and during the recent reorganization this belief has been substantiated from year to year firstly, because of optimistic estimates from those training officers required to produce the estimates of costs for training, and secondly, because of the flexibility of AHQ Finance Officers in being able to arrange for unexpended monies in one vote to be transferred to the training vote.

Rising costs trends, basic wage rises and other "imponderables", with little, if any, commensurate rise in the Army vote, will now force CMF training officers to ensure that full value is received for every pound spent on training.

Definition of Training Funds

"Instructions for Training, 1956" provides that "the funds allocated annually to cover expenditure (excepting pay) on camps, schools, bivouacs, courses of instruction and tactical exercises, etc, for the Citizen Military Forces (including members of the Reserve of Officers and Regimental Cadets but excluding National Service Trainees engaged on their initial camp training) are known as 'Training Funds'".

However, in this paper Training Funds have been interpreted as meaning all funds (including pay) required for the training of the CMF, National Service, full time duty, and cadets. It must be made quite clear in fact, that the amount of the funds provided for pay and allowances for all of this training will stipulate just how many days training may be undertaken and, by whom. As a direct consequence, the funds required for General Expenses, being generally proportional to the number of days training authorized and the numbers of personnel being trained, will depend upon the funds authorized for pay and allowances.

The types of funds with which training officers will deal, therefore, are as follows:—

(a) *Pay and allowances for —*

- Obligatory Camp Training.
- Obligatory Home Training.
- Full-time duty National Service Training.
- Voluntary Home Training.
- Voluntary Schools and Courses.
- Performance of additional duty on CO's authority.
- Attendance at voluntary Schools and Courses.
- Over 20 days on GOC/Commander of a Command authority.
- Efficiency Grant.
- Officers of Cadets.
- Part-time duty training.

(b) *General Expenses for —*

Camps.
 Camp reconnaissances.
 Schools and Courses.
 Bivouacs.
 Exercises.
 Conferences and Conventions.
 Cadet Activities.
 Home Training.
 Skill at Arms Prize Money.
 Welfare and Betterment Allowance.
 Athletic competitions.

Expenses under "General Expenses" are further dissected into types of expenditure, eg, Travelling and Subsistence, Freight and Cartage, Bivouac Allowance, etc.

Estimation of Training Funds

Basically, estimation of training funds must be made initially by COs of units and, to enable them to estimate with some degree of accuracy, the following criteria must be considered:—

- (a) Authorized training (number of days).
- (b) Percentage of attendance at various types of training activities.
- (c) Proportions of ranks to attend various training activities and their marital status.
- (d) Pro rata costs of General Expenses dissection items for the various types of activities.
- (e) Distances to be travelled from unit HQ to the site of the activity, and the method by which the site may be reached, viz, rail, road, etc.

It is at this stage that the incurable optimism of the training officer is first apparent. Despite experience from previous years, he will always over-estimate the percentage of attendance and the proportion of ranks to attend an activity. This, multiplied many times throughout the whole programme of the years training of a unit by the large number of training activities, and again by the number of units in a Command,

generally results in a large over-estimation in the General Expenses funds required for that Command. Also, it automatically produces a much larger over-estimation of the pay and allowances required, since the total numbers to attend various types of activities are collated by Commands and submitted to AHQ, where, *inter alia*, they may be used for estimation of pay and allowances.

At the date of writing this paper, units are required to submit estimates for General Expenses only, but the wide implications of inaccurate and over-optimistic estimation of items under this heading must be emphasized. The effect is felt not only in the CMF pay vote, but in divisions of the vote dealing with Fares and Subsistence, Freight and Cartage, Rations and Supplementary Rations, POL, Hire of Vehicles and others. The cumulative effect may well mean that the purchase of items of capital equipment may have to be deferred where, had the estimate been reasonably accurate, they could have been bought.

Unit Estimates

How can the harassed unit Adjutant or Quartermaster who will prepare the unit estimate do so with any degree of accuracy? There are so many "imponderables" involved in this process that one is hesitant even to offer advice on the subject, but for a start let us look at the "constants" and "variables" for one or two types of activities to see if we can arrive at some outline plan.

Since these are unit activities, there immediately seems to be one "constant" which will apply to all their activities — that is the number of days training authorized by AHQ. Now, while we know that the three years training cycle published in MBI 186/1958 authorized training to a total of 53 days for members of the CMF, and also that other authorities permit, first, a GOC/Commander of a Command, and second, a CO of a unit, to authorize additional training to this 53 days, we also know

that nothing approaching this amount of training is actually performed by all the CMF. Our "constant" has, therefore, become a "variable", but a variable with a maximum.

There is, however, a reasonably accurate measurement of what training has been done at particular types of activities, and that is the company roll book. It will show, after a little analysis, the numbers of officers, WOs, NCOs and rank and file who attended each particular unit activity. Here then, is the first real guide to the so very important "numbers" of personnel, and it is at this stage that the optimism of the training officer must be checked. It is most unlikely that the attendance at a bivouac (for example) this year will be better than it was last year unless there has been a considerable upwards change in the strength of the unit or sub-unit to attend the bivouac. The next factor which again may be described as a "variable constant" in an assessment of numbers to attend activities, therefore, is the strength, vis a vis, the strength last year. These two factors taken in conjunction, will determine the personnel strengths estimated to attend the particular activity. This is only a basis for the calculation of the General Expenses needed for the activity, but it is most important.

Variables will include the following:—

- (a) Location of activity.
- (b) Type of activity.
- (c) Cost trends.

Is the activity to be held away from the training depot? If it is, the troops have to be transported to the site and this will cost money, whether unit transport or public transport is used. With the numbers to attend defined, the costs for transport by road (Army or public means) or by rail can be calculated quite accurately.

What other General Expenses are likely to be incurred? If a bivouac, it is likely that money will be spent on

postages, telegrams and telephones, bivouac allowance [which covers rations, expense supplies (excluding straw) and fuel for cooking, freight and cartage, and perhaps the hire of vehicles and employment of civilian labour. The amount of money required for these items must be accurately assessed from the numbers to attend the activity (the Quartermaster must have his finger in this pie, too!).

It is apparent that there is a lot of work involved in estimating the cost of even one activity, but without detailed research and intelligent application of past experiences and present trends, a completely false costing will be made when all the unit's activities are collated.

However, some form of an outline plan has emerged which may be reduced to —

- (a) A firm resolve not to use over-optimistic figures for future unit activities, but to use coldly calculated figures based on past experience.
- (b) Use of costs of items on today's prices with a slight percentage rise for rising cost trends.
- (c) A slight peep into a crystal ball to assess expansion or contraction of the unit.
- (d) An appreciation of the effects which over estimation may have on Army finances.

Command Collations

These are not recipes for summer salads, but they do have one thing in common with these dishes — to ensure that the "lettuce" is not dished out with too heavy a hand. It is the responsibility of the Command to check formation and unit bids for training funds and, having assessed them as being a fair and just bid for the training planned, to collate all the unit and formation bids into a Command estimate. This is prepared in two parts, the first showing the types of activities, the numbers to attend and the

estimated cost; and the second the split up by cost of the types of service required, eg, "Fares and Subsistence — £30,000". Totals in Part 1 and Part 2 must balance.

Action by AHQ

On receipt of Command bids, the total amounts under various items of estimate divisions are compared with expenditure on those items in past years. Usually, unless some large projected change in strengths is predicted, the final figure from the examination of Command bids and AHQ records, leans rather towards the factual figure of recent expenditure.

Estimation of Pay Required

This is generally "averaged" from the past years expenditure, and takes into account any large increase or decrease in strengths or training activities. The authorized training for the training year is laid down in MBIs, but it must be recognized by all concerned with training that the maximum training authorized is never completed by all ranks.

Estimation of funds required for pay and allowances, therefore, requires nice judgment by DMT and CFO in collaboration. There is possible, however, some measure of checking by means of the general relation between pay and general expense, and from past experience.

Control of Expenditure

Assuming that funds have been made available both for pay and general expenses in accordance with Command and AHQ bids, the all important question is then posed as to what is the best method of ensuring that expenditure is controlled within these funds.

It is considered that the control of funds to be expended on training should be allotted, within reason, to the level at which expenditure is to be incurred, ie, to Commands and, following the same line of reasoning, by Command Headquarters to Formations.

It follows that it is necessary for the Command slice of training funds (as used in the context of this paper) to be allocated to them very early in the training year (if possible, before the new training year begins). This allocation must, of necessity, be based upon Command Estimates, including estimates for pay, and related to the expenditure on training for the old financial year, and must show the general division of funds as between pay and general expenses.

Commands, on receiving this allocation, must calculate the amount of training possible with these funds and, from the formation estimates, calculate a sub-allocation of funds to formations. It is essential that it be understood, at this stage, that all available funds will have been allotted, and that expenditure must be confined to the amount of the Command allocation.

From the time that funds are sub-allocated to formations, strict control and continuous review of expenditure will be necessary. This control and review may be carried out by Command Estimates Review Committees and, in particular, very close co-operation between the Command G Staff and the Command Paymaster will be necessary.

While the continuous review of expenditure is reasonably simple, the control of training presents some problems. Certain statutory training, eg, Obligatory Camp and Home Training CMF, National Service full-time duty training, and some other "incidental" training, viz, Officer of Cadet training, are commitments which represent inescapable expenditure for pay. All other training will be measured by the funds available and the cost of each type of training. It is from within the funds remaining after statutory training pay and general expenses have been costed that the flexibility of the Command training must be achieved.

It will be clear, therefore, that the training value for funds expended, to be achieved from any particular voluntary

activity, must be weighed very carefully before the activity is authorized. It is important, so that best value may be obtained for expenditure, to recognize those items which, without careful watch can quickly convert an economic activity into a wasteful process. Of these, Travelling and Subsistence, Hire of Vehicles, Civilian Labour, Freight and Cartage, and Rations come most quickly to mind. Three of these are related to movement and the deduction from them that follows is that, providing equal training value may be obtained, the closer an activity may be organized to the training depot, the further the Command training allocation will go.

What about schools and courses? Can economies be effected with regard to these activities? In order of highest costs, the methods of conducting schools and courses are —

- (a) Continuous full time.
- (b) Night and morning (continuous for pay purposes).
- (c) Night and week-end.
- (d) A series of week-ends.

For training value, obviously the more economical course is the continuous full-time course, but this is a costly course administratively and, with the CMF, difficult to fill vacancies allotted. Night and morning courses, while not impinging on students' employment, are again costly

from the administrative angle, and rarely produce the full value for pay expended. Night and week-end courses (two consecutive week-ends and three hours per night for the week nights between) are very cheap administratively (pay plus 9 fares to parades and 4 meals per student) and do not impinge on students' employment, while a course consisting of a series of week-ends costs only fares to parades (two per week-end) and meals required in accordance with working hours.

Depending on the aim of the school or course, the decision as to its method of conduct should always favour the more economical.

Conclusion

It is felt that this is a somewhat lengthy and rambling paper, but it is hoped that its publication may throw some light on what is rather a misunderstood yet very important subject.

It should be apparent, however, from discussion above, that the funds which are allocated for training must be very carefully husbanded, that the right place for control of training funds is Command Headquarters and that the right personnel to ensure that no wastage is permitted or practised is every CMF officer and every ARA officer associated with training.

A UNITED STATES — Counter-Aggression Force

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Reprinted from the July 1959 issue of the *Military Review*,
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WAR need not be a conflict of arms! The conditions prevailing since World War II, exclusive of the periods of armed conflict, generally have been called cold war and had all the earmarks of a war, except for actual fighting. The period was characterized by a struggle between the Communist bloc led by the USSR, and the West led by the United States. The object of the struggle was to gain the support of the people and the governments of those nations belonging to the opposite camp, or of those nations remaining uncommitted. Political, economic, and psychological methods were used in the cold war to gain an advantage.

The possibility exists prominently that Communist non-military aggression may become so threatening to the security of the free world that the latter may be forced to react in a manner that military action would become unavoidable. The dividing line between cold war and military action is fairly clear but easily tripped over. The degree of determination to resist decrees whether cold war will lead to hot war.

The hot variety of war can be considered in different categories, from limited to general. Types of weapons

Lieutenant-Colonel H. P. Rand received his AB Degree from Columbia University in 1941 and was commissioned the following year. He was graduated from the Regular Course of the US Army Command and General Staff College in 1953, and from the US Army War College in 1958. During World War II he served with the 13th Armoured Division in France and Germany, and from 1946 to 1949 he was with the 1st Constabulary Brigade in Germany. In 1953 he went to Korea, where he was battalion commander and staff officer with the 7th Infantry Division and battalion commander with I Corps Artillery. Other assignments include duty with the Career Management Division, Department of the Army; Army War Plans Division, Office of the Director of Plans, Deputy Chief of Staff for Military Operations, Department of the Army; and three tours as instructor at the US Army Artillery and Missile School. He now is assigned to the faculty of the USA CGSC.

used (conventional and different types and yields of nuclear weapons) geographical restraints observed, types and numbers of forces employed, and objectives sought—all these criteria are applicable to a categorizing of wars. When no restrictions are observed, total war exists. When restrictions are observed, whether by public declaration or through tacit consent between the parties involved, limited war exists.

Limited War

For purposes of this discussion, limited war will be considered one in which the objectives sought by either side are limited. If it becomes apparent to one side that its objective cannot be attained, it may be either prepared to accept defeat or relax the self-imposed limitations on its objectives. To be limited the conflict must be aimed clearly at an objective other than the existence of the enemy state or its form of government. The temptation may arise for the victor to exploit military success in a limited war, materially change the objective, and eventually threaten the very existence of the loser. In the nuclear age such a temptation is most dangerous because the West's major antagonist of this era will, under any circumstances, maintain his massive retaliatory capability in reserve. This he is likely to employ only when survival of his government and nation is at stake or to initiate a surprise general war.

Selectivity in the application of force is the most prominent characteristic of limited war. Land forces possess the best facility for graduating, to the degree required, the amount of force applied. The type and size of the forces employed—from infantry patrols to corps of armoured divisions—the type and yields of weapons used—from rifles to missiles with nuclear warheads—the tactics applied—from harassing raids to deep penetrations—and the volume of support from other services—all of these afford the land forces a long and finely graduated scale of force application for limited war.

The brief history of the nuclear age supports the thesis that limited wars are more likely to occur than general war. The cold war which began after World War II has been interrupted by several instances of Communist aggression with limited objectives. Such aggression occurred even during the period when the United States alone possessed a capability to deliver nuclear weapons at great ranges. Although the Soviets refrained from direct and open involvement in the conflicts, their behind the scenes participation was apparent. Since there is no end in sight to Soviet expansionist desires and, therefore, to the cold war, the threat of limited war will remain an instrument of Soviet policy.

Soviet Nuclear Diplomacy

The nuclear diplomacy of the Soviets might be taken as an indication that they are prepared to initiate global war. However, as long as they retain the initiative in the international power game through their political philosophy, they can afford to resort to nuclear diplomacy, knowing full well that the free world will not react to words with arms. There is little doubt that the dread of nuclear devastation exists worldwide. Soviet leaders themselves are subject to this fear from among their own people. No conceivable advantage can accrue to them if they initiate general war which would destroy much of the United States and, in retaliation, much of the USSR.

For the foreseeable future, however, because of Communism's aggressive aims the free world is faced with the possibility of limited war. The United States, therefore, must develop a strategic concept which will help to prevent limited wars whenever possible and to deal with them decisively when they occur.

All Communist military aggression during the cold war years has been primarily by land forces, such as in Greece, Indo-China, and Korea. The principal reaction of the free world in all these instances was the employment of countering land forces supported by

naval and air forces as required. Land forces will, under all foreseeable conditions, continue to be the prime instrument of attaining Communist limited war objectives, and countering land forces will, therefore, remain the prime means of response by the West. In limited war the relative importance of land forces is materially greater from the outset than in general war where air forces predominate in the early stages.

The majority of the likely areas of Communist aggression lie at the fringes of the Iron Curtain in the Middle and Far East. In these areas the Communists can employ readily the numerically superior standing land forces at their disposal. In order to be assured of successful operations against such forces, *the free world must maintain a capability for meeting such aggression promptly with land forces supported appropriately by air and naval elements as required by the situation.* Not only must there be a sliding scale of deployable forces, but their fire support, the depth of their reinforcements, and the extent of their tactical and strategic air support also must be readily adjustable.

The initiation of nuclear warfare by the free world should be undertaken only for defensive purposes. Many considerations govern the use of nuclear weapons. One of lesser import is that the Communists may be expected to make propaganda capital of the initiation of nuclear warfare by the West. However, the employment of nuclear weapons in a defensive role would largely vitiate Communist exploitation of a propaganda theme.

Ground Force Deterrence

The effectiveness of land forces in *detering aggression lies in the clear understanding by the antagonist that the forces exist, that they will be employed, and that their employment would enjoy full popular support.* In order for a deterrent force to be effective it must, according to Henry A. Kissinger in his *Nuclear Weapons and Foreign Policy*,

"pose risks which will seem . . . out of proportion to any gains". Even if by sheer weight of mass land forces the Communists could gain a limited objective in a limited war, the losses inflicted upon them in men, materiel, and in prestige must be so severe that they clearly outweigh the gains of the objectives attained.

A significant aspect of having forces immediately available is that the presence of United States troops so far has consistently deterred Communist overt aggression. The Communists have attacked only in places where no United States troops were stationed or where the United States had indicated or implied she would not intervene. With the fear of general war, linked with limited war *in the minds of the statesmen of the world*, the actual presence of United States troops or their immediate availability is a strong deterrent to Soviet attack. Satellite countries also will act with significantly more restraint when US forces are on the ground or can be expected to intervene in a minimum of time.

It is difficult to establish the precise size of land forces needed as a successful deterrent to limited war. A valid available measure is the Korean war experience when the United States employed up to eight Army divisions and one Marine division alongside 21 allied divisions. The initial United States commitment was limited to elements of one division. The build-up of United States forces was so slow that almost the entire Korean Peninsula was overrun by the enemy. The immediately available forces were of critical significance. The size of such forces should be sufficient that, together with the forces of the nation under attack, they can contain that attack until additional forces can be deployed to win the war.

Organization

In order to attain a strong deterrent stature needed to defeat any limited Communist aggression, the United States

must develop a force for that specific purpose. The designation of the Strategic Army Corps (STRAC), from which the slogan "Skilled, Tough, Ready Around the Clock" is derived, is a positive step toward this goal. However, it is believed that this force would be better able to discharge the vital functions envisaged for it if it were triservice in design. The force eventually should consist of six Army divisions organized into two corps so that provision would be made for a two-pronged aggression—a likely and logical Communist tactic. Navy and Air Force forces must be a part of the force to give it the necessary support, both for lift to the area of conflict as well as for combat support in the area.

This triservice force should be established prior to making a public announcement to the effect that the US Counter-Aggression Force (USCAF) has been created.

To attain maximum effectiveness, the elements of all three services making up USCAF should be either permanently assigned, or at least earmarked for limited war. In this way the US would possess a limited war force comparable to the Strategic Air Command. Joint planning, joint training, and joint manoeuvres would be conducted and close co-ordination in tactical and logistical matters would result.

A joint command structure is needed which would allow the Joint Chiefs of Staff to designate USCAF as a JCS joint task force. Since the Army's land forces would be the primary ingredient of the USCAF, the Army should be designated as executive agent.

The USCAF elements should receive such special training, equipment, and attachments as the world situation dictates from time to time. In addition to being a military weapon, the USCAF thus could become a potent policy instrument for the handling of US foreign affairs. If, for example, the Middle East begins to look like the most likely area for Communist subversion and military

activity, the US Government can announce publicly that USCAF has been directed to equip and train for operation in hot desert country.

The land forces must possess a full range of fire support capabilities. Conventional artillery must exist side by side with weapons capable of delivering fractional to large-yield nuclear weapons. The knowledge that US land forces are equipped to deliver such fires will add significantly to USCAF's deterrent effect. Air Force and Navy aerial support elements must habitually be with USCAF to provide strategic and deep tactical fire support to the land forces, if needed.

Airlift Essential

Much of the effectiveness of the USCAF depends on its prompt availability in any theatre of operations. In the event of local aggression and in order to enable the Army to place strong initial forces on the ground, airlift should be available to USCAF. This airlift should be sufficient to lift combat elements of two divisions plus the necessary support units. Sealift to carry the balance of the two division forces must be on hand promptly. The required lift for resupply, and the transportation of additional division forces, as required, must be readily available for assembly within 10 to 15 days after the initial elements have been dispatched.

Prompt employment of USCAF would be greatly expedited by prestockage of certain supplies and equipment in selected areas of the world. Such prestockage would be further evidence of US determination to resist aggression.

Elements of USCAF which would be deployed first must be in a high state of readiness. Not only is this a challenge to training, but difficult personnel problems also must be solved. The units must be up to required strength levels at all times, with all personnel qualified and eligible for overseas shipment. This is particularly difficult when shrinking personnel ceilings require tactical units

to perform many extraneous, administrative missions. Maintaining a high level of readiness also effects the morale of a unit. The personnel must be so indoctrinated that the need for the intense and repeated unilateral and joint training exercises is ever apparent. The troops must appreciate that they contribute significantly to the security of the United States. Education and information services must keep the units abreast of world developments and alert to the ever-shifting directions and levels of Communist aggression, military or otherwise.

It is conceivable that USCAF forces would be deployed in full, or that elements would be employed in several places simultaneously. Whenever the primary deterrent land forces and supporting Navy and Air Force elements are thus committed, Reserve component elements of all three services must be so organized as to be capable of reconstituting an appropriate reserve. Plans must be developed for the mobilization of balanced triservice forces whose composition closely resembles that of USCAF. These units should enjoy a high priority within the Reserve establishment in terms of personnel, equipment, and training. Eventually, designated Reserve component elements should plan and train together, similar to the active element of USCAF.

Obstacles

Many obstacles exist to the establishment of a US force of the type proposed. With present Army force levels it is not possible to form a six division force and maintain existing overseas commitments. An Army manpower level of at least one million men must be attained to establish USCAF, maintain overseas forces, and continue all other existing commitments.

A national educational programme must be undertaken to convince the people of the United States that a force such as USCAF is an essential tool for the free world. In addition to influencing

domestic public opinion the United States must win world opinion over to the idea of USCAF. Soviet propaganda would undoubtedly promptly affix the aggressor label to the force. The United States can prevent this by dramatizing USCAF as a tool to stop further Communist expansion. The best medium for ready access to all nations of the world is the United Nations. The United States has been using the UN frequently and habitually for her conduct of international relations.

United Nations Peace Force

Provisions contained both in the charter of the United Nations and in the UN's "Uniting for Peace Resolution" of 1951 call for force contributions by member nations to maintain international peace and security. Strenuous and prolonged efforts of various bodies of the UN to create such forces have failed primarily as a result of the East-West cleavage which seems to have prevented agreement on any of the major issues since World War II.

It is proposed that the United States offer the USCAF to the United Nations for the purpose of assisting in fighting aggression wherever it may occur. The language of the US offer must be prepared carefully so that it will not commit the US to send forces under circumstances which are contrary to her best interests. As a further safeguard in this respect, there is a clause in the "Uniting for Peace Resolution" which provides that national interests override those of the UN.

The US must make it clear that all potential victims of aggression should be prepared to defend themselves, and that only when their own forces are unable to stop and defeat the Communist aggression will USCAF be called upon.

Despite the opposition of the USSR bloc, which is bound to arise, the propaganda value of such a United States offer is estimated to be so great, particularly among the neutral nations of the world, that the United States —

and along with her the entire free world — would gain immeasurably in prestige and esteem worldwide. Quite conceivably, the US offer may be accepted in the General Assembly where the USSR has no opportunity to exercise the veto. UN acceptance of USCAF would provide a powerful tool to the United Nations for maintenance of peace.

Conclusion

The cost to the US Government of shifting emphasis toward forces prepared for the most likely form of war — limited war — would be significant. However, along with the decision to

initiate such a programme a re-evaluation of the entire defence programme should be made — a re-evaluation designed to ascertain whether there are possible areas where excessive emphasis is being placed on preparation for general war, which is assessed to be the least likely to occur.

If the threat of the massed Communist land forces is clearly presented to the people of the United States, they will see the need for and support strong preparations for that type of war which the Communists most likely will use in their efforts to bring on the early downfall of the Western World.

WAVELL ON CONFIDENTIAL REPORTS

During dinner Wavell was silent, his thoughts obviously far away, while his hosts tactfully carried on the conversation without him. With the port, for no known reason, the talk turned to annual confidential reports. Their value, advantages and drawbacks were argued. Suddenly Wavell came to life, "The best confidential report I ever heard of", he said, "was also the shortest. It was by one Horse Gunner of another and ran — 'Personally I would not breed from this officer!'"

FUTILITARIANISM

A PLEA FOR MORE IDEAS AND LESS CONFORMITY

ONE might have hoped that the spate of "isms" with which this century has been plagued, pre-natally and into its middle age, might by now have been abating. How disappointing it is, then, to find that timid administrations have launched the new cult of "Futilitarianism" as a philosophic justification for their theory and practice of "Inverse Darwinism", or the ascent of apes by un-natural selection.

Futilitarianism, of course, is a natural corollary of utilitarianism, so long advocated by the high priests of industry — what is not useful is not good. Believing that good can never become bad, the futilitarian goes on doing something which was once useful without questioning whether it is still good. In fact, since everything material changes, utility can become futility unless a questioning mind is constantly alert to detect the need for change.

Along with futilitarianism go the theories of the superiority of mediocrity, unsinkability of the unrocked boat, and the safety of the middle of the road.

The cry is for the team of mediocre men who work well together, rather than for one of brilliant men who don't. The theory overlooks that the role of the leader is to draw out the best from those capable of the best. Equally it overlooks the fact that teams are rarely evenly composed and that the ideas of the brilliant must inevitably be disturbing to the set ways of the mediocre.

Successful leadership of mixed teams calls for great ability in harmonising the effort of dissonant groups. Mediocre men quite willingly serve a master, but brilliant men demand a leader. Brilliant men, subjected to poor leadership, or subjected to a master, will rebel, quit, or take over the leadership themselves.

Avoidance of rocking the boat begets stagnation. It demands passivity or dilettante harmony on the part of the crew. The cox steers only for the quiet waters, and quails before rough adventurous seas. Eventually, as in the "Ancient Mariner", the team becomes "As idle as a painted ship upon a painted ocean."

Finally, sticking to the middle of the road can lead to entanglement with both streams of traffic, so that the only safe course then is to halt and hope for the best.

Futilitarianism connotes constant pre-occupation with the present. It takes no note of the past nor heed of the future. It ignores the fact that men cannot live for the present, since the present is instantaneous — the future and the past alone have dimension.

A futilitarian is neither a good conservative nor a good radical. The former strives to preserve what is best from the past, and to plan realistically for the future. The radical is more at pains to clear away the bad of the past and to plan idealistically for the future.

A poor conservative saves too much and essays too little. A bad radical clears away everything, leaving nothing on which to build. A futilitarian, however, neither clears away nor builds, but forever works methodically round on a refuse dump of paper, producing endless plans, none of which is ever practical or even idealistic, none of which he believes can be put successfully into effect.

Futilitarians are afraid of thought. To them all thoughts are awful. Futilitarians abhor ideas, failing to understand that progress comes through the friction of ideas. Futilitarians are devoted to the

present, which to them is always the best: "We have never been so well prepared in peace time as we are now", is a remark typical of a Futilitarian, who fails to ask himself the further question "How well are we prepared to relation to the likely threat?"

Thus the Futilitarian team, safe in its uniform mediocrity, rows in perfect unison its unrocking boat, embedded in the middle of a concrete road, and encouraged with an illusion of movement from the passing traffic.

— Anon

