

UNCLASSIFIED

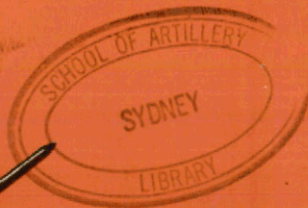
Australian Army History Unit  
16 July 2014

AUSTRALIAN  
STAFF COLLEGE LIBRARY

**AUSTRALIAN**

**ARMY**

**JOURNAL**



**NO. 97**

**JUNE B**

**1957**

*Notified in AAOs for 30th June, 1957*

MILITARY BOARD

Army Headquarters  
Melbourne  
1/6/57

Issued by Command of the Military Board

*ADW Knight*

---

*Distribution:*

The Journal is issued through RAAOC Stationery  
Depots on the scale of One per Officer, Officer  
of Cadets, and Cadet Under Officer.

# AUSTRALIAN ARMY JOURNAL

AUSTRALIAN  
STAFF COLLEGE LIBRARY

*A Periodical Review of Military Literature*

Number 97

June, 1957

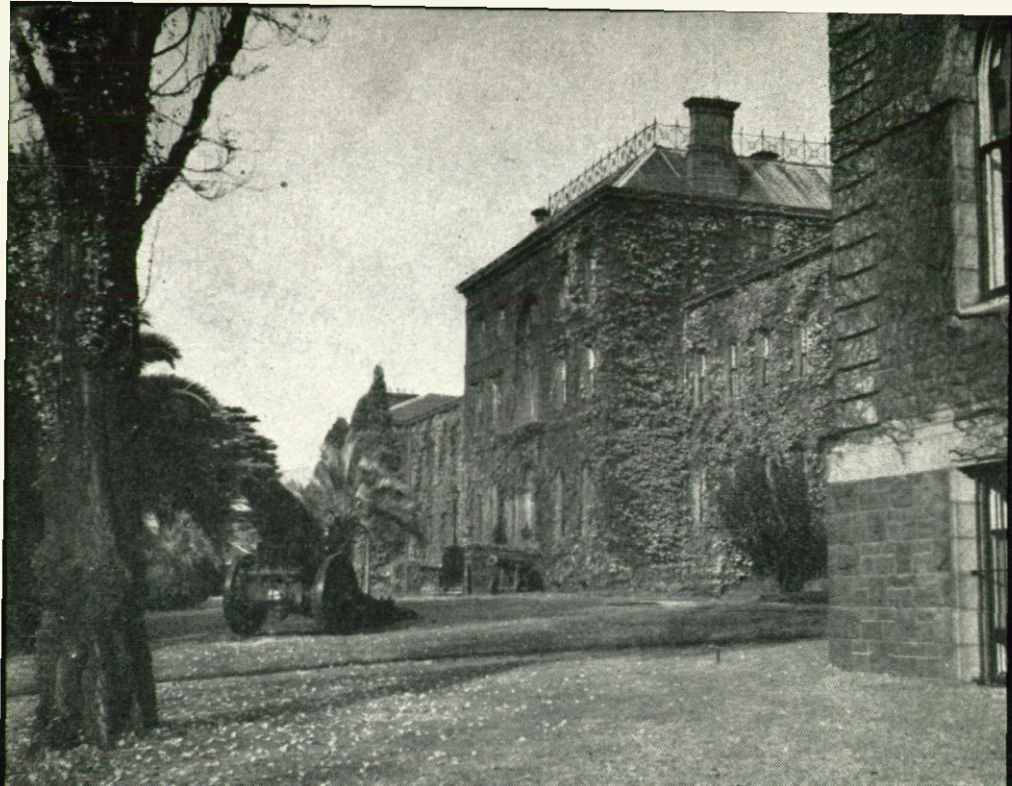
## CONTENTS

	Page
Logistics are Logistic . . . . . Lieutenant-Colonel A. Green	5
Some Observations on Nuclear Warfare . . . . . Captain K. E. Gallard	16
India, 1956 — People and Culture . . . . . Major Austin Chapman	22
Habeas Corpus . . . . . Lieutenant-Colonel H. Fairclough	33
RAASC. The British Predecessors and Formation in Australia Corporal R. T. Willing	39
Massive Retaliation, Deterrence, Brushfires and all that Colonel G. M. C. Sprung	43

---

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

**UNCLASSIFIED**



VICTORIA BARRACKS, MELBOURNE

# AUSTRALIAN ARMY JOURNAL

*Editor:*

COLONEL E. G. KEOGH, MBE, ED (RL)

*Assistant Editor:*

MAJOR W. C. NEWMAN, ED.

*Staff Artist:*

MISS JOAN GRAHAM

The AUSTRALIAN ARMY JOURNAL is printed and published for the Directorate of Military Training by Wilke & Co. Ltd. The contents are derived from various acknowledged official and unofficial sources, and do not necessarily represent General Staff Policy.

Contributions, which should be addressed to the Director of Military Training, Army Headquarters, Melbourne, are invited from all ranks of the Army, Cadet Corps and Reserve of Officers. £5 will be paid to the author of the best article published each month, and £40 to the author of the best article published during the year.

# LOGISTICS ARE LOGISTIC

Lieutenant-Colonel A. Green

Royal Australian Army Service Corps

## The Incremental Factors

THERE is an alarming and significant coincidence between the military noun logistics and the mathematical adjective logistic. The military term logistics was of course imported from the American adaptation of the French for quarters (Fr. General de Loges is literally Quartermaster - General) to mean the art of military movement and maintenance; and "logistic" describes the mathematical processes of logarithmic functions. This resemblance is so close in our modern systems of military administration that any assumption of real similarity would be pardonable. For the administrative echelons in a modern army increase progressively from front to rear, as though obeying some fundamental law of military mathematics, and, despite a wailing chorus of "Cut the Tail," the administrators seem powerless to remedy the situation.

In a simpler age the Indian Frontier soldier was keenly aware of the inevitable incremental factors which limited the payload and radius of action of his animal transport. Thus, if the daily ration of a mule was one-tenth the payload, one mule in ten carried forage, and

for every ten forage carriers another forage carrying mule was required. Furthermore, at a radius of three days' march from base, apart from a basic requirement of six days' forage, an additional factor had to be included for the domestic consumption of the transport, thus considerably reducing the carrying capacity within a mobile force. A common and exemplary economy of those days was the salutary dumping of bulky officers' valises found to be overweight. This may be regarded as a parable for our own times! A similar but more complex incremental factor lies at the root of the present administrative problem, but the remedies, alas, are not so obvious.

## Effects of Administrative Top-heaviness

It is an accepted belief that an inflated administrative Tail is detrimental to the fighting efficiency of an army. Therefore it is relevant to examine the reasons for this belief. They may be summarised in the following manner:—

- (a) Administrative manpower subtracts from the fully-combatant potential strength of the forces in the field.
- (b) An unnecessarily high proportion of rear units con-

sumes additional tonnages, which might be available in the form of ammunition and fuel, to the fighting formations.

- (c) Enlarged administrative installations increase the vulnerability of a force to air and ground attack, and may even constitute objectives and assets to an enemy like the Japanese, who plans to adapt them to his own offensive use.
- (d) Unduly heavy administrative overhead imposes an unnecessary drain upon the belligerent nation's economy and manpower.

Any generalization that the administrative Tail is a bad thing in itself is nonsense. We saw the extraordinary picture, during the Middle East campaign, of the War Office adopting an arbitrary attitude and trying to ship an extra infantry division in the next convoy to a heavily-committed Wavell, who was at the same time insisting that they send, *not fighting arms but administrative units*, because his army was badly-found for the conduct of operations, being deficient of transport and depot units and even accommodation and works for his five months' reserves. Much play is made of the convention that forward units are worthy, and rear units ignoble. This was once true, in linear warfare, but may be less valid in area warfare. Indeed, the Tail may, at last, be more vulnerable than the Teeth. It is also usual to place stress on the inferior discipline and morale of Tail units. This criticism has frequently been justified, but it is not necessary that

administrative units should be lacking in the power to hit back, or if required aggress. AASC units in Tobruk, RASC units at Dunkirk and RIASC units at Imphal have all proved this feasible in the past. It is a matter of policy, leadership and training to develop Tail units with a sting! On balance, it must be admitted that an inflated Tail is a liability, a waste and a reproach to the stomachs and teeth which it feeds, and every effort must be exerted to trim the Tail to a reasonable size.

Under the nuclear threat that process becomes still more necessary. The mass destruction weapon is more effective in the higher kilotonnage, and functions best as a strategic weapon against the conglomeration of men and material in rear areas. The recent British War Office announcement that, because of the vulnerability of large forces and masses of material to nuclear attack, the Government would dispose of surplus equipment and vehicles, seems to derive from the syllogism that reduced holdings offer lesser targets, and therefore facilitate military operations in nuclear war. The logical deduction is that in nuclear war forces and material in dispersed smaller holdings offer lesser targets, but the risk is so great that stocks must be dispersed, concealed, and multiplied, to ensure that an essential level of stocks will survive nuclear attack. In fact, FM Montgomery recently publicly doubted whether the present logistical system could support nuclear warfare in the future. This conclusion leads to quite different measures, such as the stockpiling of war material of all types, and detailed, carefully-planned dispersion.

This does not decrease the Tail, which must inevitably undergo changes, and probably extensions.

### The Root of the Tail

If the modern administrative overhead is examined and simplified, it can generally be attributed to one or more of the following factors:—

- (a) *Weight of Material.*—The justifiable desire of field commanders to build up such amplitude of ammunition, engineer equipment and warlike stores as will ensure outright superiority over the enemy. This leads to concentration of manpower and material, in turn demanding services and accommodation.
- (b) *Administrative Insurance.*—The modern practice of accumulating adequate surpluses of personnel, units and material to guard against all the foreseeable requirements and accidents of war. These reserves are functions of the initial quantities at (a).
- (c) *Personnel Welfare.*—The endeavour to produce an ideal state of personal well-being in the soldier by making available the maximum of urban comforts and a convincing degree of personal care. This demands a high proportion of unwarlike stores and services, lacking in immediate military significance.
- (d) *Systems of Organization.*—The creation of establishments and formations designed to

be perfectly functionally independent and self-sufficient, thus enabling the commander to operate in isolation whenever necessary. Such systems can lead to duplication and waste.

- (e) *Specialization of Manpower and Material.*—The use of special equipment, demand-ink skilled operation and servicing, to confer technical superiority. This modern trend exempts many soldiers from hitherto accepted elementary military duties and creates privileged classes of specialists, with attendant domestic trains.

All these factors are accepted as valid in modern war, but they also contribute to the current state in which only half of the army in the field is available for the fighting arms, because the other half is pre-empted by the "Tail." At the same time, we must recognize the fact that divisional frontages, mobility and fire power have increased manifold while the Tail has been growing. Yet we stand reproved that other armies, notably the Russian, can apparently retain their desirable fighting characteristics and at the same time manage with a Manx tail or an equine dock. Other Iron Curtain armies, such as the Chinese Communist Army, must encounter acute problems of manpower overheads when they are relying on man-pack transport and coolie engineer work. This they can partially offset by keeping personnel amenities at a primitive level, a solution which is denied to Western Democratic armies.

### Consideration of Accepted Overheads

#### *Accumulation of Material*

The Western Democracies have primary reasons for insisting on high levels of war material as an essential condition of operation. It is a logical outcome of their high productive capacity, which has far exceeded that of any potential opponents over the past twenty years, and of their possession and access to the necessary raw materials. It is also a necessity for them, in obedience to humane and demographic factors, to economise in scarce manpower, particularly if expenditure of material, e.g., ammunition, will help effect that economy. Thus during the last war the Western Allies did not employ formations in solid phalanxes on narrow fronts as the Russians did, and invariably aimed to provide a greater volume of supporting fire than, say, the Japanese. The quest for more effective vehicles and weapons is ceaseless. Some of the results of development assist in lessening overheads, e.g., lighter or simpler weapons; other results complicate the problem, e.g., a heavier tank uses more fuel, requires more servicing, heavier ammunition, and larger transporters, in their turn requiring stronger bridges, better roads, and more road maintenance—even larger LST. At every stage such a weapon's development adds to the *administrative Tail in RAASC* vehicles, RAAOC depots, RAEME craftsmen and RAE engineer effort.

The demands for outright material superiority are not confined to the land forces. The air component of the field army is also a voracious

consumer of material. Thus an Airfield Construction Group of the World War II type needed as much transport to move and support it as would constitute the third line transport of an army corps. Modern jet aircraft, having greater tyre pressures calling for heavier tarmac on the runways, will presumably create a need for yet more transport. They consume fuel at such rates, in terms of hundreds of tons of fuel per squadron a day, that POL supply to the air force in war is probably the greatest single logistical problem, quantitatively and qualitatively.

There is no simple alternative to the material accumulations upon which we base our war plans. The use of nuclear weapons may, in time, permit the reduction of first line ammunition scales. There seems no likelihood of engineer stores consumption diminishing; indeed we may see it increase to meet the need for more overhead cover as protection against blast and heat, as well as for conventional field works. The importance of first line material stocks and expenditure lies not only in their initial call on manpower, vehicles and accommodation, but upon their final effects, as each rear echelon adds an increment for service and domestic purposes.

#### **Administrative Insurance**

Forethought is one of the great intellectual triumphs of *homo sapiens*. Administrative forethought is a proven military virtue, and this specialist age has produced whole cadres of military administrators, to whom these functions of forethinking are entrusted. The fur-



nishing of material sinews of war is no longer the province of civilian "rascally commissaries." Consequently the administrative machine is more efficient, more complex and probably inclined to be more self-centred, indeed semi-autonomous. Above all, it is constantly at pains never to be found deficient. Thus, operations of war, which must constantly involve calculated risks, are supported by logistical machinery which admits no prospect of risk. This insistence on heavy administrative insurance must in fact rule out many operations, because the build-up requirements dominate the project from the outset.

The system of maintenance in the field used in the British Commonwealth is an extraordinary example of mutual mistrust. It not only provides theatre and operational reserves, but allows separate holdings by Army, Corps or Division if desired, so that each commander retains freedom of action without having to rely on the next superior formation for immediate support. The American and the Continental systems of maintenance insist upon the responsibilities of the superior formations to the field commanders, and demand greater reliance upon that support. Elimination of some of these holdings would decrease the Tail elements of the army, and the systems which can ensure this are worthy of examination.

The levels of reserves are an important factor in determining army overheads. A reserve cannot remain inert. Comestible commodities must be turned over; vehicles must be kept mechanically sound; equipment, weapons and ammuni-

tion must be housed, inspected, guarded and maintained. These tasks require men, who in turn require incremental services.

The calculation of reserves is an exacting administrative appreciation. It depends on such data as troop strengths, methods of transport, time taken to replace stocks consumed, and the scope of projected operations. It must equate such imponderables as enemy intentions, meteorology (particularly if air transport is to be used); domestic, allied and enemy political measures; and the inherent risks of war. The natural caution of administrators faced by such problems results in over-insurance. Successful logisticians of World War II are already revealing that the magic formula which built their reputations was to "double it" no matter how great the original estimate of manpower or material might be. We all envied the Americans their lavish scales of equipment, but nobody would wish for the related problems of moving and providing such massive quantities under all conditions of operations, and to ensure the backing of reserves entailed.

The levels of reserves carried in the various theatres during World War II are relevant, although they must be related to the geography and strategy of the area at the time. Thus, relying on a long sea voyage, Malaya in 1941 carried about a year's total stocks of certain imported material. Although the force reserves for certain air-transported and air-maintained operations in SWPA were fixed at 14 days, the operations succeeded, despite the

fact that the reserves never exceeded seven days and sometimes declined to the dangerously low level of one day. The Middle East levels fluctuated greatly, from an initial 90 days to 150 days in theory, working out in practice to 120 days. Nevertheless the operations of this vast theatre were not underbacked, although at times the logistics were precarious. In Burma the Allied Land Forces, operating over long and inefficient Lines of Communication, had prescribed levels of six months' reserves of certain technical stores, and still went short at some stages of the campaign. There can be no hard or fast rules; but overinsurance is a fairly constant tendency.

Without doubt the greatest aid to economy in reserve holdings is air transport, whether fixed wing or vertical lift. By reducing the risk of supplies being cut off, the safe level of reserves may be lowered. Moreover, one central reserve may serve a series of forces if air transport is available to transport it. Air transport also reduces the stocks in transit in the system of transport, colloquially known as the "Pipeline." Although this reduces holdings, it also removes a hidden reserve. The main attack on inflated reserves must always be intelligent, bold administrative planning, and not the familiar *carte blanche* hitherto accorded to the experts.

#### Range of Holdings

A factor which is subsidiary to that of reserve levels, and one contributing a substantial part to this evil of overinsurance is the wide range of stock holdings which mod-

ern perfectionists require. Thus thousands of components for vehicles and weapons are duplicated and triplicated in the various echelons of holdings, on the assumption that all are indispensable, and all require several days to deliver.

Only by swifter intercommunication, e.g., teletype; swifter transport, preferably air; and by realistic appraisal of what is really essential, can this aspect be improved. It is noteworthy that the first two devices both entail the employment of specialist personnel and equipment, thus further complicating the pattern of military activity. The third approach entails the elimination of unnecessary refinements, luxuries, anything not a proven necessity. Such a reform postulates questions of the following nature: Should small components be favoured, or whole major assemblies?—the former require detailed fitting, whereas the latter are bulky. Should repair be carried out in the theatre, to save shipping, or casualties be evacuated to the Main Support Area to save manpower and machinery? Should weapons be cheap and disposable, or built to last a generation and repairable? Only it must be remembered that the choice is rarely as simple a matter as the examples quoted. It is doubtful whether much reduction can be made in the range of holdings without prejudicing the mechanization of our army, which is the source of its mobility, firepower and intercommunication.

#### Welfare or Warfare?

Field Marshal Slim, in his epic history of the Burma Campaign,

emphasizes the adverse morale effects of bad press publicity and poor rations in the early phase of the campaigns. Thus a success was to be reported in the euphemistic terms "Pork Sausage" and a failure in the execrated words "Soya Link"—a universally unpopular ersatz sausage. At about the same time the Lethbridge Commission reported that the AMF in New Guinea were (occasionally) getting steak in the front line. The Japanese prided themselves on living hard, and if newspaper reports are correct their army has revived the practice of winter manoeuvres under spartan conditions. In estimating the level of welfare amenity required by any army we must refer to the normal domestic environment of the soldier. The Turk or the Jap may thrive in conditions which will incapacitate an Anglo-Saxon.

Many commanders regard the primitive soldier as the ideal fighter; who is content to march, fight, eat and then clean his boots and bayonet complacently, without yearning for concert parties, home leave or ice-cream. This is a one-sided view; primitive men may have primitive virtues, but are unlikely to possess the sophisticated techniques which are so important in modern war. The urban citizen costs more to breed and rear, but, as the more expensive product, he can achieve more in the fields of mechanization than his simpler brother—and the machine tool is now more powerful than plain muscle.

The question is, then, whether to train our men to forgo the civilized amenities they have always en-

joyed, or to afford them as much welfare as possible. In practice a middle course is normally adopted. Some simplification of entertainment, comforts, and pleasures is imposed, but the level is not reduced so low as to depress morale.

A frequent target of reformers is the ration. Such attacks are often badly timed, since modern rations are not only designed for palatability but also to ensure the calory and vitamin content essential to health. Moreover, economy in rations effects little improvement in the tonnages to be lifted, as the ration is a relatively small portion of the daily maintenance tonnage. When purists complain, "Why can't we learn to live on a pocketful of rice" they are apt to forget these factors. These problems of welfare amenities are similar to the traditional question of whether a horse intended to undergo strenuous winter work should be hardened and acclimatized in advance? Surprisingly, the experts say it is better to coddle the animal in a warm stable, and get it into good fat condition to prepare for the hardship. Soldiers are sentient people and will accept hardship which they know is justified, but the imposition of unnecessary discomfort is detrimental and not conducive to good morale. Hard training is a different matter, since it not only induces fitness for war but fosters pride and self-respect. Therefore in fixing the level of creature comfort to be given to the soldier a fine appreciation is needed. It must be related to his national customs and his operational functions. There is no simple solution; excess must be avoided, but the sol-

dier must be assured that he is not forgotten nor undervalued.

We are from time to time accused of unnecessary detail in our personnel management systems and care of the soldier. Critics say that our potential enemies can manage without Central Records and documentation, and that expensive medical evacuation systems are too extravagant in war. It has already been emphasised that the Western European, particularly the Anglo-Saxon who is reared in the atmosphere of team games and mass-community life, hates to be a forgotten soldier. It is also a basic principle that the soldier who enters battle assured of speedy attention and evacuation if he is wounded gains enormously in morale. Moreover, with our limited manpower we must recover every casualty as quickly as possible. Obviously there can be little economy here; indeed, in nuclear warfare the overheads must increase.

#### Systems of Organization

Military organizers are greatly addicted to thematic numbers and diagrams. For twenty years the major number has been three, and the diagrams have been mainly boxes joined by straight lines in geometrical symmetry. These habits of thought are convenient conventions, but can prove very expensive in manpower. Recently Liddel-Hart has attacked the Corps organization of two or three divisions used in recent years by the armies of the British Commonwealth, and has called for a Corps of five divisions like the 1st AIF in France. Larger multiples of components reduce the overheads.

In the lower organizational levels, units tend to be formed of self-contained "Bricks," which have the inherent flexibility which permits quick reshuffling of support weapons or administrative units to meet changing situations. The onset of nuclear warfare changes the virtue in demand to one of maximum indestructibility coupled with flexibility. The geometrical design gives place to something more biological in shape, which, like the amoeba when severed, can split and still contrive to thrive. Thus the units of the future may be smaller, integral entities. Smaller units generally mean greater overheads, but the integral establishment can sometimes be economical in manpower compared with the symmetrical geometrical type, which is often internally inflexible.

Another principle which is increasingly invoked in nuclear warfare is that of spreading the risk, particularly that affecting vitally important installations and services. This entails extensive stockpiling; multiplication of stocks, accommodation, handling personnel, transport agencies, and ports of entry. This must therefore greatly increase the manpower of the Administrative Tail. It can be offset by more mechanical handling and better communications, but the overall effect is inescapable, even though it may be mitigated. Thus the most advantageous effects may be gained by using air transport, but air transport cannot attempt to move the same tonnages as sea or rail transport, and so additional restrictions are placed on the material available, and on the size of the Tail.

It may be, if global nuclear warfare supervenes, that a type of Guerrilla Administration will be forced upon us. This will be a system of local self-sufficiency, dependent upon dispersed centres of support, using local agriculture and industry to the best advantage, thus permitting the continued prosecution of war despite the initial destruction of major arsenals and centres of population. In such circumstances much of the overhead will have to be raised on the spot to ensure a continuing war effort and survival into victory.

### The Age of Specialists

The effects of technocracy are more clearly illustrated in the air forces, where some twenty technocrats may minister to each winged gladiator. The army still expects an infantryman to master some eight weapons efficiently as well as operate a wireless set. Generally the army becomes an increasingly specialised service, composed of hundreds of skilled employments each taking anything from two weeks to two years to master. The services are equally as specialised as the arms, but this does not prevent them from learning to defend themselves when need arises.

The problems of reinforcement of and training these specialists add considerably to administrative manpower strengths and to the Tail. This commitment is inevitable and must be accepted. Since our specialists increase our striking power they must be tolerated, even encouraged; but if the Tail is not to become a greater liability they must be well-trained soldiers, not civilian

craftsmen in uniforms. This stricture applies equally to jungle and nuclear warfare. Otherwise there is little scope for Tail cutting among the specialists.

### Planners' Delusions of Grandeur

Soldiers, like lawyers, thrive on precedent. Administrative planning is a matter of intelligent appreciation based on solid factors, precedent and guesswork. Naturally there is a great range of circumstances between the relative administrative simplicity of Continental warfare and the complexities of desert and jungle. Hence the range of gross divisional slice in World War II extended from 30,000 to 120,000. Some of the accretion of manpower in the Communication Zone in modern war is attributable to the unwillingness of planners to take any chances. The introduction of Statistical Method into planning has substituted formulae for common-sense logical deduction. So bemused have we become at the hands of the planners that only recently one witnessed such experts hoodwinking experienced soldiers (who had campaigned on 4, 8, 12 and 25 pounds per man per day) with stories of how essential it was to back a force with practically hundreds of pounds per man per day. Such hyperbole verges on fantasy. It is undoubtedly responsible for some of the misunderstanding of the size and scope of the Tail which is now current. What we need is an administrative Ardant du Picq to analyse the logistical facts of life, and explode such theories.

### Passive Acceptance?

This age in which we are living has been characterized by certain modern moralists as the Age of Waste, Excess and Gluttony. There is some justification in this accusation against Western civilization, judged by the standards of the past, and indeed of the present in Asia. It is therefore a short step to acceptance of administrative extravagance as a necessary evil. It is clear that much administrative overhead in military operations springs from natural civilian habits of thought. Thus if the soldier gets apple pie and ice-cream at home the army regards the supply of apple pie and ice-cream in the field as a routine necessity, not even as a remarkable administrative tour de force, when these luxuries, whatever mental comfort they bring, are not essential to the nutrition and fighting efficiency of the soldier. The Mahrattas defeated the Moguls because they, unlike their opponents, left their harems at home!

Attention has been drawn in the past to the destructive effects of war upon military assets as well as upon the civil economy. Reduction of military stock-in-trade will proportionately reduce battlefield wastage. The difficulty is to shake off habitual mental attitudes and to strike the first blow for reform. Of course, one short cut to diminishing the Tail is to reduce the number of Teeth and the appetites of the attendant Stomachs! However, the main attack must necessarily be upon unjustifiable excess in the Services of supply, movement and domestic welfare.

### Some Radical Approaches to the Problem

There is an ultimate hope that the complexity of modern logistics will be rationalized by two radical measures. The first is the maximum standardization of all common-user material and employments between the three Services, and in some cases civilian industry. There are already preliminary steps being taken in this direction. The second is the unification of the whole machinery of logistics, which the writer has advocated over the past three years. This will appreciably cut the Tail in the overseas theatre, and, despite the present improvements of the Single Manager system (USA) and the Agency System (UK and British Commonwealth), full unification will slash the overlap which now exists in administrative processes and lead to greater efficiency, with economy.

### The Immediate Prospect

It must be accepted that every fighting soldier and every administrative soldier deployed in a theatre of war will continue to require logistical backing of the present order, with incremental effects similar to those already discussed. Some comfort may be drawn from the decreases in supporting arms and their ammunition which will follow the adoption of tactical nuclear weapons. An additional favourable factor lies in the ability of smaller formations with increased fire-power to hold greater frontages and areas. Thus by diminishing the primary consumers their attendant Services may be reduced. Furthermore the greater use of air transport, includ-

ing helicopters and light fixed wing aircraft, can eliminate much road transport and the related engineer effort. Moreover, such air transport can give great flexibility to centralized stocks of material.

On the debit side we must expect increased stockpiling, decentralized stockholding in order to spread the risk, with consequently greater manpower and movement overheads. Once operations begin we must expect heavier losses in stocks, accommodation and major utilities such as ports and power facilities. This indicates little possibility of economy in certain types of base and L of C units for the holding and handling of stocks.

Although the basic factors affecting the size of the Tail appear to be of such a strategic and tactical order as defy the wishful thinking of the Tail-dockers, there are subsidiary fields in which appreciable improvements can be made. The most obvious measure is the careful streamlining of staffs, establishments, scales of material and reserves. Over-insurance must be combatted by direct intervention of commanders over their logistical advisors. Mechanical handling equipment should be used to the maximum effect in all depots and transport areas. Modern packaging processes can be adopted to increase the storage life, and decrease the building space required for materials. Specialization should not be allowed to prevent the maximum interchangeability of personnel. By a

high standard of basic combatant training the Tail can develop a Sting, which will be needed in areas where vertical envelopment or guerrilla warfare threatens the rear areas. This releases infantry and armoured units from L of C duty, and leads to an overall decrease in the size of force required for a given task. A spartan simplicity in standards of personal welfare is not excluded, but if it is to be attained without prejudice to morale and efficiency it needs gradual training, with accompanying indoctrination appealing to sound soldierly ideals. The mathematics of such economies are such as equating the weight and morale value of bottled beer against the weight and morale value of troops' mail, or newspapers.

To summarize, the logistic increments of administration in the field cannot be eliminated, but they can be reduced and limited. In short-term prospects only minor economies appear feasible, because the dominant factors defy reduction. Ultimately there should be considerable reduction of the Tail as new weapons and new logistical instruments are brought into use. But these considerations should not deter the reformers, since every legitimate economy in overheads must lead to a corresponding increase in hitting-power, mobility and general warworthiness. And that, it is submitted, is a very real advantage to a nation of nine million people living in a strategic area populated by nine hundred millions.

# SOME OBSERVATIONS ON NUCLEAR WARFARE

Captain K. E. Gallard,

Royal Australian Infantry

**T**HIS article is based mainly on some established facts and observations that may be open to a great deal of conjecture. However, in the absence of much information for detailed study, the observations are made for the purpose of throwing the subject open to others who, no doubt, are better trained and more qualified to display their knowledge.

Most of us, either in the course of military duties or otherwise, have given some thought to the application of nuclear weapons to modern warfare. Perhaps some of us have only read the odd article or have discussed such weapons briefly. In any case, what has been the average reaction? Were the ideas expressed clear and concise? Was it possible to reach any logical conclusions? If we have been more assiduous and have studied the subject, were the answers to problems satisfactory? On the other hand, was it all so much hot air?

It is contended that, notwithstanding the expert technical data available on nuclear weapons showing anticipated results from a given weapon, quite often the answers to a theoretical problem are unsatisfactory to a tidy mind. After all, we are supposed to be trained to have tidy minds, and the obscure treatment accorded to nuclear warfare leads to rather a lot of mental indigestion. It seems that there is a great deal accepted in theory that is both illogical and unreal. The generally accepted apology for this state of affairs is that there is little of practical application to rely upon. How true!

Perhaps we are hidebound to past teachings on conventional warfare because of past experience. Perhaps we are wedded to conventional warfare because we hope to fight a future war that is both local and conventional, if we must fight a war at all. Unfortunately our attitude is reflected in teaching. In the pre-



sentation of both problems and solutions there is an attempt to combine nuclear weapons in the purely conventional battle.

### Aim

Therefore the aim of this article is twofold:—

- (a) To comment briefly on the impact of nuclear warfare on conventional warfare doctrine, and
- (b) To examine a few aspects of nuclear warfare as applied to some accepted principles of war.

### Nuclear Weapons in the Conventional Tactical Situation

Almost without exception current teaching denotes the use of the tactical nuclear weapon, the largest types, and even the super bomb, within a conventional setting. However, conventional situations demand restrictions on numbers of weapons available, limitations on size and methods of delivery. These restrictions and the like, allied with a super weapon, tend to present an unreal picture. No doubt such limitations have a practical application, but it is felt that the thoughts and ideas expressed and the conclusions reached tend towards an unsatisfactory result, particularly in open discussion.

Perhaps the question to be answered is, "Is there a place for nuclear weapons in conventional warfare?" There will be many to support the affirmative answer to this question and, indeed, produce good affirmative arguments. However, at the outset there is the problem of which side has the initiative

and the weapons, plus the power to deliver the weapon at the right time and place. This, in itself, poses another problem within a problem ad infinitum.

No doubt we can agree that at present we study the phases of war with passing reference to the use of atomic or nuclear weapons in the odd problem or two. This may be dictated by our hopes that we shall fight a conventional war against a conventionally equipped enemy whilst we hold a small stockpile of nuclear weapons. One must concede that the situation is not without possibility and catered for in our current defence policy. Still, at this stage, after several years within the atomic age, perhaps our energies and thoughts should be directed further than the conventional.

It is always difficult to divorce one's thinking from conventional warfare, for therein lies experience and practice. Otherwise, why study Military History. Nevertheless, past military campaigns can provide many examples where new weapons completely revolutionized the techniques and practices of the day. This would seem to indicate that perhaps the study and practice of nuclear warfare should be to a degree dissociated from conventional warfare.

### Nuclear Warfare a Class Apart?

Maybe one tends to sidestep the question of total war; either from a natural abhorrence or from the practical viewpoint that such warfare with nuclear weapons is inconceivable in this enlightened age. Then, perhaps nuclear warfare is beyond the average tactical concep-

tion and lies entirely within the bounds of grand strategy. These are only observations and not conclusions, but such ideas do tend to segregate nuclear warfare into a class of its own.

In any case, it seems timely to examine some of the possibilities of nuclear warfare without the cloying influence of the conventional.

### Strategical Implications of Nuclear Warfare

If one is to believe the incredible result that occurs following the detonation (if this is the word) of a hydrogen bomb, surely the employment of such a weapon in war goes beyond the realms of mere tactics. The successful application of such a weapon to a vital centre seems to provide defensive problems to which there is no answer. Great dispersion and much deep digging are the best suggestions to date. Such thoughts provide the question, "For what are we preparing?"

In conventional warfare effort is concentrated to achieve efficiency and economy. Heavy bombing in the conventional sense is accepted as a justifiable risk. If preparations and planning provide only for conventional warfare, there must undoubtedly be a horrible day of reckoning should a changeover to nuclear warfare occur.

It is conceded that there is a basic requirement for wide dispersion against nuclear attack as a passive means of defence. Such wide dispersion would no doubt be unacceptable in a conventional war. It is also doubtful whether a com-

promise is possible. A solution has been advocated that there should be a duplication of effort in both spheres, but again it is doubtful whether the peacetime economy of any nation, with the possible exception of the United States, could stand the financial strain. We can only hope to be given sufficient time to achieve a measure of passive defence should a conventional battle become a nuclear war.

### Information and Intelligence

Obviously, to achieve time to prepare it is of paramount importance to have the best information service possible. Strategy has always relied upon good intelligence to formulate a policy in the conduct of war. However, with the new problems created in the field of nuclear warfare, the ability to forecast an enemy's intention must be infallible. The earliest possible warning of an intention to utilize nuclear weapons may offer the only means of salvation.

At this stage it is not known just how good is the intelligence system of the Western Allies. If there are any doubts it is hoped that remedial action is being taken now.

It must be assumed that the decision to use nuclear weapons will be a political one, at least from the Western viewpoint, anyway. This being so, then it would appear that the Soviet and its satellites have some advantage. Apart from having considerably less scruples in making such a decision, it may well be that the local political commissar is also the military commander on the spot empowered to make the decision to use nuclear weapons at

a moment's notice. No doubt a quick decision must be less liable to interception by Western intelligence.

On the other hand, one can imagine a degree of political procrastination on the part of the Western Allies. For example, consent by NATO might well take weeks, and the ensuing deliberations would be most liable to interception by enemy intelligence, with consequent loss of surprise. Indeed, one must consider that under such circumstances the ultimate result must be to lose the initiative.

The problems associated with the fact that the enemy is in possession of nuclear weapons, and has the means and the intention to use them, must be almost insoluble unless a reliable information service can provide an accurate forecast of his intentions. It may be that the conventional war has just been won when the nuclear war is just about to begin.

### Concentration

Taking known facts into consideration, it seems that, generally speaking, nuclear warfare does not suit the Soviet bloc. The greatest powers, USSR and China, possess assets that may be completely nullified by nuclear attack. Such major assets are manpower and industrial potential. Both of these assets require concentration to achieve the maximum effect. Such concentration could well be fatal if subjected to a well-directed nuclear attack.

A logical deduction would be that the West is in a better position because of the ability to disperse the

various delivery agencies for atomic and other nuclear missiles. A slugging match in terms of nuclear warfare between Russia and the United States could perhaps be better carried out by the latter because the potential sources of nuclear missiles from the United States and her allies literally cover the face of the globe. On the other hand, the target areas of Russia and her satellites are reasonably well concentrated in the major sense. Russia could never be really sure that all possible points of retaliation were covered.

There remains a thought that given sufficient nuclear weapons to begin and wage a nuclear war, Russia, characteristically, could remain quite callous to the decimation of her manpower and major cities, and may be prepared to appreciate and accept tremendous losses to achieve a successful result, such as the complete destruction of the United States, Great Britain and their allies.

Decentralization and dispersion will be difficult for Russia and China, as both countries are comparatively new in the line-up of industrial power. Such power was only achieved by intense concentration in selected areas, and the results of hard work in this direction are just coming to fruition. If the West is said to be hidebound in the conventional sense, it is only natural to assume that the same applies to the Soviet Bloc; only more so.

Therefore it seems that, initially, the Western alliance, with its greater dispersion of manpower and industry throughout the world, is strategically better placed to survive a total nuclear war.

### Economy of Effort

The use of nuclear weapons will undoubtedly result in savings on the battlefield in large numbers of troops and materials. However, what will be the battlefield? In all probability it will encompass the whole world, and no vital centre need necessarily be safe from attack.

To achieve a stockpile and adequate production of nuclear weapons one has only to look at the tremendous effort involved at such a place as Oak Ridge, California. This centre of nuclear weapon production is an example of concentration to give efficiency. It seems that the production centre thus concentrated is vulnerable even if the distribution point of the missile is not.

Consider the cost of production of a nuclear weapon. If one is to believe the written word, then the extreme cost is such that production must be limited by financial resources. No doubt the question of economy will be solved. Nevertheless, the nuclear weapon at this particular time does not derive much from the principle of economy of effort. It seems that more manpower, money and materials are required at the production end to get the desired result.

### Interior and Exterior Lines

One can only presume that a nuclear war will be fought on a global basis. Modern methods of weapon, delivery, including electronic target-seeking devices, all point to the warring nations operating on interior lines, at least during the initial stages. Again, to the uninformed observer, it appears that

the Soviet and its satellites are at some disadvantage.

The use of the satellites to absorb the shock of any land offensive from the West against Russia must be nullified to a degree if a knockout blow can be delivered from a long distance. At a casual glance it seems that a major revision of Soviet defence strategy is required in the light of possible long-range nuclear attack from the West. Perhaps the Soviet problem is even greater than that of the West. This is one aspect of apparent Soviet weakness that could be the subject of a separate article.

### Conclusion

The foregoing is a very brief attempt to rationalize on some aspects of nuclear warfare without getting involved in technicalities. It seems to the writer that there is not enough logical thinking being given to the various facets of the subject.

The thought that there will be no nuclear war remains uppermost in most minds. Therefore, conventional warfare still holds pride of place. However, it would be well to remember that the United States is arming in such a way that warfare on a large scale in the conventional manner may not be possible for this nation. It must be reasonable to assume that if attacked the obvious measures available to the United States for retaliation are in the main nuclear in character.

There is no need to go completely overboard and push nuclear

warfare to the detriment of conventional techniques. Nevertheless, it is apparent that it is time that some sort of a comprehensive bulletin on

organization and employment of nuclear weapons was published to clarify some of the doubts in the average mind.

---

Prejudice against innovation is a typical characteristic of an Officer Corps which has grown up in a well-trying and proven system. Thus it was that the Prussian Army was defeated by Napoleon. This attitude was also evident during this war, in German as well as British officer circles, where, with their minds fixed on complicated theories, people lost the ability to come to terms with reality. A military doctrine had been worked out to the last detail, and it was now regarded as the summit of all military wisdom. The only military thinking which was acceptable was that which followed their standardised rules. Everything outside the rules was regarded as a gamble; if it succeeded, then it was the result of luck and accident. This attitude of mind creates fixed preconceived ideas, the consequences of which are incalculable.

—Field-Marshal Erwin Rommel.

# INDIA - 1956

## PEOPLE AND CULTURE

Major Austin Chapman, BE,

Royal Australian Engineers

*This is the second of a series of three articles on India today.—Editor.*

### The People

**N**EXT to China, India is the world's most populous country. There are 361 millions of all creeds and colours. The Indian civilization is probably older than that of Egypt or China. For example, excavation at Harappa in the Indus valley reveal a highly advanced urban way of life dating from 3000 B.C. Streets are straight and many houses of burnt brick contain their own bathrooms connected to municipal drainage systems.

The two main racial strains are the Dravidian in the south, represented by those speaking Tamil, Telugu and Kannada, and the Aryan races of the north, who speak Hindi, Punjabi, Gujarati, Bengali, etc. Though the two racial groups have to some extent fused to make modern India, there are still marked differences. Those of the south are

quieter and less volatile than the north, and hence the more martial types such as Sikhs and Mahrattas are from the north. Christianity has a stronger following in the south. Economically the south is poorer and the soil generally less fertile.

A very interesting group in South India are the hill men of the Nilgiri Hills, known as the Todas. Ethnically they are of the same origin as the Bushmen of South Africa and the Aborigines of Australia. They are very similar in appearance to the aborigines, but their customs differ in some respects. For example, they practice polyandry—the taking of more than one husband. The Todas were original inhabitants of the plains of South India, but were driven into the hills by the Dravidian races, who, in their turn, were being expelled from North India.

The Indian people, therefore, comprise a number of races or tribes



Hindu

whose language, features and habits vary considerably. Some, such as Tamils, are very dark, whilst in the north skin-colouring can be very pale, as one would expect from an Aryan people. It is also of interest to note that the Sikhs are not a separate race but rather Sikhism is a separate religion. Again we find basic differences in the major proclivities of a certain race. For example, centred around Bombay and now combined in one state are the Marattas and the Gujaratis. The former are a warlike or fighting race whilst the latter are basically traders. These differences are not, of course, as prominent today as, say, in the 1500-1800 era, but they still have an effect on the characteristics of an area, or, in the military field, on the characteristics of a unit which is raised from that area.

#### North-East Frontier

Although mention was made in the first article of the Nagas, it would be well in view of the strategic importance of the area to

know something more of the peoples of the North-East Frontier of India. The Government of India administers the area through the North-East Frontier Agency (NEFA) and the Government of Assam. It includes the Lushai Hills, Manipur, the Naga Hills and that area of India lying each of Bhutan.

The peoples are racially similar to those on the other side of the border and have many affiliations with them.

It is a highly mountainous area covered in thick jungle. Only one road joins the area with India, and that runs through the narrow corridor between Nepal and East Pakistan. Space does not permit of mentioning all the tribes in detail, but they comprise such people as:—

- (a) The Mompas and the Apatanis in the area east of Bhutan, who have highly developed the local agricultural resources.
- (b) The Nagas in the area between the Bhrmaputra and the Chindwin.
- (c) The cultured and artistic Manipuris, who trade with India and Burma.
- (d) The Mizos of the Lushai Hills, the majority of whom are Christian and have a high degree of literacy.

The main characteristic of the area is the firm cohesion with which its peoples are held together. Very insular and tribal, the individual is loth to leave his area and people and has a minimum of contact with the outside world. Proud and independent, they resent aggressive

authority over them, and some indulge in perpetual tribal warfare and head-hunting. Their economy is based on simple agriculture, and they have a complicated social structure. Thus they are in themselves a very interesting study, and due to their strategic location are very important people in India.

### The Caste System

These words are commonly used to describe an essentially Indian form of social organization. There is evidence in the past to show that the caste was not solely determined by accident of birth but also by profession. To simplify this one might say that, as son normally followed in the footsteps of his father as regards occupation, so that profession or occupation became the prerogative of a particular group of people who then found their own social level. This occurred within each tribe, and gradually similar professions in each tribe became affiliated, in guilds, as it were, and thus the system grew. Originally one understands there was equal reward for all professions, but gradually education and technical skills took their toll, and so the castes became widely separated in the standards of living they could afford.

The first two groups to gain distinction were the Brahmanas and the Kshatriyas. The former possessed a knowledge of sacred literature and religious ceremonies and were the intellectuals. The latter wielded political power and carried out the functions of administration. Later came the Vaishyas, who were the traders and merchants, and the

Sudras, who performed the menial work. Thus one finds Kashmiri Brahmins, Guderati Brahmins, and so on. The standards of living of the more educated castes rose and vice versa, until one reaches the "untouchables." Untouchability is now against the law in India, but customs of centuries are not easily stamped out by law, but good progress has been made. Great strides have also been made in the education of the scheduled castes, and a proportion of all new Government positions is reserved for them.

### Education

One of the most important problems to be tackled after independence was national education. Apart from the desire for a national language, there was a need for compulsory education for children and illiterate adults. Good progress has been made, and between 1948 and 1955 100,000 new primary schools catering for an additional 10,000,000 pupils were opened. However, to give some idea of the task that still lies ahead it is estimated that 2.8 million teachers are required to implement a programme of universal elementary education. At present only some 600,000 teachers are available, and all are not fully trained.

Similar progress is being made in the secondary and higher education fields. For example, in 1948 there were 179,000 students at Universities and Colleges, but by 1955 this had risen to 518,000. This rapid expansion has brought some major difficulties. One great problem is finding suitable employment for these well-educated people, as India



has not yet developed her industrial and commercial activities to the extent where such large numbers can be absorbed. No doubt the situation will right itself in time, but meanwhile these newly educated people are restless and form a fertile ground for Communism.

A large amount of higher education is only made possible by the availability of overseas missionaries. It should not be thought that this term applies only to those seeking religious conversions. They run great educational establishments and are the moving force behind some of the great hospitals, such as that at Vellore in South India.

### Religion

There is complete religious tolerance in India, and there are four main groups—

- |                          |             |
|--------------------------|-------------|
| (a) Hindus . . . . .     | 303 million |
| (b) Muslims . . . . .    | 42 million  |
| (c) Christians . . . . . | 8 million   |
| (d) Sikhs . . . . .      | 6 million   |

Hinduism is not a religion in the accepted sense, but rather a system of thought which allows for a variety of beliefs. For example, there are the Jains, who are against killing in any form, be it human, animal, ant or fly. The temples of India vary in size, magnificence and purpose. The temples of Kauchee-puran — “The Golden City” — in South India are magnificent in their ornate beauty and multiplicity of stone carvings. One can see a stone chain, with each link some fifteen inches long, carved out of one piece of stone. What is more, just as expert artisans are at work today. To Christians some shrines would be

classed as bordering on the immoral, but human relations have a definite place in some forms of Hinduism. John Masters in his book “The Deceivers” gives a most excellent account of the worshippers of the Goddess Kali, who practised “thuggee.” This practice—the systematic murder of travellers — was stamped out in the 1800’s by the British.

### Culture

The culture of any country is a rather nebulous matter. To some it is the development of the fine arts and to others the term is synonymous with the standard of living. India’s culture is based on her colourful past history, on the riches and legends that have grown up around her princes, and on the beauty of her natural and man-made attractions. Many visitors to India skim through Bombay, Delhi and perhaps Agra, and leave the rest of a vast country undiscovered.

In the south the Nilgiri Hills rise to the Ootacamund plateau at 7500 feet. Here on the Wenlock Downs one could be back in England. A short trip takes one to the Guadalar Ghat,<sup>1</sup> and, from the lookout, virtually the whole State of Mysore is spread out 6000 feet below like a brilliant carpet. In Mysore City is the Maharajah’s palace, where still the erstwhile ruler is surrounded by the trappings of Indian wealth. Objets d’art of all description, the golden state howdah, the Royal stables with forty Rolls-Royce cars are all the symbols of the princely era. The Taj Mahal at Agra well

<sup>1</sup> Ghat—Mountain, i.e., ghat road—mountain road or mountain pass.



**Workers taking midday meal in wheatfields of Pakistan**

deserves its claim to be the most impressive monument in the world. The sheer purity of this white marble edifice and the fine carvings and inlay work in precious stones is duplicated nowhere in the world.

However, it is in its natural beauty that India has its greatest attractions. The Himalayan mountains are magnificent in their huge grandeur, while the quiet serenity of the Vale of Kashmir attracts thousands of visitors annually. The Ajanta caves with their wonderful murals and frescoes are well worth the trip from Bombay. All these specimens of ancient architecture with their paintings and sculptures give India a rich cultural heritage

and serve as a constant reminder of the age of the country.

In its music and dancing India seems to have resisted all foreign influences, and, to those used to the harmony of Western music, the traditional music is, to say the least, hard to take. On the other hand, Indian dancing can be fascinating. Like most Eastern dance forms its essence lies in the gestures made with eyes, head, hand and body. In earlier days the artists enjoyed the patronage of the Moghul Emperors and then the Indian Princes. Today the Central Government has assumed direct patronage of the arts.

The Indian film industry has also

developed until it is today the third largest in the world. Films are exported to Pakistan, Malaya, Indo-China, South Africa, etc. It is interesting to note that special films, both full length and features, are made for children. This example could well be followed in other countries.

To sum up, India has a great artistic and cultural heritage which, whilst availing itself of modern inventions such as radio and films, has nevertheless resisted outside influences and maintained its traditional nature.

### Defence Services

To protect her peoples India has a powerful army and is developing a modern navy and air force. After Independence, the Indianization of the forces was pushed ahead, and today the only British officers serve in an advisory capacity or are on technical exchange duty.

Before 1947 there were three groups in the Army of India. They were:—

- (a) The British Army in India, which comprised British regiments and units of all corps.
- (b) The Indian Army, which comprised Indian troops with an increasing number of Indian officers.
- (c) Various State or Princely forces, which for the most part were used for ceremonial and guard duties.

In 1947 the British Army in India withdrew, and steps were taken to amalgamate the Indian Army and the State forces. Unfortunately, whilst the bulk of the personnel of

the old Indian Army were from the new Indian nation, the bulk of the modern facilities were in Pakistan. This lack of facilities has been resolutely tackled, and by "making do" until permanent facilities are available, the temporary type of accommodation, so common in Australia, has been avoided. The National Defence Academy and Engineer Barracks, both at Poona, and the Defence Services Staff College at Wellington are all good illustrations of this policy.

Enlistment in the Indian Army is voluntary, and there is an overabundance of recruits. Units are basically formed on an area basis such as the Madras Regiment, which enlists in Madras State. However, this principle does not apply to officers who can be posted to any regiment, e.g., one can find a Sikh officer in the Madrasii. In addition, Guards regiments have been formed, and there is no territorial affiliation with these units. Mention has already been made of the Gurkhas, who form a good percentage of the infantry troops.

Whilst on the whole the Army has been mechanized, a small number of animal units have been retained, including one cavalry regiment. These animal-based units rely on mules and include artillery and supply units. Elephants are also used in isolated areas. Generally speaking, most equipment has to be imported, but continual emphasis is placed on "indigenous" material, since the Indians have a realistic attitude on the likelihood of imports should a conflict arise.

Mention has been made in a pre-

vious article on "Tri-Service Colleges" of the steps being taken to integrate the Armed Forces through joint training of officers. (AAJ 93, Feb 57). Selection for officer cadets is on a somewhat different basis to that prevalent in Australia. Candidates are first required to pass a public service examination and interviewing board before they come into Service hands. This has resulted in academic ability rather than potential leadership being a pre-requisite for successful entry, and is causing some difficulty in obtaining enough cadets of a suitable standard.

The main centres of interest to the Indian Army at the moment are the North-East Frontier, Kashmir and the Rajasthan Desert. Considerable battle experience was obtained in the fighting in Kashmir and Jammu and India provided a field ambulance for the UN Forces in Korea. From published figures, which are freely available, of Central Government spending, India is spending a little over 50% of the Central Government income on defence. This for a country which requires every rupee for development is very high, but until some firm settlement is made with Pakistan there is unlikely to be much reduction. Certainly India has no territorial ambitions outside what she already has, but she is alive to the necessity of having a powerful army as a guarantee against avacious neighbours.

A secondary role for the Army is internal security. With such a large population, many of whom are not well educated and thus easily led, this task is very important. A

favourite habit of Indians who are rioting or demonstrating for some particular reason is to attack the most valuable Government object within reach. Such items as double-decker trams and air-conditioned railway coaches are prize targets. As many of these disturbances are on a racial basis the Army, being independent of local feelings, is a useful means of restoring order. This can be no mean task in such large cities as Bombay and Calcutta.

### Living Standards

The standards of living in this country vary as immensely as the wages and salaries received. For example, a labourer in South India receives three shillings and sixpence per day, or, on a six-day week basis, four pounds four shillings a month. A captain receives some seventy pounds a month. Hence it is common amongst the lower classes and castes for everyone in the family, including children, to work—if they can.

Let us see, then, the conditions under which such a family lives, and as an illustration take a family working on a tea estate. Their home consists basically of one room with a kitchenette attached, and a very small walled compound which contains a washing and toilet area. Water is either piped into the house or is handy. The floor is made of a heavily pounded mixture of cow manure and mud. Strangely enough this sets very hard and is not unlike concrete in its final appearance, that is, of course, on the surface. In the kitchenette is a simple one-fire fuel stove or an earthen oven type of cooker. Utensils are few,

and furniture is confined to bed boards and perhaps a small table and benches. Generally speaking, the area is kept very clean, and is frequently swept with a hand-broom made from bundles of twigs.

Here, then, the family is brought up—and families are big. On one estate some 40 per cent. of married women who were capable of child-birth had a child each year. This is one of India's greatest problems—a rapidly increasing population. The Government of India has seen fit to give countenance to a policy of active encouragement of birth control, which is publicized under the guise of "Family Planning." It is interesting to note that the life expectancy of an Indian male of this class is some 34 years.

To return to the family, one would find all working on the estate in one occupation or another, and between them would earn more than enough for food and clothing. Some savings would be put aside for eventual purchase of a small block of land in the home village. On the estates, health, education and housing are free, i.e., provided by the estate, and these labourers are well off.

How much worse off, then, is the labourer or farmer in the villages of the plains. Living to a large extent in mud-walled houses, in generally hot and dry areas life is a continual struggle. Water from the well must be carried for the house and drawn up by hand, by bullock power or donkey power to irrigate the fields. For these people, the great mass of the Indian nation, there are few of our so-called amenities. There may be a rare

visit to a picture house, but the joys and pleasures of travel, of holidays at the beach, of drives in one's own car, of watching great events, of radio and television, all these are unknown to the villager of India. Relatively he still lies asleep in the past with his own pleasures and goals, but with the sure knowledge that he must work hard to eat and live, and in every human being there is a great love of life.

To be fair to India, there are in the big cities of Bombay, Madras, Calcutta and so on an urban way of life closer to the Western ideals. But here, too, some families still sleep on the pavements at night, and the more sheltered and warmer spots are the occupants' right by inheritance. India faces a tremendous task in raising the living standards of her people, but raise them she must, for here is the most fertile ground in the world for Communism, and even now the seeds are being sown.

### Social Welfare

The Indian Constitution guarantees the health of men, women and children, but the accomplishment of this guarantee is still financially impossible. Prohibition of the consumption, except for medicinal purposes, of intoxicating drinks has been made law, and should be in force throughout all the States by 1 Apr 58. Whilst the reasons for this action are based on the highest motives, it does not operate in practice. The equivalent of the American speakeasies—the village toddy man—flourish throughout States in which prohibition is already in force. It is of interest that histori-

cally the only known race of people who did not make and drink fermented liquor of one type or another were the Australian aborigines. Before prohibition the average Indian drank a liquor made from rice or fermented coconut juice. He still drinks it today, but pays more for inferior and often injurious liquids. It is very doubtful if prohibition will ever really be enforceable.

Over the past few decades the status of Indian women has undergone a change, and they are now to be treated as equal with men. They vote and in all walks of life are pushing forward to play a part in their country's future. In a country where some 38 per cent. of the population is under 15, child welfare has great significance, and a start has been made on an educational programme. Similar activities are occurring in the field of youth welfare, but the task is so immense, the numbers to be reached are millions not thousands, that one wonders whether the task is not hopeless. It is these numbers which have the greatest impact on a foreigner. For Australia is bigger in area than India, but India has 40 times the population of Australia. Get out at Bombay or Calcutta railway station and have anything up to twenty porters fight to carry each one of your bags for the privilege of earning sixpence, and realize that probably more than half live, sleep and eat in the station, and India's problems start to unfold.

### Communism

There is without doubt a fertile field for Communism in India today.

Two main groups are vulnerable—the poor landless farm labourers, of whom, including their dependants, there are 45 millions, and the newly educated group who are unable to find suitable employment. With regard to the first group, certain efforts are being made, such as in the Bhoodan Movement and co-operative farming, to alleviate their lot and thus make them more contented. These matters will be discussed in the next article.

As regards the second group, the situation in Travancore-Cochin, now Kerala State, is typical. Travancore-Cochin, a small southern state on the west coast of the Indian peninsula, has always had an excellent education system and a resulting high degree of literacy even amongst the women. Prior to Independence, a large number of these educated persons found employment under the princes of various States, and were, it may be said, an administrative pool drawn on from all over India. With the general rise in education throughout the nation and the downfall of the princes, this situation no longer prevails. As a result, men with good secondary and tertiary educations are either unemployed or forced to take labourer's work in order to eat. Having through education tasted or assimilated the fruits of better living, they are now denied the opportunity of suitable work, so that they can afford to live better—hence the discontent. This reached such a stage in Travancore-Cochin, and Communism obtained such a hold that in 1956, when the State Government fell from power, Presidential rule from Delhi was enforced



**Nehru**

rather than allow a Communist-controlled Government to operate.<sup>2</sup>

The Communist element is also quick to take advantage of any cause of discontent, such as state boundaries and demands for increased pay, to embarrass the Central Government. However, the Congress Party which rules India today is very alive to the dangers. Active steps have been taken in the agricultural field, and as the Second Five Year Plan progresses there will be more positions available to the educated group.

It must be realized that the coun-

<sup>2</sup> Since this article was written, at the Indian elections in 1957 Kerala State returned a Communist Government. This is the first democratically elected Communist Government to come into power.

try is very solidly united under Nehru, and whilst he remains leader there is no likelihood of any substantial gains by Communism. By inviting Russia's rulers to visit India, Nehru in one sense gained Communist support for his party, thus choking off any measure of criticism by the Indian Communists. Of course what will happen when Nehru passes from the scene is an entirely different matter. Then the activities of the Indian Communists must be carefully watched.

Though somewhat out of context, some space should be devoted to India's Prime Minister. Jawaharlal Nehru is undoubtedly an outstanding man. Alone he rules 360 millions in the sense that his word is accepted throughout the country on all contentious issues. To put it bluntly, what Nehru says—goes! He was associated with the great Mahatma Gandhi, the man who walked equally with "kings and beggars," and has for nearly ten years steered his country along a path of development. He is undoubtedly a force for peace in the world, and through the doctrine of "Panch Shila" wishes to be friends with all. He cannot but be aware of the dangers of Communism, but whether he believes it has no designs on India is hard to say. One thing, however, is obvious—Nehru does not intend willingly to give it a chance in India. Very learned and highly educated, he has that magnetic type of personality which lifts men to the pinnacle of leadership.

### Conclusion

It is hard to avoid sentimentality when summing up the Indian

people. The intimate contacts in the form of personal servants cannot fail to generally impress. Fairly treated, they are intensely loyal, and within their own conventions honest enough. As contact widens to a professional or social basis, there appears to creep in an inferiority complex, and thus an aloofness which develops on occasion into intolerance, conveying the feeling to the visitor that he is not wanted. However, it is in the distant contacts—with the villagers, the itinerant merchants, the guides and the train attendants—that the real heart of the Indian people is found. They are people of ready humour, of tremendous patience, have an unquenchable spirit and a most optimistic outlook on life. It has been said that the great majority of Indian workers are "born in debt, live in debt and die in debt," but still they smile. As in all nations, it is in the children that a country's spirit is most faithfully



Some of India's Children

portrayed. Though initially shy and reserved, India's children are a happy, laughing group, and when one compares their prospects with those of a Western child one hates to think of the disillusionment that lies ahead. However, they have one tremendous advantage still—they have no comprehension of atomic warfare, jet aircraft or guided missiles.



# HABEAS CORPUS

Lieutenant-Colonel H. Fairclough,

Royal Australian Army Service Corps

**T**HE literal translation of "habeas corpus," according to the Oxford Dictionary, is, "You must have the body." These words may therefore be appropriate as a title for this article, which deals with the dearth of recruits and the Army's inability to get some of its soldiers to re-engage. Of course, it may be a rash undertaking to tackle this subject at all when so many others, who have masses of data on which to base conclusions, are grappling with it. Despite the rashness or otherwise, any ideas, old or new, will probably be welcome to those whose job it is to find a solution to the manpower problem in the Army. Apart from that, every thoughtful officer and NCO must be concerned with this problem. Therefore any words which will stimulate action to stop the drift may be worth while.

To deal with the subject adequately would require more words than are usually acceptable to the Journal, always supposing this article is printed. However, by condensation and avoiding the obvious, it is hoped to put forward some worth-while suggestions, and in this regard it is thought wise to

dispose of two factors at the very outset. These are:—

1. It is not lack of fighting spirit which keeps men out of the Army. Australia's military history rebuts any such thought. Approximately one in eight of the population wore the King's uniform during the last war, and volunteers have always come forward in emergencies and will do so again.
2. It is futile asking the soldier or civilian why he doesn't re-engage or join up. Few soldiers in the last war ever gave a satisfactory answer when asked why they had joined the AIF. Many said they didn't know. Others gave, and soldiers usually will give, a socially acceptable answer which may be far from the truth. In these times I am sure that what one individual will say is his reason for not joining or re-engaging will be contradicted by another. Whilst the sum of their answers may provide clues, the real answer to the problem, in my opinion, has to come from those who have made the Army their

careers and have had considerable experience. A possible radical change in the Army's outlook and a facing up to certain realities by the Government of the day may be needed.

Without further preamble I now propose to list certain factors under various group headings: factors which may possibly be those actuating the Australian male in his attitude to the peacetime army. Then it is proposed to deal with the first-mentioned in each group, that being considered by the author to be the more important. The remainder will be mentioned only in passing or as support to the main consideration, lack of space preventing any more detailed elaboration. However, each is a factor to be reckoned with, and no doubt they are all being considered elsewhere.

#### Publicity Group

- (a) Influence of dissatisfied ex-soldiers, wives, families and friends.
- (b) Publicity.
- (c) Advertising.

#### Freedom Group

- (a) Freedom in off-duty hours.
- (b) Dislike of being regimented and ordered about.
- (c) Military Law, Rules, Regulations and Orders.
- (d) Discipline.
- (e) Lack of privacy in family matters.

#### Odious Comparison Group

- (a) Overtime for civilians.
- (b) Better pay in civilian employment.

- (c) Better opportunities for advancement outside the Army.
- (d) Schools and Courses in the Army.

#### Security Group

- (a) Security of employment.
- (b) Security of domicile.
- (c) Availability of housing.
- (d) Movement overseas or interstate.
- (e) Early retiring ages.

#### Colour Group

- (a) The Army in relation to national characteristics and activities.
- (b) Colour.
- (c) Dress.
- (d) Parades.

#### Morale Group

- (a) Leadership and man management.
- (b) Boredom.
- (c) Monotonous training.
- (d) Lack of equipment.

The above formidable list must be fairly close to the bottom of the barrel in providing factors which may influence the civilian to keep out of the Army and the soldier to return to civilian life. Indeed, if my factors with the inference that they are all unfavourable are acceptable, it might well be asked if the Army has any good features at all. From the enthusiastic regular the answer to the last statement is an emphatic "Yes, it has!" However, since the Army's virtues do not appear sufficiently attractive to the soldier who fails to re-engage, it is idle to consider them.

The influence of dissatisfied soldiers on civilians and serving soldiers cannot be overlooked when

considering recruiting and re-engagements. It will be remembered that during the 1939-45 war Militia units could be converted to AIF if a certain percentage of members would sign for overseas service. During that process, the writer often found soldiers who would not convert because their fathers, who had been in the First AIF, had forbidden them to do so. In "Hail and Farewell," an article on Personnel Depots, there is mention of the impact dissatisfied soldiers can have on their fellow-men. However, this is too widely appreciated to need any emphasis here. There is no advertising more powerful than one man saying to another: "Keep out of the Army—I tried it and it's NOT ON." Very often, too, opposition comes from wives and relatives, especially mothers, who can be a strong counter to young men wishing to enlist, and any adverse publicity the Army gets only strengthens this opposition. Strangely enough, the Army does not benefit very much in the way of favourable advertisement from the satisfied soldier. The Australian male has a marked reluctance to praise anything, particularly the Services.

The Army is news, particularly when something goes wrong, and any unfavourable publicity added to the influence just described needs strong counter activity. Consequently the Army's advertising has to be of considerable appeal to have any effect on the Australian public. I have no figures on advertising, so cannot say how successful this is, but when 10 recruits in Western Command were asked had they enlisted as a result of advertising they all said "No. We had no money to

buy newspapers." During periods of unemployment, of course, the Army increases its intake, because then the only opposition comes from the other two Services and advertising is of lesser importance. Many members of the Army view its advertisements with feelings ranging from critical to a laissez faire attitude.

To provide a strong counter activity, it is essential that the Army examines its conscience and administration to ensure that there is no dissatisfaction amongst its members. We all appreciate how one rotten apple can ruin a case. Perfection, of course, is unobtainable, but striving for it in all aspects of military affairs, from personnel depots to units and from enlistment to discharge, will do much to eliminate the bad. The Army in peacetime must be made so attractive, without loss of discipline or prestige, that opposition is weakened and finally overcome. In succeeding paragraphs it is hoped to offer some suggestions which may assist this aim. The cost of implementing these suggestions could be offset against the losses now incurred in the process of enlisting and training soldiers, only to lose them when their services have become the more valuable on account of such training.

The Army today is heavily integrated with civilians, in many cases doing similar jobs to the officers and other ranks. The civilian who works beyond the normal hours is paid overtime. Not so the soldier. Generally speaking, the civilian has higher rates of pay and fewer schools and courses to pass than the soldier to obtain advancement. He enjoys a longer employment life than many of the graded soldiers. I

do not propose to go into any more detail with this, perhaps, rather "odious" matter. It is very much the concern of the authorities, who, no doubt, have it well in mind.

The civilian considering enlistment and the soldier thinking of re-engagement will consider his "Freedom in off-duty hours." The alleged national characteristics of being free-and-easy, sport loving, indolent sun-worshippers get a rude jolt in the Army. From morning till night and often at week-ends the soldier is at the beck and call of his superiors to a greater or lesser degree according to his employment or unit. Some units have a great deal of guard duty to do, and this can be very soul destroying. The soldier, on enlistment, is often moved away from his happy hunting grounds; from his beaches, racetracks, football grounds and other, to him, desirable resorts. His appointments with girl friends or relations are more difficult to arrange and keep. Girl friends are a power behind the scenes, and probably influence the civilian and soldier to a very great extent in the subject matter of this article. Generally speaking, I think it reasonable to say that the soldier has less freedom than his civilian counterpart. The former certainly cannot select where he will live and is often too far from the cities to go there in off-duty hours and week-ends. The civilian, on the other hand, lives where he chooses.

The soldier is also subject to additional rules and regulations that restrict his freedom of action. He can be dealt with by his officers and court-martialled for offences that are not in the civil code. In this connection, of course, there are two

categories of police as against one for the civilian. Sometimes, too, there is a lack of privacy when his affairs have to be investigated, as in compassionate cases.

A possible solution:

- (a) Recast the soldier's week. Concentrate on making him efficient for four days a week and use the fifth day as suggested in "Colour Group" and/or;
- (b) Give him more leave, so that he can wipe out any extra duty time and make up for his enforced absences from home. This, however, is only tenable if his efficiency warrants it.

And now for security. The first factor in this group, security of employment, probably affects the officer or the potential officer and senior NCO far more than any other category of soldier. From the cradle to the grave every human being craves security, this being one of the most powerful motivating forces known to man. In the sphere of employment the man feels most secure who has a contract. The masses, in enlightened countries, enjoy and rely on the security provided by trade unions. If you are sacked you may have the safeguard of fellow-workers going on strike until you are reinstated. This is a powerful and protective contract. What is the position in the Army?

If the Government decides to disarm, retrench or reorganize, an officer or soldier may be out of a job overnight. This has happened before and could happen again. True, the same could and does occur in the Public Service and in civil em-

ployment, but the Services in the eyes of the public are far more vulnerable. Disarmament and the future of the Services are forever appearing in the headlines, and this publicity engenders a feeling of insecurity in members and prospective members. The threat of war and death is not the same potent factor as the possible loss of a job. Hope springs eternal as far as the former are concerned, and in any case as a civilian or soldier you can always be killed crossing the road.

I will concede that the Army's vulnerability may influence the educated man far more than it does the masses, but then these men are those wanted as officers and NCOs. All the factors in this group provide formidable deterrents to recruiting and re-engagement; certainly cogent enough to warrant very careful consideration.

What is a remedy for this. Here are two suggestions:

- (a) In the event of retrenchment all pensions to be payable immediately; such pension to be suspended, on the member securing employment, until the original retiring age is reached; and
- (b) Guarantee of other employment or preference in employment to all below a certain rank. In an expanding population and a growing country this should not be hard to do.

Even if adopted, the Government of the day might never be called upon to honour this proposed contract. It would, however, be a stabilizing influence and, if well advertised, a considerable inducement to enlist. Two considerations in this group, security of domicile and

housing, have been the concern of the authorities for some time, and there is no need for detailed comment here. The fact that the Army owns a considerable number of houses and lets them at reduced rentals is never advertised. Perhaps it should be. Movement interstate and early retiring ages seem beyond the scope of this article. The first could perhaps be reduced by decentralization of Army activities, such as Recruit Training, and by retaining soldiers in their own States, but there are some snags in this.

We now come to the Colour Group. Like colour, the Army can either attract or repel. The Army is attractive to the general public when rendering assistance in times of national emergencies in peace or war. Apart from that, the Army does stir the imagination by means of tattoos, occasional parades, band recitals and such like. National Service has helped the Army because of the manifestly excellent job done. It could attract favourable comment by performing the traditional Service function of providing mounted escorts for the Governor-General and State Governors on ceremonial occasions. By improving the uniform, particularly summer dress, it could have thousands of walking—or marching—advertisements.

However, the foregoing, it seems, is not enough. I now suggest that the Army should identify itself with, and take advantage of, our national characteristics.

Sport; Australians love it, either as participants or spectators. Why not, then, expand the Army's interests and activities in this field. Why shouldn't the Army compete in the Sydney-Hobart Yacht Race, the Re-

dex trials, have its Life Saving Clubs, field its cricket, football and other sporting teams in State and Interstate competitions and provide players for the Davis Cup tournaments and Test Cricket series. Many a young champion passes through National Service and many other budding ones serve in the Cadets. What a field to exploit! If the Army could say, "Join the Army and combine a career with your favourite sport," then you could throw away the posters and pamphlets. The organization of sporting activities has value for the officer and NCO, whilst there is no need to elaborate on the advantages of increased physical fitness and morale which would accrue.

This exploitation of sport as a means of attracting the public has been well recognized in other countries. A good example would be the universities of Yale and Harvard in the USA. Before the 1939-45 War sport figured much more in the permanent forces than it does now. It cannot be disputed that the nation's overall requirement is an efficient Army, and if that can be obtained by the means suggested then the taxpayer should be well satisfied and any objections overcome. The Army cannot, by virtue of its functions and training requirements, be strictly related to the civil service or the 40-hour week. The above suggestion, of course, would require careful thought and examination. This alone would constitute a paper of considerable length, which would be well worth writing. As previously stated in this article, the cost, in this instance, of coaches, equipment and training, would be offset against the expense incurred by losing trained soldiers through discharge and non-re-engagement.

And now for Morale. This is tremendously important and vital. Morale is affected, for better or worse, according to the quality of the twin fundamental factors of Leadership and Man Management. There is nothing more important in the sphere of industrial or military activity. Books could be written on this subject, there being so many facets to it.

It is a strange paradox, then, that these factors of Morale, Leadership and Man Management figure less in the Army's curricula than any other subject, and my suggestion here is that, once a month in every Command Headquarters and in every school and unit throughout the Army, all officers and NCOs should get together and discuss this very important problem. What has transpired in the way of morale and man management throughout the month could be discussed on the basis of mutual interest and understanding. One hour a month throughout the year is not much to lose from other work. It could be extremely beneficial.

Good Leadership and Man Management will overcome boredom and monotonous training, because hand in glove with the first two go imagination and initiative. Lack of equipment, which is fatal to morale, particularly in CMF units, is beyond the scope of this article, except to mention it.

That, then, is the military problem of Habeas Corpus. To have an army you must have the men. Perhaps if my words have done nothing else than provoke discussion and thought, this article will have served its purpose. Fiat Lux—let there be light.

# RAASC

## Its British Predecessors and Formation in Australia

Corporal R. T. Willing,

Corps of Staff Cadets, RMC, Duntroon

THE roots of the Royal Australian Army Service Corps lie in the two-centuries-old history of its opposite number in the United Kingdom. The twin functions of the Corps, those of supplies and transport, have not always been amalgamated, and so it is that this year commemorates the second centenary of the all-important function of supplying the fighting soldier.

In 1757 the Commissariat of Stores was set up under the Treasury. Previous to this date minor organizations of a like nature had existed, but not in the official capacity of this one. To go farther back we can trace the idea of "rations" to Queen Elizabeth the First's reign. In those days English soldiers were so improvident that they ate their three days' rations in one day and, as they were required to keep themselves on their pay, and no such thing as the Field Cash

Office existed, all too often they had no food and literally "no stomach for the fight."

The twin functions were separate for over a century, and much friction existed between them. Thus in 1645 there was no transport corps as such, and only one Commissary of Victuals under the Treasury which arranged bread and cheese contracts.

Transport was a function given over to civilians, who treated it more as a sinecure, hence the friction between the two services of supply and transport until 1869, when the first attempt was made to combine them.

The earliest waggon train was formed in Ireland in 1690. It numbered twelve 4-horse waggons and comprised:—

- 1 Conductor,
- 12 Drivers,
- 12 Boys,
- 1 Smith.

Previously, in 1680 at Tangier, the British soldier was the best fed in the world. The ration was:—

“Issue every Monday morning of 1 piece of beef, 1 piece of pork, 7 lbs. bread, a quart of pease, a pint of saltmeat, besides butter and cheese for his week’s allowance.”

Marlborough was the first to establish the principle of paying for supplies from the theatre of war.

The first uniformed transport corps was raised in 1794-5 under the name The Royal Waggoners. This “to consist of five Comp of Foot, of four Sergeants, four Corporals, four Farriers, four Collar-makers, four Wheelwrights, and one hundred men in each, beside Commsd Officers.”

The RAASC has its Battle Honours, too. The first was won in the Peninsular War, but the proudest was that of Waterloo. As a special mark of esteem, the men were termed “Waterloo men” and the officers had the letter “W” placed after their names in the Army List. The Waterloo medal of the Commanding Officer, Lt-Col T. Aird, is in the RASC Museum at Buller Barracks, Aldershot. This unit was at the time the Royal Waggon Train. The Military Train, 1856-69, won other Battle Honours at Taku Forts, Peking and Lucknow.

1869 is the important year, for in that year the two services, supply and transport, were combined. Thus on the 17 Dec 1869 a Royal Warrant For The Formation Of An Army Service Corps was issued as a Special Army Circular. The in-

roduction and first paragraph are the main interest, and clearly state the necessity to combine the two services, thus:

“Victoria R.

Whereas it has been represented to Us that it is expedient to raise a special corps for duty in connection with the Transport and Supply Services of Our Army. Our will and pleasure is, that a corps, to be denominated the ARMY SERVICE CORPS, be raised, and that it be commanded by officers of the Control Department.

1. The Corps shall in the first instance be formed of volunteers from Our Military Train, Commissariat Staff Corps, Military Store Staff Corps, and from that portion of Our Army Hospital Corps which is attached to the Purveyor’s Branch of the Hospital Department of the Army.”

So in England began the lifeline of the field troops, but in this country awareness of the Corps’ necessity was not lacking. Only eighteen years separated the formation of the ASC and the first transport and supply unit in Australia. Prior to Federation each State raised and maintained its own defence forces. To Victoria goes the distinction of forming the first unit in 1897. This was known as the Ordnance, Commissariat and Transport Corps, but the Ordnance was dropped two years later when it was relieved of that function. In 1892 the nomenclature, Army Service Corps, was adopted. New South Wales followed by raising its first company under Captain D. Miller in 1891.



The British Predecessors  
(1757-1869)

SUPPLIES

Commissaries of Stores  
(1757)  
(Under the Treasury)

Commissariat Department  
(1810)

Commissariat Department  
(1845)  
(Under the War Office)

Commissariat Staff Corps  
(1859-69)

TRANSPORT

The Royal Waggoners  
(1794-5)

The Royal Waggon Corps  
(1799-1802)

The Royal Waggon Train  
(1802-33)

No Transport Corps  
(1833-55)

The Land Transport Corps  
(1855-57)

The Military Train  
(1856-69)

The Central Department  
1869-75  
and  
The Army Service Corps  
1869

Two more were added in 1896 and 1899 respectively, and all passed under Federal control in 1901. This was the result of reorganization of the Commonwealth Forces under General Hutton's scheme following the South African War. Thus a permanent Army Service Corps came into being.

This Corps was to provide a permanent cadre for the supply columns organized for the higher formations. Its composition was:—

- 11 Officers (Senior a Major).
- 4 Warrant-Officers.
- 221 ORs—distributed according to requirements among the supply columns.

It consisted of field rather than garrison troops. The controller was the AQMG at the HQ of the Defence Ministry. In each district the DAQMG was responsible for them. Distribution of the supply columns was:

New South Wales . . . . .	5
Victoria . . . . .	4
South Australia . . . . .	1
Queensland . . . . .	2
Western Australia . . . . .	1
Tasmania . . . . .	1

A camp of sixteen days' duration

formed the annual training. With Easter camps and a certain number of night drills, efficiency was at a reasonable standard by 1907. Because the Light Horse Brigade was organized on somewhat the same lines as the British Mounted Brigade, the system of supply and transport conformed to the British system.

In 1912 the system of "first line" transport was organized in Britain, and although we had no mechanized transport our own system was recast on similar lines. Thus the old supply columns became "trains" carrying three days' supplies (the British carried one day's supplies in motor transport but ours was horse drawn). Supply columns were then the transport between railhead and supply points, and replenished the trains.

This system with minor modifications and complications is still in operation today, even with the advent of faster motor transport. It was organized in time for the First Great War, and has proved itself efficient in two world wars. Today's modern columns, although many do not realize it, have a highly regarded tradition to be proud of, not only in England but in the earliest times of our own country.

# MASSIVE RETALIATION, DETERRENCE, BRUSHFIRES, AND ALL THAT

---

Colonel G. M. C. Sprung, MC, CD,

Director of Staff Duties, Army Headquarters, Ottawa

---

*In this article Colonel Sprung outlines an approach to defence questions which, as he says, "is as old as Methuselah, but which was crystallized anew by reading Mr. Kaufman's book, 'Military Policy and National Security'".—Editor.*

ONLY seldom, I would venture to guess, have statesmen and military thinkers known precisely what defence forces were essential to their countries' welfare. Even casual study of the evolution of military arms leaves one with a stark impression of ceaseless change. Problems of armour and gunpower, bows and pikes, muskets and rifles, sail and steam, machine-guns and tanks, aircraft and battleships, missiles and atomic warheads, have followed one another without respite, the newest ideas already

warning of changes in arms and forces which have themselves not yet wholly emerged from the haze of controversy with their predecessors.

It is commonplace to observe that our own day continues this pattern and intensifies it. Applied science has gathered itself into a compact ball, and has hurled itself through the technical difficulties of arms development with such success that weapon and tactical concepts which were promising to harden into doctrine following the Second World War have been shattered into literally meaningless fragments of past experience. Little wonder that our military age, like, and yet even more, than most others, has brought bewilderment to the experts and a haunting insecurity to the minds of the statesmen.

*From Canadian Army Journal.*

Once again we have had to pose

the troubling question: "What kind of military forces are most apt to further the well-being and security of our countries?"

It is now almost a matter of history that during the past decade the obvious answer to this question was held to be: ". . . why naturally, those forces which can employ the largest nuclear weapons." The reasons for this general agreement were many, and lie too far beneath the surface to be probed at this time. Certain it is that from Churchill and Montgomery to the editorial writer of the smallest country newspaper, those permitted to be vocal in the matter agreed that the air arm could bring the new weapons most effectively into play, and was therefore the kind of defence force most apt to further the interests of nations.

This conclusion was strengthened (if indeed it was not largely induced) by considering the problem of defending Western Europe against Russia. The balance of forces in this theatre was so hopelessly to the disadvantage of the Western powers that the only answer was to redress the inequality by the use of nuclear weapons. This has been the burden of the NATO strategists. "We will be compelled to use our nuclear power against Russia for the stark reason that we have no other defensive means at hand."

It has been with more than reluctance that Western nations have questioned this reasoning. One might even suspect that it was at first accepted with relief. "At last," some might have thought, "we have solved the problem of expensive armies—we don't need them." With

the dawning presentiment that by sanctioning the strategy of "nuclear redress" the one condition, sufficient in itself to engender a nuclear war, is created, there may be a readier willingness to examine the imbalance of forces in a fresh light. It could be that the future (long-term) course of defence thinking in Europe will be to weigh the advantage of restoring the balance between Russian forces in Europe and those of the Western powers. Perhaps the effort of maintaining larger forces, if this lessens the certainty of *any* European war being a nuclear war, will appear more tolerable than it did during the initial nuclear craze.

Be this as it may, there are signs abroad that defence problems are receiving a fresh appraisal. The initial nuclear hypnotism is wearing thin, and the eye is clearing for a cold, hard scrutiny of the strategic problems of our time in the light of the full circumstances—including nuclear weapons, but including also many other facts which so far have remained out of focus on the periphery of our minds.

Let us assume for present purposes that force has not yet passed from the international arena, and that the "right" forces are those which are most useful in furthering the interests of nations under the prevailing conditions of international rivalry. It will be agreed that the dominant—not the only—condition of our generation is the aggressive and expansive Communist idea. Mr. Kaufman and his associates, in the book referred to, start from these assumptions (albeit much more subtly defined) and

searchingly study the wisdom of reliance on the strategic air arm as the major military instrument of national policy.

They find it wanting as an answer if taken by itself, though a primary part of any complete answer. Reliance on the strategic air arm comparts one inescapable result for political method: it forces a nation, as in fact it has already forced the United States, to a policy of "massive retaliation."

What massive retaliation means as a stroke of war is quite clear. What it means as a basis for foreign policy is somewhat less so. Taken at its simplest, it must be supposed to mean that a nation which has the military power to drop devastating quantities of thermonuclear engines on its enemies threatens to do so, if this nation considers itself threatened by any act or policy of other powers. This is alternatively referred to as the "policy of deterrence." (It is clearly merely *nuclear* deterrence, as a balance of *any* type of force must act as a deterrent.)

Whatever brutal sense such an idea might have if all nations in the world were at the mercy of one super-power which alone was able to devastate the lands of its enemies, it has very little discernible sense at all in a world where other powers are equally able to visit devastation on the nation issuing such a threat. If a nuclear stroke of war means that the country launching it will almost certainly suffer the same destruction which it delivers, then the practical meaning of "massive retaliation" (or "nuclear deterrence") is that the

nation relying on it is prepared to have tens of millions of its own citizens killed and its own society mangled beyond recognition every time it is seriously displeased with the actions of an unfriendly power abroad.

Mr. Kaufman brings a fine academic pen to bear on an analysis of this doctrine. He examines what he terms its "credibility." If the threat of massive retaliation is to be effective, it must, before all else, be believed by other potentially hostile powers. It must be credible that the United States is prepared to see itself blasted into dust in order to prevent, say, Russia or China achieving an advantage in Afghanistan or Formosa. Now the probability of such a monstrous absurdity being accepted by anyone is very low. In consequence, massive retaliation can realistically result in only one of two things: either the hostile power, ignoring the threat, proceeds with aggressive acts and the United States decides not to carry it out, which would be regrettable; or the United States acts as promised, thus unloosing a world war without adequate reason, which would be even more regrettable. In neither case has the "policy" served the interests of the country originating it, though this is perhaps not an unfair criterion to apply to any policy.

The nuclear air arm is then by itself not an adequate foundation for national policy. It is scaled for use in a contest with an opposing nuclear air arm, but can have little real effect on the daily struggle for influence and position in the many regions of conflict which exist

throughout the world. History has played us false in this matter. Why should not the most powerful weapon in our entire arsenal also be the most influential? Have not the mounted knight, the capital battleship and the tank dominated their respective fields at times in the past? Why should this not be true today? Through the first atomic decade most thinkers assumed it would be true. As the real consequences of the use of the new weapons have become available for careful appreciation and analysis, however, the certainty of this assumption has been undermined.

Put simply, it has become clear that in a time of "nuclear plenty" any major power will be able to obliterate its enemies—and in turn will itself be exposed to obliteration. At this point many thinkers, including Mr. Kaufman, are beginning to sense the fundamental absurdity. The purpose of war is to further the well-being and permanent interests of the nation, or, more precisely, the result of victory must be seen in these terms. If, however, no nation in possession of its sane faculties can accept the risk of *winning* a nuclear war in the future—if, that is, victory no longer has meaning, then nuclear war is no longer a feasible political course of action. It is certainly straining the language to equate obliteration—the fruit of victory—with the well-being and permanent interest of any people, even a people toward which one may feel hostile.

It appears, then, that we cannot follow the pattern of history in this respect. We must—a painful necessity—think again.

Absurd as is the idea of warfare with self-obliteration at its end, we must be careful not to recoil too far from the new and horrible engines. No major power can afford to be, or to belong to an alliance which is, in any essential respect, less capable of wreaking destruction than are its potential enemies. If this were to happen, the weaker side could expect to be put under such pressure that its international position would rapidly crumble. Obliteration as the cost of defeat does make incisive sense. A major power has, then, no choice but to retain a strong air arm, for such is the price of remaining in the international arena. It is, if you like, the ante in the game, or the capital cost of a national life insurance policy. Sir John Slessor has already likened the nuclear air fleet of our day to the battleships of the Royal Navy during the nineteenth century. Though never used in action, their mere existence guaranteed a certain reasonableness in the conduct of European affairs.

It is to the credit of Mr. Kaufman and his associates that, though recognizing the "dead-end" against which air strategy has run with the new weapons, he still recognizes that this absurdity turns on the— for purposes of obliteration—equal capacity of rival powers. If either side were not to possess this power, then the nuclear air arm would become decisive. In other words, a major power which wishes to retain its freedom of action in foreign affairs (and could there be one which did not?) must first of all retain the capacity to annihilate its possible enemies, even though (and here the absurdity threatens to re-

turn on us) it has no serious intention of ever doing so.

The most powerful weapons, then, taken by themselves as a military arm, are not able to sustain a reasonable and reasoning foreign policy in its day-to-day problems. The nuclear bluff was called in China, Korea, Indo-China and Hungary, and will most certainly be called in other regions in the future. We have had ample time and more to realize that a plan to employ the nuclear redress in Europe and a threat to resort to nuclear retaliation for aggression elsewhere are not going to sustain the interests of the Western powers. Is it not then time and past the time to consider carefully what military policy will counter and throw back the military acts of powers hostile to us?

At this point in the argument Mr. Kaufman's concept of "limited war" becomes important. It is his merit that he is not distracted by the misleading and vague term "brushfire" war. Those who delude themselves by the facile use of the word "brushfire" appear to argue: "Of course there may be, from time to time, 'local' or 'peripheral' or 'colonial' clashes. We must be prepared to assist in these. Such clashes are, however, but distractions. We must keep our eye fixed on the area of vital importance: the nuclear war."

Mr. Kaufman has investigated the nature of "peripheral clashes" and has, perhaps for the first time, set them in true perspective. Such military actions may well be the most important form of Communist policy. In losing them, the West may be losing the only wars that

will ever be fought in the future. He points out (and in this he is original) that *the existence of the nuclear arm is the very condition which is most likely to keep limited wars limited*. The mutual fear of obliteration is the best guarantee that local wars will not be permitted by any major power to involve direct attacks on one another's homeland. Paradoxically, the weapons of unlimited power may restore war, which in the Second World War had begun to assume an irrational quality, to a rational and finite place in the policy of nations.

This train of thought is impressive enough to give one pause. If it is sound, then the nations of the West should seriously study their fighting forces to ensure that they are in balance with this situation. In just which way wars can be limited is a question worthy of much study. Mr. Kaufman can hardly be wrong when he suggests that in at least three fundamentals war must be defined if it is to be limited. It must have a limited political objective; it must be limited in geographical extent; and it must employ a limited range of weapons.

If this much is accepted, then one cannot deny the force of Mr. Kaufman's conclusion: that ground forces, with close air and naval support, are the arm most suited not only to success in limited war but most suited to success in imposing the "limits."

Mr. Kaufman is writing of and for the United States. In this context he urges that all arms of the forces must be strengthened. Stra-

tegic Air Command must continue to improve its capacity to deliver annihilation; the Army and the Navy must improve their capacities to intervene swiftly and effectively in areas of possible action overseas. This is not pleasant advice to lay before the taxpayer, but it follows from the premises and logic of the argument.

As far as the writer knows, *Military Policy and National Security*

is the first extensive effort to cull prejudice from reason and illusion from fact in the confusing field of contemporary military problems. Naturally there will be those who disagree. Now that a certain basis of reasoned opinion has been established, however, as has been done in Mr. Kaufman's book, he who wishes to disagree must do so in kind and not with the sole aid of catchwords and slogans.

---