Australian Army History Unit

AUSTRALIAN

ARMY JOURNAL





No 119 APRIL 1959

MILITARY BOARD

Army Headquarters
Melbourne
1/4/1959

Issued by Command of the Military Board

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Distribution

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

AUSTRALIAN ARMY JOURNAL

A Periodical Review of Military Literature

Number 119

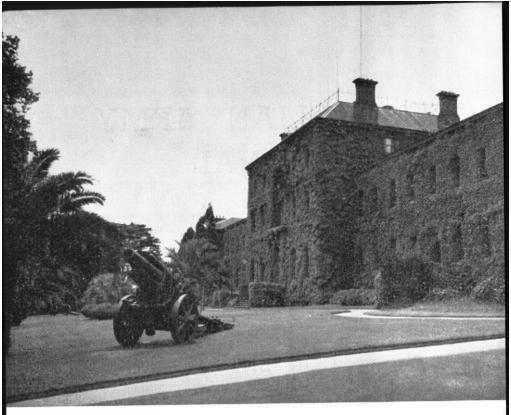
April, 1959

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VICTORIA BARRACKS, MELBOURNE

AUSTRALIAN ARMY JOURNAL

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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.

Atomic Punch

For the Ground Gainers

COLONEL GEORGE C. DALIA

Reprinted from the November 1958 issue of ARMY INFORMATION DIGEST, USA

WITHIN the past year, the US Army has introduced into its force structure a new and different type of combined arms organization—the United States Army Missile Command. Perhaps the best illustration of its need and purpose is provided by events leading to the establishment and deployment of the US Army Southern European Task Force in Northern Italy.

In October 1955, the Western Powers and the Soviet Union withdrew their military forces from Austria. Prior to this withdrawal, the forward Allied position was located in Austria — a situation which gave the Allies capability of delaying a major enemy advance until the defences of Northern Italy and Western Austria could be adequately After the withdrawal, the reinforced. most forward position in the southern region held by NATO forces was the border of Northern Italy. As a result, the major avenues of approach to Southern Europe from the east were left open and unguarded. This, in a sense, created a vacuum in the defence of NATO's southern region.

Increasing the capability of the allied forces protecting the northernmost line in Southern Europe was essential. Two courses of action were open to the allied command. The first was to deploy additional conventional forces into the area, thereby assuring a strong defence at all times. Obviously, this would have been costly in men and material. The

second was for the United States to provide a ground-delivery, all-weather capability of employing atomic fire-power to assist in area defence.

To implement the latter preferred course of action, the Southern European Task Force (SETAF) was organized in October 1955 by Major-General John H. Michaelis. SETAF was assigned to Allied Land Forces, Southern Europe, with the mission of providing atomic fire support to the forces defending the vital approaches into Northern Italy.

Initially, SETAF was organized along conventional lines. Major units included an infantry regiment, an artillery howitzer battalion, engineers, signal and service elements. For atomic fire, an Honest John unit was included in the command.

It was soon realized, however, that new concepts of organization were necessary. Although the command was organized as a combined arms unit, its primary unit was neither the infantry regiment nor the conventional artillery battalion. Actually the primary and only unit that had the capability of accomplishing the SETAF mission was one of the smallest in size but definitely the largest in fire power potential — the Honest John unit. This marked a new concept in the organization of a combined arms command — namely, that the fire unit and not the manœuvring unit was the principal element.

Missile commands were developed to provide accurate all-weather atomic firepower support to combat forces of the United States and its allies. Based on the experience gained from SETAF, the following factors were considered in developing the missile command organization:—

Atomic firepower delivery,
Target acquisition.
Communications.
Security.
Logistic support.
Co-ordination with supported forces.

From analysis of these factors and the lessons learned by SETAF, the US Army Missile Commands were developed and assigned the mission "To provide atomic fire to United States or allied forces in any area of the world."

Atomic Firepower

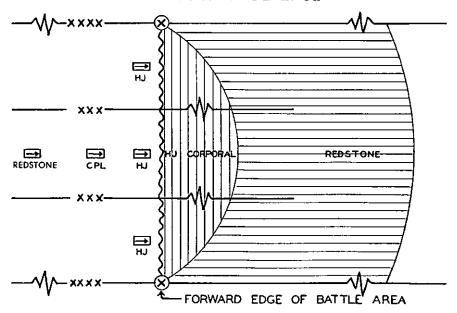
To insure effective support to the major elements of a type field army, delivery

units were sought, employing a highly mobile weapon that could provide tactical fire support to the division and its subordinate elements. Launchers and missiles or rockets in this category at present in the Army inventory or available in the near future include the 762-mm Rocket — Honest John, and the 380-mm Rocket — Little John.

A long-range artillery rocket, the 762-mm Rocket — Honest John, is capable of carrying either an atomic or non-atomic warhead. It is a free-flight rocket, as distinguished from a guided missile, with range equivalent to medium to long-range artillery. The weapons system consists of a rocket weighing several tons and a highly mobile self-propelled launcher.

The Little John is a 380-mm rocket packing explosive power greater than heavy artillery. Simple and reliable, the system utilizes a solid propellant rocket engine. Lightweight launchers and ground equipment have extremely high mobility and are easily airlifted.

FIELD ARMY IN DEFENCE



To provide effective support to a corps of three to four divisions, a medium-range missile that could cover the entire corps area of responsibility was required. For this purpose, the Corporal guided missile is currently available.

Equipped with either an atomic or nonatomic warhead, the Corporal can engage tactical targets at ranges of more than 75 miles, with the missile following a ballistic trajectory during most of its flight. Weather and visibility conditions do not restrict its use.

As a replacement for the Corporal, the Army is developing a new mediumrange missile, the Sergeant. A solid propellent surface-to-surface ballistic guided missile, the Sergeant is 30 feet long, and incorporates many improvements over the Corporal in accuracy, mobility and economy. It can deliver a nuclear blow deep in the enemy rear, and is invulnerable to any known enemy counter-measures. It is air-transportable and can be emplaced rapidly and fired in all conditions of weather and terrain by a comparatively small crew.

For the overall support of a field army or an army group a long-range tactical atomic missile is required, capable of destroying targets deep in enemy territory. In this category, the Redstone missile is capable of delivering either atomic or non-atomic projectiles at greater ranges than the Corporal or the Sergeant.

The Pershing, a solid propellant ballistic missile, will succeed the Redstone liquid propellant missile. The new missile will be smaller, lighter and more mobile than the Redstone and will provide the Army with a more versatile and flexible weapon with which to discharge its nuclear battlefield role.

Target Acquisition

From a tactical viewpoint, where targets are to be engaged by a ground force with conventional and atomic weapons, the commander must have the means to acquire the necessary information to assure himself of a profitable target. This means that the unit must be organized and equipped to perform the information-gathering—ie, target acquisition—mission. This unit must locate targets deep in the enemy rear, both physically and electronically by devices such as radar, television and related equipment.

Signal Communications

The breadth and depth of the nuclear battlefield, the complexity of operations incident to target acquisition and delivery of fire, the requirement for flexibility and responsiveness of the entire support system—all dictated that an effective high capacity communications systems be incorporated into the proposed missile command organization. The communication system of necessity must be extensive, to match the broadened area of the modern battlefield.

Security

The vulnerability of missile units to ground attacks, the dispersed formation of supported units on the nuclear battlefield, and the fact that the situation might not permit delivery units to be located near elements of the supported units, indicated that a security or local defence capability should be incorporated within the missile command.

Besides possessing maximum ground mobility, this security force had to be organized and equipped to provide the maximum security with a minimum of personnel. Consideration was given to including an air defence element within the command; however, due to the requirements for area defence, it was felt that defence against air attacks must be provided by the supported force.

Logistic Support

Economy of force dictated that the requirements for logistic and administrative support be kept to the minimum. Service elements, it was recognized, will

vary greatly according to local requirements, geographic deployment, and location of other US Forces. Further, this requirement could not be met at the expense of the tactical units.

In general, service support to an atomic force normally is kept to the minimum consistent with the provision of special weapons support, essential maintenance, transportation and other conventional support. But since missile commands are not logistically self-supporting, those operating for extended periods away from US Forces must be heavily augmented with Technical Service units.

Co-ordination

In developing a logical approach to an atomic force organization, one of the major considerations is the requirement for co-ordination with the supported forces.

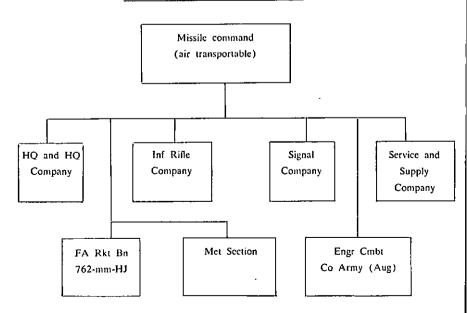
First, the atomic force commander must be of appropriate rank. Considerations in determining rank included the size of the force to be supported (division to an army group), the firepower potential of the atomic command and finally the fact that the unit may be the sole United States unit within an allied command.

Second. it was recognized that sufficient liaison personnel, qualified to provide sound tactical and technical advice to the supported force commander and his staff, are essential to the missile command. It can be assumed that the commander of the US Force will be the principal advisor to the allied force on missile commander and atomic employment and, accordingly, liaison personnel must be capable of advising key staff personnel of the supported force.

Types of Missile Commands

Based on an evaluation of the foregoing factors, three types of missile commands were developed by the Department of the Army—the United States Army

AIR TRANSPORTABLE COMMAND



Missile Command (Air Transportable), United States Army Missile Command (Medium), and the United States Army Missile Command (Heavy).

Air Transportable Missile Command

Possessing a fully air transportable capability, this command is a comparatively small organization designed primarily to furnish atomic fire at the division level. The command — with a total strength of approximately 1100 — is built around one Honest John battalion.

The Honest John battalion, the firepower element, has four launchers and is capable of launching rockets with a variety of atomic warheads. reconnaissance and surveillance platoon is included in the headquarters company charged with the target acquisition function. Communications are provided by the Signal Company. An infantry company is included for the command security mission. A combat engineer company provides overall engineer support including camouflage, geodetic survey and other related support. For logistic support, the service and supply company includes a special weapons detachment, a chemical section for radiological detection and decontamination, and conventional service elements.

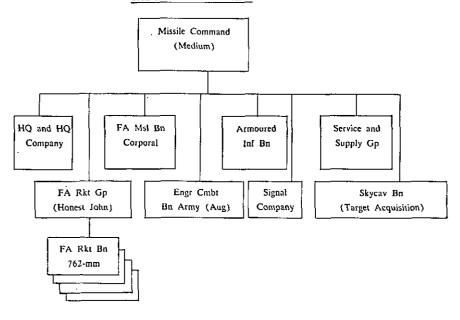
Currently located at Fort Bragg, North Carolina, the 3rd US Army Missile Command (Air Transportable) was activated in March 1957.

The Medium Command

The US Army Missile Command (Medium) is flexible in organization and can be readily adjusted in size and composition for a given mission in a particular area of operation. The firepower units, the primary elements of the command, include a field artillery rocket group of four Honest John battalions and a Corporal battalion. With these, the command can furnish fire support to divisions, corps and field Army.

Possible variations in this command include a reduction in the number of

THE MEDIUM COMMAND



Honest John battalions and the corresponding supporting groups, or the addition of a second Corporal battalion, when additional medium-range firepower is essential.

The target acquisition unit is the Sky Cavalry Battalion—largest Army unit organized primarily to accomplish this mission. The battalion will have the capability of performing reconnaissance and surveillance over wide fronts and extended distances through the use of a combination of troops, vehicles aircraft, photographic equipment, electronic and detection devices.

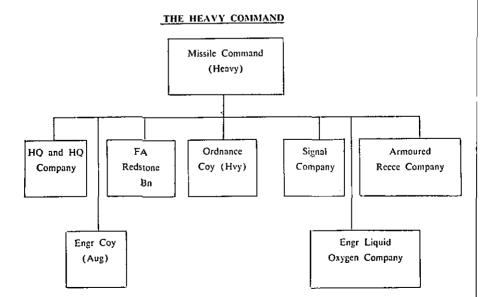
The battalion has four Sky Cavalry companies, each similarly organized. In order to exploit to the maximum the destructive power of missiles and rockets, information on tactical targets must be obtained as rapidly as possible, followed by an immediate evaluation of results of atomic strikes. Effective operation of the Sky Cavalry battalion is thus vital to the successful operation of the command as a whole.

For local security an armoured infantry battalion is included. This is a ROCAD

armoured infantry unit with the mission of protecting the special weapons and company units. signal delivery Α provides wire, radio, photo and other The engineer related signal activities. combat battalion provides assistance in sites, camouflage, preparing missile survey and geodetic elements for locating the launcher sites. A service and supply group provides both conventional and special weapons logistic support. chemical detachment is included radiological survey and decontamination service There is also an ordnance battalion to furnish special weapon warheads, missiles, and rockets,

The medium command is the largest, most versatile and flexible organization that can furnish atomic firepower to the division, corps and possibly the field army.

Two medium missile commands have been activated – the 1st US Army Missile Command (Medium) assigned to US Army Southern European Task Force; and the 2nd US Army Missile Command (Medium) at Fort Hood, Texas.



Heavy Missile Command

The US Army Missile Command (Heavy) is built around the Redstone missile, with its long-range capability. consists of approximately personnel. Primary element is the Redstone Battalion with two launchers, supported by an ordnance company with. special weapons and conventional support; a LOX company (engineer liquid oxvgen company); an augmented engineer company; a signal company for communications: and an armoured for reconnaissance company local security. The target acquisition element, aviation support, chemical section and general supply section are included in headquarters company,

Elements of the heavy command could conceivably be incorporated into the medium command, particularly when there is a requirement for delivery of long-range atomic fire in addition to the Corporal.

Overall, the US Army Missile Command has measurably increased the striking power of the United States combat forces; moreover, it has enabled the United States to support its allies with a tremendous firepower at minimum cost in personnel.

The Army's missile commands, it must be fully understood are designed to furnish fire support to organized conventional ground forces. They cannot be deployed as independent units since no ground-holding capability has been included within their organization. (Infantry and armoured units included primarily for local security purposes). Even so, it should be fully appreciated that each type command possesses the capability of delivering accurate atomic firepower, regardless of weather or visibility conditions, whenever a situation requiring such action may arise.

: DIGGER

Major G. M. F. Wood Australian Intelligence Corps

The proud have digged Psalm CXIX - 85

The Ideal Man

Do Australians, as a group, admire some particular type of person? We know that this has generally been a characteristic of older races and groups; the British respect the gentleman, the Japanese the disciplined warrior (the Samurai), while the Indian defers to the ascetic (the Sadhu).

If a popular opinion poll were to be held it would almost certainly find that the Australian ideal is the self-reliant man as epitomised in the Digger. The purpose of this article is not so much to argue whether the Digger does, in fact, represent the Australian ideal or not, but to accept this as such, and to set down certain historical events which appear to have influenced the adoption of this word as an expression of the Australian ideal.

The term Digger, taken into general use by the first AIF and now applied loosely to any Australian, has roots reaching back into the formative stages of our history; there are indeed some who assert that it goes much further back, to an obscure group which existed in England in the seventeenth century.

Diggers and Levellers (Seventeenth Century)

This group of people called themselves Diggers and their movement a so-called "Revolt of the Diggers". These Diggers were small bodies of men who took possession of unoccupied land such as Commands and began to cultivate them for their own and the general good.

The Diggers were a segment of a more important movement called the Levellers. Neither group enjoyed much success but were examples of early struggles for land reform and a 'fair go' for the common man.

Both Diggers and Levellers failed in their objectives but their struggle for reform was taken up by the Chartists, who appeared in the early part of the nineteenth century.

Chartists (Nineteenth Century)

The Chartists were a much more important group of reformers who led a movement in England which eventually grew to such proportions that ruthless measures were required by the Government to suppress it. Many of its leaders were arrested and sentenced; the sentences being commuted in some 84 cases to transportation to Australia. It is of note that when Governor Hotham was faced with the possibility of similar trouble in Ballarat and Melbourne in 1854, he recalled how the British Government had dealt with the Chartist revolt and proposed taking similar action in Victoria.

Many Chartists came to Australia as free settlers, paying their own passage,

and hoping for better success in their struggle for freedom and reform in a new land. That Chartist ideals were still active in 1854 is clear from the aims of the Ballarat Reform League, formed in that year, and the activity of Chartists during the Eureka Movement. The Scottish Chartist, Kennedy, and others ended their more inflammatory speeches at Ballarat with the direct-action couplet—

"Moral persuasion is a lot of humbug Nothing persuades like a lick in the lug."

Cummins, the man who hid the miner's wounded leader, Peter Lalor, after the revolt, was a Chartist and rumours of Chartism were sufficiently strong for Lalor, when defending his position as an Australian democrat, to declare in 1856, "If democracy means Chartism, Communism or Republicanism, I never was, I am not now, nor do I ever intend to be, a democrat. But, if democracy means opposition to a tyrannical press, a people tyrannical or a tyrannical government, then I have even been, I am still, and I will ever remain a democrat."

The link between these early movements and the digger of Eureka is, therefore, not as tenuous as it might at first sight appear; common motivators in all three movements were a striving for representative government, land reform and a 'fair go' for every man.

The Eureka Stockade (1854)

The revolt at Eureka on 3 December 1854 was an affair of such magnitude in the formation of the Australian ethos and the word 'digger' that is is proposed to narrate the events surrounding our one and only serious revolt in some detail.

Victoria became a separate colony on 1 July 1851 and rich finds of gold were discovered there in the same year. The fabulous gold rush era had begun, and the "have nots" and adventurers from all over the world poured through the port of Melbourne to the goldfields of the hinterland. By the end of the following year Melbourne had expanded to become the largest and most turbulent of the Australian cities and was to remain so for over the next half century.

The pressure of this explosive increase in population in Victoria (from 83,350 to 198,496 within the two years ending December 1853) became apparent during succeeding years when most of the rich goldfields were exhausted and the chaotic finances of the infant colony steadily Diggers began to drift deteriorated. away from their unrewarding claims seeking other employment, which was hard to find. Their specific goldfield grievances, concerning non-representalicence fees and restrictive government control, became submerged in colony-wide problems of unemployment, the unrepresentative nature of he government (through a Lieutenant Governor and a Legislative Council) and the difficulty of unlocking the lands.

era was one of world-wide turbulence and unrest, following 1848 "The year of revolutions". Most of the immigrants brought with them their sense of the social and economic injustice of the old world and their determination to make a change for the better in this new land. Britain, troubled by the prevailing social unrest and the aftermath of Chartism, sought to relieve pressure on her overcrowded prisons by reviving a limited form of transportation Australia.

The reaction to this proposition by the incipient colonies was violent and added to public resentment against government "from over the sea". At this critical moment in the affairs of Victoria the Lieutenant Governor, Sir James Joseph La Trobe, a reasonable and sympathetic man, was replaced Captain Sir Charles Hotham, RN, an able, self-dependent, but unimaginative and autocratic officer, with strong views on discipline engendered by his service background.

Hotham was shortly afterwards appointed Governor of the new Colony and ordered by British Government to adjust its chaotic finances as his first task. This he proceeded to do by the simplest means at his disposal — that of intensifying the collection of miners' licences to "not less than twice a week" with payment to be enforced "at all hazards".

The method of issue of these licences had given serious trouble from the very beginning and was in its practical application harsh, humiliating and tactless. The goldfields police conducted "Digger hunts" in much the same spirit as fox-hunts in England. Diggers found without licences were taken to the Police Headquarters called "the Camp" and chained to a tree or post or thrown into a prison until the licence was paid.

A miner might be called on to produce his licence up to a dozen times a day. Deep-sinking, in search of alluvial leads, as practiced in Ballarat, meant frequent wettings caused by seepage of water. The miner had often to work in wet and muddy conditions and the requirement to carry and produce a licence was, in these circumstances, a constant Several events aggravation. ocurred in quick succession which transformed the sporadic but increasing resentment of the diggers into a flare of concerted action.

In October 1854 a digger named James Scobie was murdered near the notorious Eureka Hotel in Ballarat. The assailants, members of the hotel staff, were arrested but, after an enquiry, were honourably discharged by the bench. enraged the miners that a public meeting was held, attended by between three and five thousand men. The authorities sought to protect the nearby hotel by posting foot and mounted police in the vicinity. The sight of the hated "Joes" (so called from a curious contraction of the former Lieutenant Governor's middle name) was such that the orderly meeting quickly deteriorated into a seething mob and the hotel was soon

ablaze. Scobie's assailants were subsequently tried and convicted but, while the due processes of law were grinding slowly, the pace of other events at Ballarat was accelerating.

Johann Gregorious. crippled а Armenian servant of the local parish priest, had gone to visit a sick miner. Whilst he was there a police trooper asked him to show his miner's licence. The Armenian replied with some difficulty that he was a foreigner and a domestic servant and not a miner. The trooper then ordered Gregorious to follow him to the Camp and when the Armenian said he could not easily do this as he was a cripple, the trooper ill-treated Gregorious was subsequently charged and fined for "assaulting a trooper in the execution of his duty". This incident considerably upset the strong Irish element at Eureka and contributed to the steadily mounting unrest. Clashes between the police and the diggers became more numerous thereafter and on November 1854 Committee, which had recently been set up, was disbanded and replaced by the "Ballarat Reform League" whose aims were —

A full and fair representation.

Manhood suffrage.

No property qualification for members of the Legislative Council.

Payment of members.

Short duration of Parliament.

In an affair of such multiple causation as Eureka the Diggers' preoccupation with the form of democratic government, to the exclusion of their acute local grievances, was remarkable.

About a week after the formation of the League a mass meeting was held at which one of the miners' leaders stated "It is not the wish of the League to effect any immediate separation of this colony from the parent country, if equal DIGGER

laws and equal rights are dealt out to the whole free community. But if Queen Victoria continues to act upon the ill advice of dishonest Ministers, and insists upon indirectly dictating obnoxious laws for this colony under the assumed authority of the Royal Prerogative, the Reform League will endeavour to supersede such Royal Prerogative by asserting that of the People, which is the most Royal of all prerogatives as the people are the only legitimate source of all political power".

The militants had clearly taken charge and the advocates of moderation had been shouldered aside.

Two newspapers which had recently commenced publication in Melbourne, the "Age" and the "Argus", did nothing to placate matters. On the contrary they championed the diggers' cause and added daily fuel to the growing flames of public opinion throughout the Colony. The Government, watching the rising temper of the people of Melbourne and Geelong, as well as on the goldfields, determined to take action before it was too late, and despatched reinforcements and supplies to Ballarat. These were set upon by the diggers, who overturned the last supply wagon and appropriated weapons and ammunition for themselves.

Further "digger hunts" were ordered and police pressure became more ruthless; tempers on both sides were now reaching breaking point. On 29 November the Reform League held a monster meeting at which the miners resolved to burn their hated licences and defy the Camp authorities and the Governor.

The powers vested in the governor of a colony were very great; Hotham had once said, with a good deal of truth, "I am the Governor and solely responsible for this Government".

If he had chosen, at this moment, to make one single conciliatory gesture the course of events at Eureka undoubtedly would have been quite different. The orders given to the police on the day following the burning of the licences, however, were that they should check licences as usual. The police sought to out these orders but manhandled by large crowds of diggers when dispersed who only police reinforcements arrived and the Riot Act The editor of the Ballarat was read. paper the "Diggers Advocate" wrote "there was ferment everywhere, the whole place was electric". The time for direct action by the diggers had arrived and it was only at this late stage that a natural leader arose in the person of Peter The diggers began to enclose Lalor. an area of about an acre at Eureka with pit-slabs used in mining, the purpose of which was more to delimit the area than to act as a stockade. Lalor afterwards asserted that the low barricade had never been erected with a view to military defence and was in fact quite unsuitable for that purpose. Inside this area awkward squads of miners began to drill with poles, pikes and other assorted weapons.

The diggers took an oath under the Southern Cross flag, called by Hotham "the Australian flag of independence". There is some confusion as to the exact details of this famous flag but it is known that it was composed of a white cross on a dark blue ground with the five stars of the Southern Cross superimposed.

In the first flush of their militant ardour number of diggers within stockade must have been upwards a thousand, and this number was added to by some three to four hundred diggers from Creswick Creek and elsewhere, who did not, however, stay long when they found that the rumours of food, arms and grog in abundance at Eureka were without foundation. It is probable also that some of the cooler heads, alarmed at the course events were taking, began to defect from the movement at about this time. There was no real organization for feeding and administering, much less arming and training such a body of men within the stockade and, by the

fateful sabbath morning of 3 December 1854, the number of direct-actionists had dwindled so that there were only about 120 diggers to oppose the attacking force of about 290 soldiers and police. The first shots, either for warning or effect, appear to have been fired by the diggers and the whole affair was over in about 15 minutes. The attacking party suffered 12 casualties, all soldiers, and the embattled diggers some 34. About half of the digger casualties apparently occurred after resistance within the stockade had ceased.

The soldiers behaved with commendable discipline and restraint but many of the "Joes" vented their accumulated exasperation and animosity on the diggers, wounding many and setting fire to their tents.

Such was the popular approval of the Diggers' actions that two juries, assembled in Melbourne some months after the affair, failed to find guilty any of the thirteen men indicted by the Government for complicity in the rebellion, despite the fact that these thirteen had been selected as "those against whom the proof of participation is of the clearest kind".

The physical phase of the rebellion at Eureka was at an end, but the ethical, social and inspirational vibrations which it had created continued to flow outwards like ripples from a stone thrown into a pool.

The importance of the event in Australian history is indicated by the interest of our creative writers in the subject and by the variety and nature of the men who have sought to comment on it.

Karl Marx, when he first heard of the "Ballarat Riot", correctly predicted that "the general revolutionary movement in the Colony of Victoria can only be ended as a result of considerable concessions".

Mark Twain, who visited Australia in the nineties said "it may be called the finest thing in Australian history. It was a revolution—small in size but great politically; it was a strike for liberty, a struggle for a principle, a stand against injustice and oppression".

In our own day E. V. Evatt has declared "the Eureka Stockade was of crucial importance in the making of Australian democracy", and J. B. Chifley has said "of place names in Australian history Eureka is eminent. It symbolizes the beginnings of our early struggles for political equality", Speaking from the conservative standpoint R. G. Menzies stated that "the Eureka revolution was earnest attempt at democratic government . . . it was a fierce desire to achieve true parliamentary government and true popular control of public finance"

There may indeed be some variation opinion as to the precise identifiable influence of Eureka, but there no doubt that it provided inspiration and impetus which ultimately to the transformation οf Victoria into a most advanced form of parliamentary democracy nineteenth century. At a time when the Australian ethos was being formed it acted as a catalyst, defining the qualities that previously had only been vaguely thought of as typifying the Australian personality; such ideals as self-reliance, mateship, a fair go, equality, resistance to oppressive or unrepresentative authority.

As the legends grew the digger became the popular hero of the day, to be recalled later in times of national crisis and emergency, and the diggers' flag, the Southern Cross, plainly influenced the design of the Arms of the State of Victoria and our national flag. The word "digger" became an honourable form of address and was generally and widely used in the early day throughout southeastern and western Australia.

The digger of Eureka is important because he formed the basis for many of the Australian characteristics and his qualities influenced the diggers of Anzac and Flanders, who followed in the same tradition.

The Maori Wars (1845 - 1872)

The thread of our story now passes to New Zealand and to the first time Australians fought overseas, during the Maori Wars of 1845 - 1872. Many ex gold miners and adventurers of all nationalities. including native-horn Australians, volunteered for service in New Zealand. In three years, from 1860 onwards, some 2500 men were recruited in Melbourne for service in the regiments of the Waikato Militia. These regiments were formed primarily for guard duties relieve regular units for active operations against the Maoris, who had proved themselves to be redoubtable opponents, skilled in the construction and defence of fortified villages or pas. Conventional methods of attacking these pas having failed, the British leader, Major-General Pratt, resorted to the construction of saps, which though slow were inexorable. Troops were pressed into the role of sappers and many ex gold diggers found a use for the skills they had learnt at Ballarat and Bendigo. The following extracts from a "History of the New Zealand Wars", by J. Cowan, are of particular interest.

"Neither the regular soldiers nor the enrolled city Militia were competent at the time to pursue the Maoris in their forests, and it soon became clear to the military heads that a special force was necessary to meet the natives on their own ground and levy guerilla war with the object of clearing the bush on the flanks and safeguarding the army's communications and the outsettlements. Taranaki had set an example in the formation of a corps of Bush Rangers, composed largely of country settlers and their sons. was equally good material in Auckland settlements, and there was also at hand a body of gold-diggers at Coromandel ready to turn to new

adventures now that the excitement and the profits in the primitive mining of that period were dwindling. The government urged by the Press and the public, resolved to form a small corps of picked men, used to the bush and to rough travelling and camp life, to scout the forests and hunt out the parties of marauders".

From this idea sprang the organization the Forest Rangers. Two companies were formed in 1864. The captain of No 2 Company was a Pole, Gustavus Von Tempsky, who had begun his military career in the early forties in the Prussian Army. He later fought in several of the small central American wars, became a miner in California, moved to Australia during the gold rush and was at the Coromandel gold fields in New Zealand when the Maori wars He was "working No 8 broke out. claim at the diggings when the first shots of the Waikato war excited the old war fever, and after trying unsuccessfully to form a diggers corps at Coromandel, captained by himself, he joined the Southern Cross newspaper in Auckland hoping presently to have an opportunity of getting into action He accompanied Jackson (OC No Company Forest Rangers) as correspondent on one of the early expeditions in the Wairoa Ranges, and it was on this excursion, lasting three days, that the young Rangers' officer discovered that the lean, swarthy, ex-digger with the very pronounced foreign accent was far better fitted than himself to command a fighting corps". Shortly afterwards Von Tempsky was given command of a company of Rangers. He favoured the bowie knife and taught his men to use it for many things. One subaltern said he found the knife "very useful - not for fighting, but for digging in . . . each digging a shallow shelter for himself and throwing up the earth in front."

By the time of his death in battle Von Tempsky has acquired a reputation as an unusual and successful soldier and Cowan records that some of his best volunteers had been members of the 1st Waikato Regiment which had been recruited in Melbourne from "sailors, gold-diggers and others who had seen much of the rough end of life".

This Polish officer's century-old suggestion of a "diggers corps" is the first conception, so far as I can find, of the 'digger-soldier' idea.

By the turn of the century, when New Zealand had entered on a more tranquil era, many settlers added to their earnings by the sale of a type of amber found in the Cowie forests. This gum or amber was obtained by digging, and those who sought it were known locally as diggers.

It has been advanced by some that our word had its origin in this avocation, but the proportion of gum-diggers amongst the Anzacs must have been extremely small and the pursuit itself so obscure, irrelevant and lacking in drama that its influence on the word digger could not be, at the most, more than incidental and supplementary.

The Madhist Rebellion (1885)

In 1885 New South Wales sent a contingent to North Africa to assist the British forces in quelling the Madhist rebellion. A contingent of about 770 all ranks was in the Sudan for a period of about 7 weeks and during this time they were engaged in one small action at Tamai before being withdrawn. No earthworks were constructed during the action and I can find no evidence that the word "digger" was in use during this campaign.

The Boer War (1889 - 1902)

Australia sent over 15,000 volunteers to the Boer War and the contingent appears to have been used mainly in patrolling and guard duties. One incident, however, may have some relevance to the search for the origin of our word.

In August 1900 a party of about 500 Australians arrived with a large convoy of stores for a small Rhodesian garrison overlooking the Elands River in North-West Transvaal. The Australians camped overnight with the garrison and as dawn broke they were attacked by a strong Boer Commando, armed with field guns and rifles. They managed to survive the first day by strengthening the low walls of the post with bags of flour and sugar and stacking boulders and boxes of biscuits on the barricades thus formed. When night fell they began furiously to dig themselves in; they dug with picks, shovels, bayonets, and even pen knives, into the hard stony ground. They built trenches and tunnels; they cleared the wagons of foodstuffs, removed their wheels and filled them with rocks and soil. By the next morning they had sufficient cover to defend themselves.

Two despatches sent by the Boer commander to other Boer leaders were captured later. The first, written the day the seige began, said "I have the Australians in the hollow of my hand". The second note, sent three days later, read "the Australians seem to have disappeared, they have burrowed into the ground". Each night the Australians sent out water parties to the Elands River and dug to improve their defences. They were relieved by British forces thirteen days after the first attack; they had undoubtedly saved their lives, as many of their sons were later to do, by digging.

It is of interest to recall that one of the causes of the Boer War was the conflict which occurred between gold-diggers of Dutch descent and those of other nationalities, including Australians, who had flocked to South Africa when gold was discovered. It is quite possible that the party of Australians who defended the Elands River garrison included gold-diggers from Western Australia, where gold had been discovered some two years previously. These ex-diggers may well have used the word as a jocular reminder of their civilian occupation and the part it played in their survival.

The Great War (1914 - 1918)

Gallipoli 1915

At about 0300 hours on the morning of 25 April 1915 Australian and New Zealand soldiers entered landing boats and began their ordeal by water, blood and toil on the coast of Gallipoli. Tidal currents swept their small craft a mile beyond the target beaches and they landed on a narrow beach under the cliffs of what became later known as Anzac Cove. During the bloody. confused, but exhilarating hours of the first day their tremendous elan carried them to within three and a half miles of the Narrows, the glittering stretch of sea that separates the peninsula from the mainland of Asia. Little by little their ammunition, food, water and strength became exhausted and, as the day lengthened, enemy pressure increased and by nightfall they had been driven back by the Turks to the cliffs they had scaled so zestfully in the early morning. On the night of 25 April their hold in the beach and the cliffs of Anzac Cove seemed so precarious that General Birdwood, the Corps Commander, considered withdrawing. story is told by the Force Commander, Sir Ian Hamilton, in his "Gallipoli Diary" as follows "At 0005 am on 26 April, Braithwate awakened me with a message from Birdwood inferring withdrawal". Hamilton then records that he discussed the situation with his staff, then "without another word, all keeping silence, I wrote Birdwood as follows 'your news is indeed serious but there is nothing for it but to dig vourself in and stick it out . . . make a personal appeal to your men . . . to make a supreme effort to hold their ground. You have got through the difficult business, now you have only to dig, dig, dig, until you are safe' ".

When read out on the beach to the weary and disheartened Anzacs the message had an extraordinary effect; but it was really the postscript, containing the vital and motivating word thrice repeated, that transformed them so that

they began at once to "dig, dig, dig" in a fury of redeeming effort. On the morning of 26 April Hamilton cabled to Kitchener "the Australians have done wonderfully at Gaba Tepe . . . things looked anxious for a bit, but by this morning's dawn all are dug in, cool, confident".

In my opinion the real birth of the word dates from this incident, the conception having occurred half a century previously at Eureka. The physical similarity between Gallipoli and the goldfields was striking and evocative as the following extracts will show:—

Hamilton, who had lived for a short time in Victoria before the war, wrote in his book "Gallipoli Diary", mentioned earlier, "To me this is no valley of death - it is a valley brim full of life at its highest power. Men live through more in five minutes on that crest than they do in five years at Bendigo or Ballarat. Ask the brothers of these very fighters - Kalgoorlie or Coolgardie miners to do one quarter of the work and to run one hundredth the risk on a wage basis - instanter there would be a riot. But here — not a murmur, not a question. only a radiant force of camaraderie in action."

The inventiveness and initiative of the Anzacs greatly impressed Hamilton. After a tour of trenches and underground passages near Turk's Head he wrote "Ex-westerners say that in France they have nothing to touch these Australian tunnellings . . . on the steep slopes in another place there is a complete underground trench running parallel to, and only a short bomb-throw from, a Turkish trench. We went through it by lantern. Sandbags, loopholes, etc, all are there but blind. They are still veiled from view by several feet of clay. Tomorrow night the Anzacs are going to chip off the whole upper crust of earth, and when light dawns the Turks will find a well equipped trench, every loophole manned, within bombing range of their own line.'

The initial attacks having failed, the Anzacs consolidated their position and a

big attack was planned for July. The following extract is taken from "Gallipoli" by John Masefield, the poet laureate.

"Very nearly thirty thousand men . . . had to be landed unobserved and hidden. There was only one place in which they could be hidden and that was under the ground. The Australians had to dig hiding places for them before they came. In this war of diggings, the daily life in the trenches gives digging enough for every soldier. Men dig daily even if they do not fight. At Anzac in July the Australians had a double share of digging — their daily share in the front lines. and when that was finished their nightly share, preparing cover for the new troops . . . all night long, for those three nights the Australians worked like schoolboys . . . never before had 25,000 men been kept buried under an enemy's eye until the hour of attack. Long after the war the goatherd on Gallipoli will lose his way in the miles of trenches which zigzag from Gaba Tepe to Ejelmer Bay . . . I have said that those positions were like mining camps during a gold Ballarat must have looked strangely like those camps . . . "

The Western Front (1917 - 1918)

After the withdrawal from Gallipoli the Anzacs created fresh legends for themselves on the fields of Flanders and On the Western Front the Somme. artillery and the machine gun had immobilized the battlefield and once again our soldiers had to dig to live. Their lives were lived under cover, in the trench behind a parapet or in a dugout or gallery, fighting, living and sleeping under the cover of the earth. Some of their digging feats showed gallantry and tenacity of a high order as when digging trenches, under direct artillery and machine gun fire, from which to launch the final attack on the heights of Pozieres. One of the units engaged on this dangerous operation was the 27th Battalion known later, after its Commanding Officer, as "Dollman's Dinkum Diggers". According to Dr C. E. W. Bean "Pozieres Ridge is more densely sown with Australian sacrifice than any other place on earth". Some 23,000 Diggers lie buried there,"

About a year after the capture of Pozieres, Dr Bean records that "the Divisions of 1 Anzac were very efficient instruments indeed. The troops had never been so healthy or happy, or the battalion spirit so keen. It was at this stage (about June - August 1917 on the Somme) that Australian soldiers - in particular the infantry -- came to be known. together with the Zealanders, as 'the Diggers'. The term had occasionally been heard before, but hitherto had been general only among the New Zealanders, who are said to have inherited it from the gum-diggers in their country. It carried so rich an implication of the Anzac infantry -man's own view of his functions and character, that it spread like fire through the AIF, and by the end of the year (1917) was the general term of address and for Australian New Zealand soldiers". Dr Bean adds the following footnote "It is certain that the term had several independent origins, and had been commonly used long before among miners in some units; but in most it was, even at this date, barely known and its general application certainly came to the AIF from the New Zealanders".

Dr Bean's statement that the word did not come into general use until late in 1917 must be accepted, but it seems possible that he was too close to events to have assessed the true origin of the word. He devoted very little space to its consideration, and it could be assumed from his footnote that he may have had some second thoughts about its origin and importance; the New Zealanders themselves have questioned the relevance of the gum-diggers in this regard.

For the reasons advanced earlier in this article it is considered that the pursuit of gum-digging lacks the DIGGER 21

universality and stature needed to serve as the basis for a widely used and enthusiastically accepted word, but its supplemental character can be accepted.

It is of interest that the lexicographer Partridge (himself ล Zealander and a first war digger) in his Dictionary of Slang notes that "the Digger is the selfname of the Australian soldier and the New Zealand soldier. Probably revived from the common form of address which originated on the goldfields of Australian and New Zealand by those who 'shovelled Gallipoli into sandbags'". Partridge also points out that prior to 1909 the British army used the word Digger as a contraction for the phrase "Damned Guard Room". In this form the word may have had a temporary and restricted vogue among the regiments who were stationed in Australia during the colonial period.

World War II and After

The word became very popular between the two world wars but it had two meanings, one precise meaning "a soldier", particularly "an infantryman", and the other general, meaning "an Australian".

During World War II its use was not as consistent as might have been expected and the tendency was to use the word in its general sense as "an Australian". It is probable that the rapidly changing pattern and mobile nature of the war inhibited its use to some extent as claborate earthworks were seldom required by the Australian forces.

During the Korean campaign and the Malayan Emergency the words Digger and Aussie were both indiscriminately by Australians themselves and by other nationalities. It might have been thought that the closing stages of the Korean campaign, with its extensive earthworks, would have brought the word back to almost exclusive use as a selfname for the Australian soldier, but this does not appear to have been the case.

The Future

We have thus far traced the evolution of our word and have shown, I think, that it is firmly based, that it arose naturally from some of the most significant events in our short history as a nation, that it had supplementary sources but its line of true descent is through Eureka, Gallipoli and Flanders, and that it typifies much of what we hold to be the best in the Australian ethos. Its future cannot be foreseen but it appears that the word will not lack relevance in warfare of the atomic age when the mantle of earth appears to offer, as it has in the past. the best protection for the foot soldier, who must dig to live. As for the present we can say that the word is widely used and understood and we can perhaps best close our survey with a quote from an American General, James Fleet, former Eighth Commander in Korea, who, when interviewed in London, said "I never met the like or equal of the Australian Digger" and added "the Digger had something not in the text books".

Stalemate on 38th Paralell

Reprinted from An Cosantoir, Eire

ON 27th July 1953, three years after the outbreak of the Korean War, an armistice was signed at Panmunjon by the United Nations and Communist Commands. Now, five years later, a state of war still exists, and the translation of the armistice into a permanent peace appears to be as far off as ever.

A three-cornered disagreement exists between the United Nations. Communist Command and the South Korean Government on the interpretation of "the establishment, by peaceful means, of a unified, independent and democratic Korea under a representative form of government," which is the declared aim of the parties involved. The United Nations insists on free elections for all Korea under the supervision of UNO; the Communists require all Korean elections supervised by neutral observers, and the South Koreans demand elections only for one hundred seats (in a 233-member parliament) allocated by them on a population basis to North Korea.

Cost of War

In the five years since the signing of the armistice the painful process of counting the cost, reconstruction and adjustment to cold war conditions, has been proceeding in South Korea. The full figures for war casualties will probably never be known, but the United Nations' forces suffered an estimated 150,000 loss in killed, wounded and missing, and the South Koreans, who faced the first flood of the invasion

insufficiently equipped, undoubtedly suffered considerably greater losses. The country had been almost over-run, first by the initial North Korean offensive, and then by the counter-offensive that drove the enemy back beyond the 38th parallel. Seoul, the capital, Tacjon, and the other larger towns had been reduced to smoking ruins.

However, on the same date as the armistice was signed, the United States Congress was asked to authorize the provision of \$200 million as the first part of a rehabilitation programme which would extend over a period of three to five years and which, it was estimated, would cost one billion dollars in all. This aid has, in fact, been provided and non-military assistance for the three years ending June 1958, has totalled over \$850 million. In addition UNO, through the agency of the United Nations Korean Reconstruction Agency (UNKRA). established in 1950, has already provided almost two billion dollars' worth of nonmilitary aid.

In spite of this apparently generous flow of funds over the past five years, much still remains to be done. South Korea is full of homeless northern refugees and, as recently as 1957, famine was widespread in the south and west. Over all hangs the shadow of Korea's dilemma; economic almost industrial and mineral resources are in the North Korean sector while the bulk of the total population is attempting to live in the over-crowded south. are hopes that, given time, American economic experts will effect a vast improvement in conditions even with the country partitioned, but much depends on the success of agricultural schemes and the quality of future harvests.

Elections

In the political field South Korea is fundamentally stable. A general election was held in 1954 under the supervision of the United Nations' Commission for Unification and Rehabilitation of Korea (UNCURK). There were 203 seats in the new Assembly and a further 100 left unfilled for North Korean representatives. Over 90% of the eight million electorate polled and President Syngman Rhee's Liberal Party gained 136 seats. The main opposition came from Independent deputies and the Democratic Nationalists.

In 1956, Presidential elections took place and Rhee was re-elected for a third term, but the Democratic Nationalist opposition Vice-Presidential candidate was also elected. This was Dr John Chang, an American-educated Roman Catholic who, besides having represented the government as Ambassador to the USA, had also served as Prime Minister of South Korea for a year before Rhee dissolved the office. Dr Chang favoured the French type of Cabinet with reduced powers for the President as against the American system in use and favoured by Dr Rhee.

The situation after 1956, was therefore, such that if Dr Rhee died or became incapacitated, the opposition Vice-President would automatically assume office. This anomalous position did not appeal to the Liberals, but they did not have the two-thirds majority in the Assembly required to amend the Constitution.

Leadership

The 1958 General Election was fought mainly on this issue and developed into a straight fight between the Liberals and Democrats. Both parties are conservative in outlook and, apart from the

Constitutional amendment. the point at issue was the question of leader-The Liberals claimed Syngman Rhee's personal prestige and authority made his continuance in office essential as a bulwark against Communism, while the Democrats demanded a change from "personal leadership" as exercised by the 83-year-old Rhee. On the question of the unification, Democrats stood for nation-wide elections under UNO auspices, whereas Liberals proposed elections in North Korea only for the vacant 100 seats.

The election returned Dr Liberal Party to power, though with a greatly reduced majority. The Democrats made important gains in the towns (particularly in Seoul) where educated opinion has swung away from the President. The problem now is to find a successor, either Liberal or Democrat, to Dr Rhee with sufficient personality and appeal to hold the votes of the rural population and thus to prevent the break-up of the Assembly into numerous small groups, a condition which would facilitate the introduction of Communism into the South Korean Parliament.

Meanwhile, the country is still at war and the South Korean army is probably one of the largest in the world. Early in 1958, south of the 38th Parallel over 700,000 South Korean and 30,000 United States troops faced 400,000 Koreans, and some 350,000 Chinese, with a further million Chinese north of the Yalu River in Manchuria. A clause in the armistice agreement forbids the arming of the forces in Korea with weapons other than those in use at the time of the armistice, but in June 1957, the United Nations Command, then in Japan and moved one month later to Seoul, informed the Military Armistice Committee that, in view of reported violations of this clause by Communist Command, it had decided to replace outmoded weapons of UNO forces in Korea by modern equipment. Since then, modern jet aircraft capable of carrying nuclear bombs have been sent from Japan, Okinawa and elsewhere, and the modernization of the ground forces is proceeding steadily with guided missiles and 280-mm cannon capable of firing atomic shells, as part of the equipment. On the other side, North Korean and Chinese forces are believed to have some 700 jet aircraft and almost 4000 rocket launchers available.

Withdrawal

In February 1958. the Chinese Command in North Korea announced their intention to withdraw all Chinese forces by the end of the year and demanded the withdrawal of all foreign troops from South Korea by specified President Rhee denounced the proposals and, in June, the USA and the fifteen Allied nations who fought in Korea rejected the Communist demand. However, the Chinese have since claimed that, by the end of August, some 100,000 of their troops had been pulled out. A Chinese withdrawal across the Yalu river, however, does little to weaken their strategic position, while a similar withdrawal by UNO forces would make possible the re-invasion of South Korea and the presentation of the fait-accompli so feared by Syngman Rhee.

Reasons put forward for the Chinese withdrawal have been many and include the internal problems caused by the quartering of almost a half-million foreign troops on North Korean soil and

their unpopularity there. However, the real reason may be in the tough, uncompromising attitude adopted by UNO in establishing an atomic base so close to the Manchurian border. The withdrawal of troops, and even the reunification of Korea on UNO terms, would be a small price to pay for depriving the United States of a base so close to the Chinese frontier.

The ultimate reunification of Korea on the lines adopted for Austria — that is, complete neutralization — is a possibility, but not in the lifetime of President Rhee, who is as bitterly anti-Communist as Chiang Kai Shek, and recent Chinese action in the Formosa area makes it doubtful if the United States would willingly withdraw from such an important strategic position without sufficient guarantees.

At the moment the situation is uncertain. Korea is still at war and represents a not-inconsiderable pawn in the political chess game; but, whatever the outcome of the present stalemate the Korean war will be remembered as the first occasion on which the United Nations functioned in the field and the memory of the successful co-operation of fifteen nations in a shooting war should, at least, act as an injection to those whose faith in NATO may be faltering.

--- R.G.E.

COMPETITION FOR AUTHORS

The Board of Review has awarded first place and the prize of £5 for the best original article published in the February issue to "Tactics As She Is Spoke", by Lieutenant-Colonel J. J. Ballard, OBE, Royal Australian Signals.

Operations in Malaya

Major R. S. Garland, MC 3 Battalion, Royal Australian Regiment

Command and Control

EACH battalion in Malaya is given an area of operations with an allotted target. The target may be one or more organized groups of Communist Terrorists (CT). Each CT group normally has a known area of operations, which is considered in the allotment of unit boundaries.

Battalion areas normally include towns, villages, rubber estates and large areas of jungle. Obviously, CTs principally live in deep jungle, but must make frequent visits to rubber estates to contact their supporters to collect supplies. Operations are therefore conducted in both rubber and jungle. This article, however, is confined to jungle operations.

At unit and formation level, control of civil population, food denial measures, curfews, joint police/military operations, etc, are effected by committees with military, police, special branch and local government representation. (At unit level these committee meetings are colloquially referred to as Morning Prayers!)

Each CT group has couriers and a number of dispersed and concealed letter boxes. CT leaders control their groups by the clumsy system of couriers leaving coded messages in relevant letter boxes.

As each group is normally under heavy military pressure, they must continually move their camp sites and live off previously buried and concealed food dumps. Needless to say, the CTs have developed a high skill at concealment of their movements, evasion of SF patrols and living off the land. They are lightly equipped and can carry up to 30 days rations when on the move in rugged jungle country. They avoid movement on tracks, ridge lines and watercourses. To protect themselves from SF ambushes, they generally move through the jungle by contouring along the sides of ridges.

In the formulation of bn/coy framework plans of operations it is continually necessary to make a detailed study of previous pattern of CT activity in the allotted unit area.

The two principal sources of information are jungle patrolling and Special Branch reports. As Special Branch, unless there has been a recent surrender, can only provide information concerning developed areas, commanders must generally rely on patrolling and ground evidence as the basis of future planning.

Consequently, companies are generally given an operational area in which they maintain continuous operations to locate and destroy CT elements. The bulk of operations are either patrolling or ambushing of selected targets, such as camps, food dumps, letter boxes, etc.

Patrolling

The principal aim of patrolling is to locate CT camps so that they may be attacked and destroyed.

It is normal for a company commander to allot a specific area to each platoon for each operation. The company commander issues orders on —

- (a) Relevant CT information.
- (b) Movement of other troops including location of aboriginal tribes and movement of civilians.
- (c) Mission.
- (d) Outline plan, including Route in and out Duration of operation Method of search (to suit company plan) Deception arrangements.
- (e) Administrative arrangements, including medical evacuation and resupply.
- (f) Command and signals arrangements, including —
 Allocation of wireless
 Pass Words
 Identification signs (coloured hat bands, etc)
 Action if wireless fails.

The platoon commander is then in a position to prepare his detailed patrol plan from a map study of the area. He will select a series of platoon base positions from the map and decide the order in which each map square will be searched.

Rule of thumb planning estimates are -

- (a) One platoon can search one map square in one day.
- (b) It takes approximately 1 hour for a platoon to move through 1000 yards of undulating jungle country. In rugged country, swamp or secondary jungle, the figure can be reduced to about 200 - 400 yards in one hour.

The success of each operation depends on locating signs of CT habitation in the area before CTs become aware of the presence of our troops. Tangible deductions can be made from—

- (a) Tracks —
 CT or aboriginal?
 how many persons?
 when made?
 direction of movement?
- (b) Water point —
 CT or aboriginal?
 when made?
 when last used?
 direction of tracks leading from
 water point?
- (c) Food dump —
 size?
 when made?
 when last used?
- (d) Camp or rest place —
 for how many?
 when made?
 when last used?
 direction of tracks leading from
 camp?
- (e) Cultivations —
 CT or aboriginal?
 size?
 contents?
 when made?
 when last used?
 direction of tracks leading from
 cultivation?

At this stage it must be apparent that this sort of patrolling requires specialized training so that correct information can be gleaned from ground evidence in the jungle. Accordingly, a large percentage of training time is devoted to the techniques of jungle tracking. Additional aids are—

- (a) All officers and NCOs should attend a tracking course at the FARELF Training Centre, Johore.
- (b) Each platoon has 2-3 Sarawak Rangers attached as an integral part of the platoon. They are natural trackers and are also given training at the FARELF Training Centre.
- (c) Each battalion forms a Battalion Tracking Team, which includes dogs and Rangers, and it is trained to a high standard. It is held in reserve until fresh CT

tracks are discovered. It is guided to the CT tracks by the relevant platoon and a follow up operation is launched.

Platoon patrolling tactics are generally based on the fan patrol system. From the platoon base position or a selected RV, about six patrols, each of 3 men, are sent out to search on selected diverging bearings about 10 degrees apart. Obviously, each patrol must be briefed according to ground, and the area to be searched must be related to natural boundaries. Each patrol moves on its selected bearing, or as briefed, for a given distance. On encountering CT ground evidence the patrol will collect all relevant information and return to base. This will be relayed by wireless immediately to Company and Battalion Headquarters.

Subsequent action depends on successive appreciations by the platoon commander and higher commanders effected. As very few targets are available at this stage of the Emergency, maximum troops will be employed to take advantage of any likely CT target presented. Tracks normally lead to or from a camp, therefore plans must be formulated quickly to close in on the CT camp as soon as its location can be established. To achieve this manœuvre in jungle, a high standard of map reading and wireless communications is essential.

The fan patrol technique has proved to be an effective system for searching all types of jungle. Patrolling must be methodical, detailed and limited to the capacity of the platoon in the type of terrain encountered.

The best times for patrolling are early morning and late in the afternoon, as most CT camp noises are made during these periods. Patrols must move slowly and listen at frequent intervals. Each patrol must possess map, compass and protractor to check on navigation as the patrol progresses.

When in base, a platoon, should establish small listening posts well out

from the base position. They can remain out overnight to listen for any noise from a possible CT camp in the area.

Long overnight patrols from the platoon base are not favoured as the platoon is committed to a two-day wait and cannot react quickly if fresh CT ground evidence is found.

When employing a company or more, searching on a wide front, each platoon should be given a frontage of about 2000 yards. All boundaries must be based on natural features with some troops moving on the boundaries. The essential factors in exploitation of opportunities in this type of operation are again good map reading and good communications.

Communications

Each platoon carries an Australian 510 W/S and this set has produced an outstanding performance in Malaya. 62 W/S are established at battalion and company HQs. Most battalions operate on separate battalion and company command nets. This is very desirable, if the frequency allocation permits it.

Company HQs must be located at a good wireless station that will give wireless coverage over the company area. The essential for a good wireless station is high ground.

Wireless communications are of such a high standard, that although 3 RAR has operated in an area of some 300 square miles, it is normal for daily wireless contact to be established with every platoon in the jungle.

Platoon operators are trained in morse but may use voice or morse, according to the operational situation and/or local interference on the air. Each operator carries crystals for battalion HQ and other company frequencies. If he is unable to establish communication, he will try to get through on another frequency. As battalion and company HQs maintain continuous listening watch, quick relay can be effected.

When platoons are moving, the company control set must be static, well sited, and on listening watch.

Some units have experimented with 88 and 31 W/S but communications can seldom be established with VHF unless the stations are intervisible. HF sets seem to offer more consistent communications in jungle than VHF sets. However, if a good relay or repeater station is established on high ground overlooking the area of operations, 10 and 26 sets will obviously provide excellent communications.

Map references are encoded in griddle in case of interception by CTs or CT supporters.

Telephones are not used except between HQs over the local PMG circuits. They are not secure.

When on the move, platoons halt and come on the air in the middle of the day and in the late afternoon.

When operating from a platoon base, the wireless remains in base and the set comes on the air every hour during daylight hours.

Equipment

Current issue equipment in Malaya is serviceable and can be adapted to meet jungle requirements. However, there is still plenty of scope to develop more suitable tropical equipment.

A typical load carried by a rifleman is —

FN rifle and 4 magazines
Socks — spare pair
Sweater (optional)
Hockey boots
Bush jacket } (spare set —
Trousers } optional)
One pair light shorts
Bedding roll —

- (a) Parachute silk in lieu of blanket.
- (b) Sheet of plastic in lieu of poncho.

(c) Stretcher top hammock or Lilo (optional).

Seven days rations (24-hr packs) (includes Paludrine)

Toilet gear Torch

Mosquito repellent

Anti-mite repellent Mess gear

Cooking stove and hexamine tablets Reading matter (optional)

Clasp knife

Cigarette lighter

Equipment worn -

Web belt

Water bottles — two — on rear of belt

Basic pouches — two on rear of belt 1944 pattern haversack or Burgon

Machete (local Golok preferred)

Clothes worn ---

Jungle boots (canvas upper with rubber sole)

Trousers

Bush jacket

Jungle hat (colloguially referred to as "Hats, Ridiculous")

Some general comments that may be of interest are —

- (a) The jungle boot is popular but its life is generally limited to about two weeks in action. It is light and dries quickly.
- (b) Woollen socks take a long time to dry and they also shrink. Terylene socks might be the answer.
- (c) Jungle trousers meet the requirement. However, they take a long time to dry and the buckles on the waist irritate under the web belt. It is probably better to limit the number of pockets in favour of quick drying properties.
- (d) The bush jacket is general popular but a shirt design is preferable.
- (e) The jungle hat meets the requirement.
- (f) Web belt should be a one piece article.

- (g) Basic pouches should be designed so that they can be worn on the rear of the belt.
- (h) Water bottle could be larger but 1944 pattern is popular.
- (j) The design of the 1944 pattern haversack is good but it is not large enough for the requirement. On the other hand, the Burgon pack, although larger, is not the complete answer as it is uncomfortable to wear. A larger haversack, waterproofed, with side pouches, and attachments for a bedding roll seems to be the answer. A web enclosure for the bedding roll would protect it from jungle thorns.
- (k) The blanket and poncho combination is unpopular. It is far too heavy and bulky. Suggestions are—
 - Sheet of plasticised nylon, with tent flaps at both sides and appropriate eyelets, for erection as a tent.
 - (ii) Nylon sleeping bag.
 - (iii) Nylon stretcher top with inflatable pillow.

The basic requirements of all tropical clothing and equipment are —

Lightness

Compactness

Must dry quickly

Mosquito nets, although often desirable, cannot be carried because of their weight and bulk.

Rations

The current British issue of 24 hour ration packs, of varied contents, is satisfactory. However, some improvements are desirable. The weight of a 24 hours ration pack is $3\frac{1}{2}$ lb, making a $24\frac{1}{2}$ lb load of food for seven days rations. Obviously, the soldier scales this ration down according to his own tastes and the room in his haversack.

It is considered that mobility in jungle is in direct proportion to the weight carried by the soldier and the number of days rations he can carry. CTs can carry up to 30 days rations, our troops normally only carry seven days rations. Obviously, because of rice, Asian troops can achieve greater mobility. However, it is considered that our mobility can be considerably improved if the weight and bulk of rations, weapons and equipment is reduced to the minimum.

It is suggested that future ration development be based on —

- (a) Development of 24-hour ration packs of varied contents.
- (b) Development of a ten-day ration pack for one man which includes vitamin tablets, paludrine, mosquito repellent, toothbrush, soap, razor blades, toothpaste, matches, tobacco, cigarette papers, rifle oil and toilet paper. (Allup weight NOT to exceed 20 lb).

To reduce the weight and bulk of rations it is suggested that rations must be based on —

- (a) Rice, spaghetti, dehydrated vegetables, concentrated meat, soup cubes, nescafe, saccharine, oats, biscuits, milk powder, chocolate, cheese, vegemite, raisins, etc.
- (b) The number of containers should be reduced to a minimum. It is not necessary to wrap into separate meals, For example, in a ten-day ration pack, rice should be in one plastic container. The soldier must be trained to use his rations intelligently (one jungle operation ensures this!).
- (c) All containers must be square or rectangular in shape to facilitate stowage in the haversack.

Weapons

Standard weapons used are -

FN rifle

Owen SMG (or Sten for British unit)

Mark V rifles Bren LMG Remington 12-gauge, repeating, shotguns 36 grenades

The FN rifle is an excellent weapon and is increasing in popularity.

Owen SMG has produced more kills in Malaya than any other weapon. It is a good weapon for forward scouts and for jungle ambushes.

Mark V rifle was the basic weapon earlier in the Emergency but it was discarded in favour of the FN rifle.

Bren LMG is still considered to be the fire power of the section and is always carried. The CTs fear the LMG more than any other weapon.

Shotguns are very popular and are very efficient at close quarters. It is second to the Owen in number of kills. It is an ideal weapon for forward scouts and for ambushes.

Grenades are sometimes useful — particularly in a night action. However, for routine jungle patrolling, as weight carried is important, it is probably better not to carry them.

Night ambushes, employing night lighting equipment, have been developed to a high standard. Essentials are immediate light and well defined arcs of fire. Ground marker flares, electrically ignited, are supplementary to torch attachments fitted and zeroed to the weapon.

All jungle shooting must be the aimed snap from the shoulder. Hip shooting has proved abortive and wasteful of opportunities.

In range practices, emphasis is placed on two second snap exposures from standing, walking, kneeling and lying positions.

To ensure accurate shooting, zeroing and range practices should be conducted at least twice monthly. An abortive contact can generally be attributed to bad shooting. However, in ambush, concealment and fire control are of vital importance.

Platoon Drills

A series of drills are laid down to cover —

- (a) Basing up.
- (b) Immediate ambush of approaching CTs.
- (c) Immediate assault after a head-on contact.
- (d) Immediate assault on a CT camp.
- (e) Counter ambush.
- (f) MT ambush.

The drills are very similar to those taught at the Jungle Training Centre, Canungra. Full details can be found in the publication "Conduct of Anti-Terrorist Operations in Malaya".

The drills have proved invaluable and platoons must rehearse them before each operation.

CTs claim that our troops are too noisy in base and there is generally too much chopping, talking and noise by wireless operators. Troops must be trained to sleep on the ground or to erect hammocks without noise. Saws are quieter than machetes. Morse is quieter than voice.

Base locations must be moved after 2/3 days, to limit the length of patrols and to aid surprise.

Success in patrolling always hinges on good scouting. Scouts must be highly trained in scouting and tracking techniques.

It generally takes at least a week for troops to settle down to jungle routine and to develop their jungle or "animal" instincts. However, on the other hand, rest, sport and retraining are monthly requirements to keep troops at their peak for sustained operations. Therefore, platoon jungle operations in this theatre should be of a duration of not less than two weeks and not more than four weeks.

Resupply

To maintain operations for more than seven days, resupply is necessary. In addition to rations, the following items must be included:—

Replacement clothing
Replacement boots
Wireless batteries
Medical supplies
Hexamine
Mail
Replacement socks
Mosquito and mite repellent
Rifle oil and flannelette
Rum (excellent for morale)
NAAFI stores as requested.

The following agencies for jungle resupply exist:—

Air drop (Valetta or Auster) Helicopter (Scarce at present) Aborigine porter line.

Air or helicopter resupply is very efficient but indicates the location of our troops to the CTs. The most secure method, and generally used by 3 RAR, is the aborigine porter line — a familiar sight to all World War 2 jungle veterans. A porter load is 40 lb, which means one ten-day ration pack. Due allowance must be made for rations required by the porter line. In deep jungle, porter lines can operate from established bases which are resupplied by air.

Each company must prepare the loads for porterage. Burgon packs and "A" frames are pre-packed under the supervision of the CQMS.

After resupply, a platoon has unserviceable clothing, boots and surplus rations of unpalatable varieties. These items are best backloaded with the resupply line to avoid them falling into CT hands. (The CTs will dig up old refuse pits, etc, to obtain food and clothing).

Medical

Personal hygiene and sanitation must be rigidly enforced by officers and by the individual if a high standard of health is to be maintained. The warm, humid climate assists the spread of disease and infection. The answer is to maintain active measures against infection. Such measures are—

Water chlorination
Daily paludrine
Daily bathing with plenty of soap
Disinfection of all cuts and scratches.
Fly preventive measures
Anti-mite repellent on clothing
Care of the feet — washing and
powdering between the toes
Sleep dry and off the ground whenever possible
Sun bathing when convenient
Regular exercise (never a problem
for a rifleman)
Vitamin tablets

Experience shows that on arrival in Malaya individual resistance to tropical infections in very low and a high sickness rate results. However, with acclimatization and good discipline, sustained operations can be maintained and the sickness rate can be kept within reasonable limits.

Conclusion

There have been many lessons learned in Malaya that can be adapted to future tropical warfare techniques. Also, the campaign has been an ideal training ground for junior leaders, commanders and staff officers.

It is a rugged jungle country, perhaps not as formidable as New Guinea, but it poses all the jungle problems that are likely to be encountered anywhere else. The jungle varies from dense secondary growth and swamp to endless tracts of mountainous rain forest. The climate varies from hot, humid days at sea level to intense cold at high altitudes.

To live, move and fight in this country requires an infantryman to be at his rugged best and he deserves the best support and equipment that the other arms and services can give him.

The Importance of Military Geography

STAFF SERGEANT P. G. GITTINS 20 National Service Training Battalion

War is above all things a geographic phenomenon. It is tied to the earth; it derives its material substance from it, and moves purposely over it, seeking out those positions which are favourable to one side, unfavourable to the other.

- E. Banse.

No nation can hope to live, much less to prosper, unless it can think in geographical terms.

- G. T. Renner.

As long as the possibility of war in the world remains, only a nation uncaring for its heritage and future will neglect to prepare for war. Australia must, therefore, in time of peace, prepare for war. An important part of her preparation must consist in studying scientifically the theory as well as the art of warfare.

Warfare today has become an exacting science, with the detailed study of ranging from logistics, economics, physics and nuclear warfare, to military geography. Wars have become global in extent - they are too big for any one person to envisage and direct, and too serious to be met by amateur defensive strategy. World space has shrunk to such an extent that no nation can count on a policy of Modern weapons isolated neutrality. and methods of waging war are now so swift, and have such great destructive power, that no nation can afford to be

caught unprepared, with inadequate defensive measures. If a nation wants to survive, it must have its defences in order, its offensive policy previously prepared, its manpower control organization ready for instant mobilization, and its general staff must have an understanding of all possible enemy strategies.

To accomplish this understanding of enemy strategy, we must produce a new type of strategist — one who is skilled in both military sciences and geography.

Major Malcolm Wheeler-Nicholson writes cogently, "Wars are lost by losing battles. Battles are lost by poor planning. Poor planning is due to an amateur rather than a professional military viewpoint." A strategy is a plan for war, and the planning or framing of such a plan is dependent upon four major factors —

(a) Courageous imagination and intelligent anticipation.

- (b) Correct timing.
- (c) Accurate politico-economic information, and last, but not the least important;
- (d) The principles of geography.

War is not merely a sequence of battles—it is a great pattern, the designing of which involves political, economic, and geographic processes.

The Importance of Thinking Geographically

The inability to think geographically can appreciably cripple our diplomatic relations, hinder our foreign trade, blunt preparedness programme, interfere with our prosecution of war. Unless remedied, this same lack is equally certain to hamper our attempts to assist in solving world problems and to participate in world affairs. This is true because issues of power geography are pressing in upon Australia from every direction, demanding prompt and intelligent solutions, eg, the problem of Dutch New Guinea. It is becoming increasingly apparent that such issues in the world today are not being decided by the merit of historical arguments over the past years, but rather the whole moral structure if international relations seems to be shifting rapidly from a historical to a geographical basis.

relationships -Today, human economic. social and political — are very different from what they were some hundred years ago. Probably eighty per cent of all the problems which we or our representatives are asked to decide matters concerning the ownership, and taxation of resources; or are issues dealing with specific places and regions; or are questions of policy affecting our relations with countries or people. Geography, the strategy of men, lands, and resources, provides a very important basis for understanding most of these problems. No amount of general political knowledge or civic experience can take the place of it.

Without specific and appropriate geographic education, the military strategist will often arrive at either inadequate or wrong answers to national and world problems.

Instead of having studied geography as a preparation for soldier-citizenship, most of us today know very little more geography than we did in our school days. We live in an exciting age, wherein events are taking place all over the planet, events that influence our welfare and destiny in a most intimate manner, but we seldom pay any attention to the geography of those events. We tend to concentrate on the events themselves, and ignore the nature of the places where these events occur and the conditions that produce them. Hence, to most of us, the fast moving happenings of the modern world are only parts of a confusing maelstrom of human behaviour, confusing because viewed entirely apart from any understanding of the local environment that explains them and makes them natural and logical. It is like listening to a drama being played in the dark.

As an example of this, we need only cast our minds back to the years immediately prior to the World War II. We had been warned, both by our military intelligence system and the "The prophetic work. Valour Ignorance" by Homer Lea, that Japan intended to conquer and rule all the territories in the Pacific. The lead-up events and diplomatic by-play obvious, but as far as America and Australia were concerned, these events were occurring in distant and unfamiliar places. Moreover, many Americans and Australians, including some of their leaders, were unable to view against the immediate backgrounds which would have put them in their true perspective. The events were unpleasant, and because they did not seem to be parts of any large understandable pattern, we were bewildered and misled by them. Most Americans and Australians simply reacted into a policy of isolationism,

which is only a polite name for geographic ignorance and provincialism. It is one of the results of failing to realize that the world is a geographical world.

The Geographic World Defined

What is meant by the statement that this is a geographical world? In the first place it means that mankind does not live to itself, but is intimately integrated with the environing world of nature; that man everywhere derives sustenance and support by interacting with nature; that the various parts of the earth are different, and hence that man has varied his interactions with nature and his adjustments to her. In the second place it means that we Australians are not the centre of the world, with other people located in distant and remote spots. Since the earth is a sphere and air traffic can move over it without hindrance, geographic location in this world is purely a relative matter - our world has по absolute OΓ periphery, nor has it any norm for human relationship to nature.

Current events are largely meaningless unless interpreted geographically, history is mostly nonsense unless it is located and interpreted at every step by geography.

Geography — Geopolitics — Strategy

Soon after the defeat of the Wermacht in 1918, the Germans set out to evolve an enlarged, improved, and тоге comprehensive theory of war. effort, integrating the work of many geographers in Munich and elsewhere under the direction of Professor Haushofer, a Major-General in German Army, was centred in an institute political geography in Munich. known as the Institute for Geopolitics. Some one thousand of the best minds in Germany work were at programme.

Prior to the rise of the Nazis, the German geographers had already developed plans for meeting any wars that might be waged against them. In addition they had evolved strategies for European domination, and even for world conquest! Such strategies were, in the main, based upon plans for defeating British sea power through the use of land and air power.

When the Nazis took control of Germany, they adopted these plans, but made some minor changes. What is not commonly known is that the German plan for world war is a product of the thinking of a renowned British Geographer, Sir Halford Mackinder. The German scientists seized upon the basic ideas and developed them into war strategy, leaving their tactical implementation to the German General Staff.

The Italians spent little time studying military geography, but instead were content to derive their strategy from their German allies. To a certain extent the Japanese also borrowed their strategy from the Germans, but Komaki and other geopoliticians of Japan did add many distinctly Japanese features. Even in Russia. Mikhailov and other Soviet geographers began a remarkable of economic, development cultural. political and military geography.

Great Britain and the USA, however, cultivated this field almost not at all. Prior to 1941, the knowledge of their geographers was put to only negligible use by the military, naval, and diplomatic arms of the government. At the very time that the German Institute of Political Geography was laying plans to wrest world control from the loose combination of Great Britain and the USA, little or no geography was taught at our Military Colleges.

It was not until 1940 that the geographic pattern of the Axis war strategy became apparent to our General Staff. Even then few knew enough geography to understand the new strategies, or to comprehend the total pattern of the war. They could see and comprehend the Axis military tactics

readily enough, but they did not grasp the over-all pattern or the strategy of even the individual campaigns. In the future we will do well to see that every officer knows the geography of strategy in general, and the geography of likely campaigns especially.

The Geographic Principles of War Strategy

Military geography is undobtedly one of the most complicated and voluminous fields of human knowledge. Almost countless number of factors enter into the formulation of military or naval strategy. The process of dealing with this great array of factors, however, may be resolved into some eight fairly simple geographic principles—

- (1) Deference to the highest instrument of striking power.
- (2) Constant movement towards the main objective.
- (3) Economy of forces, yet achieving maximum effect.
- (4) Utilization of the natural arrangements of land and water bodies.
- (5) Regard for regional concentrations of resources.
- (6) Operating with the regimen of natural forces and processes.
- (7) The principle of deference to regional differences in psychological and cultural factors of peoples.

(8) The principle of acquiesence to land surface configurations.

To quote again from Major Malcolm "The Wheeler-Nicholson. successful strategist must know and understand thoroughly the principles of the design of To give his theories reality and practical substance, he must also have a clear grasp of the operational principles of war and an understanding of those tactical principles and procedures which underlie good generalship. In addition must possess a great fund geographic fact and theory: in short he must be able to reason geographically."

Conclusion

When Alexander the Great made plans for conquering the world he had in his mind a definite picture of that world its configuration, barriers, corridors of access, populations and resources. campaigns were conceived within the framework of this picture and formulated in terms of available manpower, tactics, manpower logistics. supplies. and Geography has been equally present in the thinking of Julius Cæsar, Napoleon, George Washington, Montgomery, or any other strategist.

If the last war has taught us any lesson at all, it is that war strategy is essentially geographic, and can, therefore, be best made by men trained to think geographically, and after such men have created strategy, it is up to the military mind to modify, revise, and implement geographic concepts into war operations.

FIT to FIGHT

Physical Training for the Modern Army

MAJOR D. J. CURTIS

Army Physical Training Corps

THE need to prepare soldiers physically for war has always been recognized and is no less important now than it was in the days of the sword and long-bow." Perhaps advance in the destructiveness of weapons has increased the need for the soldier to be fit. Certainly in any nuclear war every soldier will have to endure extreme mental and physical strain. Forces will have to be widely dispersed and men may have to march long distances to the weapons area carrying They may then have to equipment. fight for long periods without rest.

Tactically, the mobility of a formation depends ultimately on the strength, agility and endurance of the individual soldier.

Having appreciated the importance of physical fitness in preparing the soldier for the great demands that will be made upon him in battle, a physical training programme must be decided upon. The ultimate aim of PT in the Army is to make the soldier fit to fight and this must constantly be kept in mind when deciding upon a programme of training.

Most civilian systems of fitness training are designed to exercise children or train potential athletics and games players and can not be applied to Army training. The other Services, too, have their own systems of training but the

fitness requirements are quite different. It follows, then, that the PT programme must be based directly on Army requirements. It should be an integral part of Army training and needs to be carefully planned so that progression to battle fitness is achieved and the trained soldier's fitness maintained.

PT Programme

The programme must, of course, start with the newly joined recruit who, we know, has been medically examined and is organically sound. He may not have taken a great deal of exercise since leaving school and has probably developed one or two postural faults due to his civilian occupation. However, he is good material to work on and the immediate aim is to restore his basic fitness — give him a full range of movement in the joints, and straighten out any minor deformities that do not require medical attention.

The natural body movements of walking, running, jumping and climbing must be developed, and circulorespiratory fitness improved.

We do not require unsightly, bulging muscles, but must aim at —

All-round physical fitness.

Teaching purposeful military skills.

Developing mental alertness, character and leadership.

If facilities exist non-swimmers should be taught to swim at the earliest opportunity.

All-round physical fitness can be achieved by the use of a 40-minute PT table performed at least four times a week, plus one afternoon of recreational training. The PT table must include —

- (a) Mobility exercises To give a full range of movements to all the joints; to reduce stiffness and improve co-ordination; to correct postural faults; and to warm up for the more vigorous exercises.
- (b) Strength—Exercises to strengthen all the main muscle groups of the body with particular emphasis on the shoulder girdle and abdominal muscles.
- (c) Group activities Exercises ..in jumping, vaulting, climbing, balancing, groundwork and correct running technique. These exercises teach the basic skills of surmounting obstacles and help to develop speed, agility, bodycontrol, courage and determina-They also create a sense of achievement and give instructor an opportunity to bring out leaders for each group.
- (d) Carriage A short period when the instructor checks posture and the student cools down ready for the next period of unit training.

Progression to battle fitness would be achieved by using six similar tables each of increasing difficulty. More purposeful activities such as rifle, shell and log exercises, lifting and carrying, and obstacle work would be introduced from the fourth table.

The rate of progression would vary slightly with each class, but normally two weeks should be spent on each table. PT Tests, based on the exercises in the tables, could be used to check the rate of progression. This should be done fairly early in the morning so that, if necessary men who are unable to keep

up with their class are seen by the Medical Officer. Further tests, later in training, would determine whether the recruit is qualified physically to join his service unit.

Games

Full use should be made of the recreational training afternoon to teach games. Too often only the 'star' players take part and the others are left to fend for themselves. Games should be organized at platoon, etc, level so that the less proficient performers are given a chance to play competitively. Games cannot take the place of a planned progressive PT programme in achieving all-round physical fitness. They do, however, develop the qualities of selfreliance and quick reaction to an emergency and help to promote comradeship and team spirit.

It may be necessary to 'stagger' the recreational training periods throughout the week in order to take full advantage of available grounds and equipment.

Battle PT

Having completed his recruit training the soldier is fit in every way to join his unit. It is necessary now to ensure that he maintains battle phycisal fitness and further develops his self-confidence, leadership, will-power and endurance. He must also be taught the application of purposeful physical skills to training for war.

In many ways the unit training programme will help to achieve these aims but there is still a need for planned physical training.

The scope of this training must allow for the various types of units, medical categories and age groups. The syllabus will range from the 'keep fit' and recreational type of exercise for sedentary workers, low medical category men and those over 40 years of age, to the strenuous, toughening exercises necessary for the advanced training of special combat troops.

This 'battle' PT should be less formal than that used for recruits. Normally, there will be no need for corrective and strength building exercises, but all the exercises must have some military value.

The table should, if possible, cover a 40-minute period, divided as follows:—

- (a) Introductory exercises (in game form)
 To limber and warm up and to develop both physical and mental alertness. Individual and team competitions should be included (7 minutes).
- (b) Group Activities Exercises and activities based on the type of unit and its role in war. (30 minutes).
- (c) Carriage Limbering down, correction of posture and return to more formal control (3 minutes).

If it is not possible to devote 40 minutes to the PT period, the introductory and carriage parts should be given their full time and the balance devoted to group activities.

The activities might include -

- (a) Agility exercises, running, jumping, groundwork, vaulting.
- (b) Heaving, climbing, scaling, balancing.
- (c) Log, medicine ball, and stick exercises.
- (d) Pulling, pushing and manhandling of heavy equipment.
- (e) Lifting and carrying.
- (f) Rifle and shell exercises.
- (g) Boxing, wrestling, close combat.
- (h) Endurance training, (route marching, forced marching, hill walking, endurance running).
- (i) Obstacle training.
- (k) Battle swimming.

It is not enough to just put troops through these exercises and activities. They should be taught the correct techniques of climbing, endurance running, lifting and carrying, etc, and shown how to achieve economy of effort and concentration of force.

The choice of activities would depend on the immediate ultimate aims of unit training, so that the PT lesson becomes a part of the overall training of the Progression could be ensured by unit. the achievement of targets set by the Self-effort could instructor. encouraged and interest maintained by the introduction of team and individual Progression in physical competitions. fitness must keep pace with unit training. and it is, therefore, necessary for the CO to ensure that PT lessons are regularly carried out.

Two forty-minute periods each week is the minimum time necessary to maintain a good standard of fitness in any unit. More periods would be necessary for units preparing for brigade, divisional, etc, exercises and for active service.

Special attention must be given to trained soldiers who have for various reasons become unfit. (Long leave, illness, etc). It may be necessary to take these men through the last three recruit tables before carrying on with battle physical training.

The value of games in rehabilitating convalescents and men suffering from battle fatigue can not be overstated.

Annual physical tests based on battle activities designed to indicate the soldier's agility, strength and endurance would give the CO a clear picture of the physical efficiency of his unit. Such tests would also give the instructor a guide to further training and would provide a measure of achievement for the individual.

The tests could be varied to suit unit requirements of physical fitness.

In both recruit and trained soldiers the PT instructor should maintain a close liaison with the medical officer. He should seek advice about soldiers who are unable to keep up with their squad and particularly those who fall out or suffer extreme exhaustion during endurance training and tests.

If possible, instructors should keep a weekly record of recruits showing height, weight and chest measurement and noting and physical peculiarity. This would be of some assistance to medical officers when deciding treatment and further training for physically backward recruits.

Whenever possible physical training should be performed outdoors. It may be necessary, for proper control, to work inside a gymnasium during the early part of recruit training, but classes should be taken out-doors as early as possible.

Battle physical training periods should always be taken out doors irrespective

of the weather. Except in extremes of climate, the men should be stripped to the waist. During battle PT, however, clothing and equipment may be required as a progression and when practising and performing tests.

Every opportunity should be taken to practice battle swimming in clothing and finally with arms and equipment.

Finally, if such a programme of physical training covering recruits and all categories of trained soldiers is to succeed there must be—

- (a) Full support from senior staff officers and officers commanding regiments and battalions.
- (b) A cadre of fully qualified specialist instructors.
- (c) A general appreciation of the principles of physical training and its value in preparing the soldier for war.

I remembered that Adam Smith and Gibbon had told us the dark ages were gone, never more to return, that modern Europe was in no danger of the fate which had befallen the Roman Empire. It had not occurred to them that civilization itself might engender the barbarians who should destroy it. It had not occurred to them that in the very heart of great capitals, in the neighbourhood of splendid places, and churches, and libraries, and museums, vice and ignorance might produce a race of Huns fiercer than those who marched under Attila, and of Vandals more bent on destruction than those who followed Genseric.

Lord Macaulay, Speech on Re-election to Parliament, 1852.

LIMITED WAR

Its Prospects and Possibilities

Reprinted from Army Information Digest, USA, June 1958

"..... Political aims are the end and war is the means, and the means can never be conceived without the end."

- Clausewitz.

IT is generally accepted that with the power of modern weapons, a war between the United States and the Soviet Union, if waged to its utmost limits, would bring down disaster upon mankind. The growth of nuclear stockpiles, and the development of means for delivering them, have produced a situation in which the deliberate initiation of unlimited hostilities represents an unacceptable course of action for both sides in the prevailing East-West struggle.

However, this has in no way mitigated the character of the conflict. On the contrary, the Soviets give every indication of utilizing their nuclear striking power as a screen behind which to intensify the cold war. There is every reason to expect that the Communists will continue to seek opportunities for expansion.

In this protracted struggle, the take-over by subversion and coup d'etat will probably remain the preferred tactic. Failing this, the Communists will not hesitate to employ military power in the attainment of any objective which they consider significant in advancing their objective of world domination.

With no abatement of the cold war in prospect, and because of the disastrous consequences of an unlimited war, the West is faced with a fateful problem. How can Communist expansion, whether

by military or non-military means, be thwarted without incurring unacceptable risks?

In many ways, the problem of forestalling Communist expansion by so-called peaceful political and economic penetration is the most difficult challenge facing the Free World. It will require a high degree of ingenuity and skill to outmatch the Soviets in this contest. Fortunately, this is an area where the West possesses unrivalled spiritual and material resources. The principal need is a recognition of the character of the challenge and a determination to beat the Communists at their own game.

The threat of Communist expansion by non-military means is not unrelated to the Military threat. The Communist take-over in much of Eastern Europe was made possible and is preserved only by the presence of military power. Similarly, a Western strategy to counter further Communist penetration must be reinforced by military power which neutralizes the Soviet Bloc military threat. Western influence among many of the uncommitted nations, for example, is not likely to prosper unless there is also security against Communist military encroachment.

The relationship between military and non-military programmes becomes even more meaningful in terms in long-term objectives. The containment of Communist expansion is important, but it is not a sufficient strategy. Our ultimate objective is a cessation in the cold war itself.

The minimum precondition for inducing the Soviet *Bloc* nations to adandon the goal of world conquest is the denial of further opportunity for military expansion. With a military equilibrium, there can be some hope that evolutionary changes will occur in the *Bloc* regimes so that they will no longer constitute a threat to free nations.

In the light of these general considerations, the miltiary problem resolves itself down into one fundamental question: How can military power be used as a rational and effective instrument for supporting national policy objectives?

Only limited war can serve a coherent purpose. An all-out war would be a political disaster—a senseless thing without an object.

Because war is a political act, and must serve a political purpose, the controlling principle in war is the principle of the objective. It is not possible to conceive of any rational purpose that would be served by an unrestricted nuclear War. The most basic United States objective, therefore, is to avert such a disaster.

At the same time, the United States recognizes that its own security is bound up with the security of free peoples everywhere. Even the United States, with all its strengths, could not survive a state of siege in a Communist dominated world. Accordingly, this nation has rejected isolationism in favour of a forward strategy.

So that there should be no misunderstanding of United States intentions, a series of multilateral and bilateral treaties have been negotiated as a sort of a diplomatic warning system. And to make the deterrent effect of this warning system doubly meaningful, the United States has deployed its own forces in support of these treaty arrangements, and has strengthened allied forces through various military assistance programmes.

The purpose of these regional security arrangements can be stated very simply. The object is to deter aggression by making it unmistakably clear to any would-be aggressor that aggression will not succeed. The free nations of the world are determined that they will not be picked off one-by-one. Thus, the treaties provide that an attack against one will be considered either an attack against all, or a threat to the security of all. And lest there be any room for ambiguous interpretation in certain areas. these treaty arrangements have been further reinforced by the Taiwan Resolution and the American Doctrine.

These regional security arrangements constitute, in effect, a political deterrent. The Free World has witnessed how, even at a time when the United States had a near atomic monopoly, the Communists did not hesitate to employ their military resources in areas which did not involve a direct challenge to the United States. The Communists miscalculated with respect to our political intentions in the case of Korea. The system of free world alliances is intended to remove this cause for miscalculation.

Now the Free World is faced with a new danger — a new source of possible miscalculation. The Soviets may conclude that they can get away with limited adventures because the West will not risk intervention for fear of precipitating allout hostilities. Communist propaganda has played heavily on this theme during the past two years, insisting that any local war would inevitably expand. Yet concurrently, the Soviets have strengthened their own capabilities for limited war.

The obviously calculated purpose of this propaganda is to blackmail the Free World into inaction. The effects of this propaganda are reinforced to the degree that the Free World is unprepared to meet a limited challenge with other than an all-out response. The deterrent to the all-out war is not likely to deter limited or disguised aggression because the Soviets are likely to believe that their own nuclear delivery capabilities will deter the West from an all-out response to anything less than a direct challenge. The Soviets may "miscalculate" that they can get away with it.

The danger is that if the only courses of military action open to the West would involve grave risk of expanding hostilities, then the Soviet calculation might prove correct. If the Soviets calculate correctly, the West has been blackmailed into inaction; if the Soviets miscalculate the eWst is faced with the all-out war it sought to deter.

The only way out of this dilemma—for the alternatives are unacceptable—is to insure that the Free World can muster the forces necessary to defeat aggression wherever it may occur without resort to courses of action which would be likely to bring about all-out war. In other words, the West must be able to deal effectively with limited challenges, employing limited means. The balance of forces required to defeat limited aggression are significantly different in many respects from the forces which are needed to deter or wage all-out war.

Types of Warfare

Modern war may be visualized as a continuum, ranging in violence from a low extreme of guerrilla warfare at one end to the opposite extreme of all-out or unrestricted warfare at the other. However, the distinctive thing about this continuum is that, at the extreme of violence, the continuum tends to break off, with all-out war being not merely different in degree but different in kind from other warfare.

The forces required to wage an unlimited war and the priority of tasks will be significantly different from forces and tasks for limited warfare. Thus, the distinction between all-out or total war and warfare which is less than total provides a useful and meaningful framework for planning.

Warfare which is less than total is commonly characterized as limited war. While this term is subject to possible misinterpretation, it has become generally accepted as descriptive of any conflict which is not unlimited from the point of view of the United States.

Limited wars have limited objectives. In a contest between unmatched powers, however, a war which may appear as limited for one side may very well be an unlimited conflict for the other. An unlimited war, on the other hand, visualizes the complete overthrow of the enemy. In modern war, this would normally require the destruction of the government of the opposing nation.

Probably the most basic truth about war in modern times is that limited war has been the norm, whereas total war has been the aberration. Considering the disastrous character of World Wars I and II, it is essential to ask: Is there some inexorable logic in human events which makes it inevitable that henceforth any major war will be a total war? On the answer to this question may well rest the fate of civilization.

Clausewitz considered that limited wars are likely under two sets of circumstances. The first case is where the political tensions or aims are small. The second case is where the military means are such that the overthrow of the enemy either cannot be visualized at all or can only be approached indirectly.

In the past, whenever the political objective was not the overthrow of the nation, wars tended to be limited. Also, whenever the military means were insufficient to accomplish the overthrow of the enemy, wars have been limited.

The ultimate political aim of the USSR is essentially unlimited. The Soviets contemplate the progressive and complete subordination of independent nations to a Communist hegemony. The free nations, on their part, are equally determined to secure their liberty. These disparate, essentially unlimited objectives

give rise to great political tensions. In this situation any war may assume totality.

Balancing this tendency is the other case posited by Clausewitz wherein limited war is likely because the military means are such that the overthrow of the enemy cannot be visualized at all. While this dictum was premised on the insufficiency of the means, it is no less valid when the means may be sufficient to overthrow the enemy but would also produce universal disaster. A victory robbed of its meaning is no victory at all.

Thus, the Soviets are forced to seek the accomplishment of their objective by indirect means. They realize that the United States cannot be defeated directly. This objective must be approached indirectly, by sapping the energy of the Free World, and by neutralizing the United States. By this calculation, the prize plum will be ripe for picking once the balance of power has swung in favour of the Soviets so that further resistance would be futile. This is what the Soviets mean when they talk about competitive This is their preferred coexistence. battleground.

By the same logic, the United States appreciates that its own security is dependent upon preventing such a swing in the world balance of power so that the issue in any war would pose the issue of national survival. This Nation also recognizes that it must live with the threat a long time. It is not possible to conceive of destroying the source of the threat militarily without at the same time destroying the values and institutions we are striving to secure.

These, then, are some of the fundamental reasons why limited war is the most likely threat so long as both United States and the USSR are powerfully restrained from the deliberate initiation of all-out war.

While the all-out assault against the United States is certainly the greatest danger, it is the piecemeal loss of the

Free World to limited and camouflaged aggression that constitutes the greatest long-term threat to the Nation's security. A most basic national objective, therefore, is to ensure that the United States' security position shall not be so eroded. The Nation must be prepared to employ its armed forces, as necessary, in support of this objective.

Doctrine for Limited War

An important element in preparedness for limited was is well-defined doctrine. This doctrinal requirement demands not only thorughly developed military doctrine, but also the integration of military concepts with doctrine for exploiting other elements of national power such as diplomacy, the domestic economy, psychological operations, and the like. What might be termed a national doctrine for limited war is required.

Any consideration of doctrine for limited war must begin by answering the question whether limited war is possible in the atomic age. From the foregoing discussion, it is evident that this question must be answered in the affirmative. Both recent history and considerations of logic dictate this conclusion. Therefore, the first element of doctrine for limited war is that limited war is possible.

Ouite apart from logic and historical experience, there are also important psychological factors involved in this element of doctrine. If, for example, the Free World were induced to believe that limited wars are not possible, the Communists would find a ready-made climate for atomic blackmail. Also, if the West becomes convinced that any war will inevitably expand into an all-out war, and the Soviets are similarly persuaded, then there is a danger that the thought will become father to the reality. Then in a war brought on by accident or miscalculation, both sides might feel constrained to expand the conflict rather than be put at an operational disadvantage.

If, on the other hand, the presumption is that limited wars are possible, then there is some hope of keeping a war from expanding once it has broken out. The only sound basis for planning, therefore, is to assume that warfare can be limited. Without this premise there is no basis for further development of doctrine for limited war. Moreover, this premise is crucial to the deterrence of all-out war in a conflict which might have begun accidentally or by miscalculation.

The second element of doctrine for limited war is that it is possible to make a valid distinction between limited vs unlimited operations. The significant difference for the purposes of developing doctrine for limited war is that unlimited operations will involve attacks against the basic strengths of the contending parties, whereas limited operations are directed against enemy military forces.

In a limited war, the basic strengths of the contending parties must remain essentially immune to attack. There will also be restrictions on operations against enemy military forces whenever such operations are likely to threaten the strategic balance of power. This subject will be explored more fully when examining the various techniques of limitation.

The third and most basic doctrinal element in limited war is the principle of the objective. This is the most decisive limitation in limited war. By definition, a limited war is fought for a limited objective. Any idea of a limited war producing unconditional surrender is a contradiction in terms.

The elements of doctrine considered thus far constitute the essential framework for examining what Dr Max Millikan of Massachusetts Institute of Technology has called the techniques of limitation in warfare. This is the fourth element of limited war doctrine. And it is in this area that the critical doctrinal problems emerge.

The basic problem, however, can be stated quite simply, and it is this: All

operations in a limited war must be clearly in consonance with a limited objective. Any techniques for limiting hostilities must satisfy this prerequisite.

An important aspect of this requirement is that there must be no cause for the enemy to misinterpret intentions. This problem is posed by Dr Millikan in these terms: "Our signals must be persuasive".

The basic principle of war involved in devising techniques of limitation is economy of force. The force employed should be sufficient to gain the objective and no more—and should be applied with discrimination to insure that there is no cause for misunderstanding as to the objective.

While it is a relatively simple matter to recognize that there will be operational limitations in a limited war, it is much more difficult to validate the techniques of limitation. Indeed, the difficulties involved are so formidable that many analysts have been led to conclude that it is not possible to define limitations which will stand up in the crucible of war. On must concede that this conclusion may be correct.

But here again we are faced, in part, with a psychological problem. If it is conceded that no limitations on military operations can be sustained, then it would logically follow that there is no utility in attempting to devise "ground rules". Yet without tacit acceptance of such limitations, all hope of limiting warfare is forfeited. On the other hand, if one proceeds on the assumption that the mutual acceptance of restrictions is possible, it is imperative that the Free World develop tactical concepts for such limited operations.

The absolute precondition for validating any techniques of limitation is that both sides must remain convinced that it is in their own interests to avoid an expansion of hostilities. In other words, the deterrent to all-out war is important not only to deter the deliberate

launching of unlimited hostilities, but also as a deterrent to an expansion of hostilities in limited war.

The essential precondition, therefore, in sustaining limited operations is the maintenance of the strategic deterrent. This is the fifth element of doctrine for limited war.

Barring the act of a madman, it must be assumed that the Soviets will be deterred from the deliberate initiation of all-out war so long as they remain convinced that under any and all circumstances, the consequences of such an act would be unacceptable. The maintenance of this conviction is a first charge upon the military establishment.

The determination of what would be "unacceptable" to the Soviets in a total war involves a calculation of many variables, some of which probably cannot be discerned at all or evaluated with any accuracy by the Western mind. It is important, however, that such a calculation be made, utilizing the best intelligence available, and then adding a margin for error to insure that the USSR realizes, beyond peradventure, that all-out war would work its own destruction.

This is not the occasion to attempt such a calculation in quantitive terms. However, these are some of the factors which must be considered—

- (1) The offensive capability of the Free World to retaliate, under all conditions. This capability is dependent, in part, on the ability of the Free World to defend its offensive weapons systems by both active and passive means.
- (2) The net damage to the United States and the USSR to be expected in a nuclear exchange. The threshold of acceptability for the Soviets may depend in considerable degree on their estimate of comparative damage. A major factor in this assessment is the comparative

- ability of the United States and the USSR to defend themselves from nuclear attack.
- (3) Finally, and related to (2), the estimated residual capabilities of both sides. Here again, the Soviets might be prepared to accept heavier casualties and damage than otherwise if it were calculated that the balance of residual capabilities was favourable to the attainment of Communist objectives.

It is because of this residual capabilities factor that the effectiveness of a deterrent to all-out war cannot be judged solely in terms of the net capabilities of the United States and the USSR in a strategic nuclear exchange. While the first phase of such a conflict would undoubtedly consist principally of what might be termed survival operations, the issue might still have to be decided by subsequent operations in which the climatic act would be performed by the man on the ground, physically capable of imposing his will to the degree necessary to secure the objective.

Techniques of Limitation

Assuming the maintenance of the strategic deterrent as the absolute precondition for limited war, what are some of the techniques of limitation? Broadly speaking, the limitation will involve such matters as the area of the conflict, the targets to be attacked and the weapons to be employed.

It is not possible, with respect to any one of these limitations, to devise one set of criteria for limiting military operations that is necessarily any more valid than any other set. But, as indicated earlier, it is important that there be some "ground rules", and that these rules should be such that the enemy is persuaded that operations are in keeping with a limited objective.

The matter of area limitation is self-explanatory. This is probably the limitation which is most easily sustained.

In the Korean War, for example, the United Nations forces limited operations to the Korean Peninsula. Accordingly, there was no difficulty in maintaining a correlation between military operations and the limited objective sought.

The Communist limitation was of a somewhat different character. In addition to limiting operations to the Korean Peninsula, the Communists also refrained from all but relatively minor air attacks on United Nations forces, and from efforts to sever sea or air lines of communication.

United Nations forces, on the other hand, conducted virtually unrestricted air operations within the confines of the Korean Peninsula. The West, of course, did not utilize atomic weapons. However, there is no reason to conclude that the use of atomic firepower in the Korean War would in itself have necessarily led to an expansion of hostilities.

The significant thing about the Korean War experience is that both sides used quite different criteria for limiting operations. Nonetheless, the limitations were sustained because both sides judged it in their interests not to expand hostilities to a higher level of violence by committing additional resources. Both sides were, in effect, prepared to accept an outcome which fell short of the desired objective rather than risk expansion of the war.

The willingness to settle for a limited defeat or the frustration of an objective is inherent in any doctrine for limited war. It is equally important that diplomatic channels be kept open and that the opportunity for graceful retreat not be foreclosed.

While an area limitation, as in Korea, is probably the most easily validated, it is at the same time the one which is hardest to define in advance. There is no yardstick by which to calculate a normal zone for military operations. In one area of the world, military operations might extend over a vast expanse. In another

area, operations in a limited war might have to be very carefully circumscribed geographically. It becomes necessary to fall back on the general rule that operations should not extend beyond that area which very clearly has a direct impact on the ability to conduct operations, as necessary, to attain the objective.

With respect to target limitations, it is only possible to generalize as to what those limitations might be. In certain situations, there might be no limitations on the targets that could be attacked within the limited area of the conflict. More typically, however, it could be expected that some target limitations would apply.

As already indicated, as a minimum it would be necessary to forego attacks on the basic strengths of the contending Attacks on certain types of targets would undoubtedly be interpreted by the opposing forces as threatening the strategic balance. For example, attacks on targets which resulted in the attrition of elements of the strategic deterrent might force an opponent to resort to all-out attack in desperation, rather than permit such a deterioration in the strategic balance. By the same token, both sides must avoid operations which would dissipate their own strategic deterrent in limited operations.

Approaching the problem more positively, there is no reason why attacks cannot be made within the prescribed area of operations on all those targets which have a direct effect on the operations of the tactical forces. This would include attacks on the opposing ground forces, field depots, supply installations, and other support facilities, the interdiction of lines of communications which operations. directly support tactical neutralization of enemy air and missile forces engaged in direct support of tactical operations, and the like. Again, the primary requirement is that the surgets under attack bear an evident relationship to the declared objective of the operations.

The final technique of limitation is that of weapons limitation. It is in this area that the most difficult doctrinal problem arises — namely, the use of atomic weapons. The basic question is usually put in these terms: How is it possible to limit the use of atomic weapons?

Does not the employment of atomic weapons mark the dividing line between limited and all-out war?

If one side uses a small atomic weapon, will not the opponent retaliate with a larger one, and so on, until the war has expanded into unlimited war?

Once nuclear weapons are used, is there any logical point at which to stop?

There can be no categorical, all-inclusive answer to this question. The truth probably is that there is no logical place to stop, and yet either or both sides may, in fact, restrict themselves in the use of nuclear weapons. For there is no reason to believe that, so long as both sides desire to limit hostilities, the use of atomic fire will in itself lead to all-out war.

Inherent in all of these techniques of limitation is the presumption that each side must make a new calculation of its risks whenever it expands the conflict in area, in the targets attacked, or in the weapons employed. These risks must be weighed against the worth of the objective.

The conduct of military operations under these conditions will require cool heads and steady nerves, and the side that possesses military capabilities which are militarily effective in accomplishing the objective and yet do not require the deliberate expansion of hostilities has a tremendous advantage in this war of nerves.

The essence of the strategic problem, therefore, is to be able to conduct military operations effectively despite area, target, and weapons limitations. There is no

reason why the West need preclude itself from the use of atomic weapons in limited war, for fear of expanding However, it must be recoghostilities. nized that limited war operations will generally involve coming to the aid of an ally. Thus a Western decision to initiate the use of atomic weapons must have the approval of the ally on whose territory the war is being fought. Soviet propaganda is attempting to convince the Free World that any use of atomic weapons means total war. It is, therefore, important to both ourselves and our allies that the use of atomic weapons in a limited war will be carefully circumscribed and related to a limited objective.

If these techniques of limitation are to be sustained, it is of the utmost importance that aggression be resisted promptly and successfully. The greatest danger of all-out war is to be found in the little war getting out of control. The likelihood of this happening is increased as the political issues at stake assume an expanded significance. The tensions involved are likely to be in direct proportion to the value of the prize to be won or lost.

The sixth element of doctrine for limited war, therefore, is rapid counteraction. The ability to intervene quickly and to repel an aggression is of basic importance in limited war and in turn. to the deterrence of all-out war. territory is lost, it is extremely difficult to regain without a major effort. this situation there may be a tendency to rely on threats of punishment in an effort to force the withdrawal of the aggressor. This may well precipitate a ultimatums and counterseries of ultimatums until the positions of both sides have become frozen and can no longer be accommodated short of one side or the other either withdrawing or making good on its threat.

On the other hand, if significant military power can be deployed quickly to the area of the aggression, can stop the enemy advance promptly, and then

restore the status quo, the risks of intervention are greatly reduced.

It is sometimes argued that the Free World cannot muster sufficient forces at any point on the periphery of the Sino-Soviet Bloc to defend successfully because Soviets can operate on interior lines. Yet, insofar as peripheral actions are concerned, the advantake of operating on interior lines vanishes when the land area in question in hemispheric in extent. There is no reason why the West cannot outmatch the Soviets in strategic mobility if adequate sea and air lift is available.

It is imperative that this strategic factor be exploited fully. The prospects for limiting hostilities are greatly enhanced by a capability for rapid counter-action.

The seventh and final element of doctrine for limited war is so evident that it requires no extensive elaboration—mutual support. Very obviously all of the armed forces, operating as a tri-dimensional team, are required for the conduct of limited war operations, just as they are needed in event of all-out war.

The Army is, of course, dependent upon the Air Force — and in some cases the Navy also — for tactical air support. Also, the attainment of the necessary strategic mobility to make rapid counteraction possible requires suitable airlift and high-speed sea-lift; the Army is dependent upon the Air Force and Navy respectively for this support. It is only by exploiting the full capabilities of all the services in mutually supporting operations that limited war — or all-out war — can be fought successfully.

These, then, are the principal elements of limited war doctrine—

- (1) Limited war is possible.
- (2) There is a valid distinction between unlimited and limited operations.
- (3) Maintenance of the objective.(4) In limited wars, limitations will be
- employed.

 (5) The absolute precondition for limited war is the maintenance of the strategic deterrent.

placed upon area of conflict, targets

subject to attack, and weapons

- strategic deterrent.

 (6) Rapid and effective counter-action is the single most important operational capability for limited war.
- (7) Mutual support.

support this doctrine, as well as to meet the requirements for deterring allout war. These are among the Army's first priority objectives.

threat to the Nation's security, and with

the expansion of a limited war the

most likely source of an all-out conflict,

Army programmes are designed to

the capability to wage limited war effectively is the surest guarantee of the Nations' security. The deterrent to the all-out war is not enough for it cannot assuredly deter limited war, and it is not designed for the conduct of limited operations.

The tactical forces necessary for limited war are no less important to the Nation's security than maintenance of the strategic deterrent. There must be options open to the Free World in resisting Communist aggression—options

which lie between inaction on the one

hand and actions carrying undue risk of

all-out war on the other. In preparing

to meet the most overwhelming danger, the lesser danger but more likely threat cannot be neglected. There must be no

chink in the armour of deterrence.