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(Retd)*

Counter Attack

Lieut Col JN Virley

JULY - SEPTEMBER 1970

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South Asia And Its Strategic Environment

MAHARAJ K CHOPRA

IN this discussion South Asia would be considered as comprised of that part of southern Asia which is projected well into the Indian Ocean and thus would include eight states : Afghanistan, Pakistan, India, Nepal, Bhutan, Bangla Desh, Burma, and Sri Lanka. The discussion would be in the light of the more significant changes that have recently taken place in the world landscape. These changes have happened in individual countries, in various distinctive regions of the globe, in the relationship between blocs, and in economic, political, and strategic outlook of major powers as well as the international community as a whole. South Asia carries the impress of these changes, but what shape these bestow the region has elicited varied appreciations. There are those who think that South Asia has, generally speaking, settled on an even keel, which assures smooth sailing for at least some reasonable time to come. But there are others who consider this situation deceptive, a sort of long calm before storm, and visualise that the region would relapse into its traditional disquiet and conflict once an adverse catalyst is forthcoming. Between these two extremes, however, one might examine the nature of forces operating in the region, the response of the regional states, and the thrust of the external influences—in short, the strategic environment, which would provide an intelligent clue to the way winds are blowing in this important part of the globe.

First, we must clear up a little anomaly. If you look at any standard map of the world, you discover that "South Asia" as a descriptive expression does not appear. The reason is that this particular geographical nomenclature has no authoritative, universally recognised sanction behind it. In this respect it resembles at least three other Asian regions—Asian Pacific, Southeast Asia and the Middle East, all of which are composed of an assortment of states whose inclusion in one or other region is not standardised.

And yet all these regions have come to be spoken of as distinctive, largely the result of the political and strategic considerations which

arose during the Second World War and have continued since. And the geopolitical expert, if not the geographer, has good reasons to stick on to the epithets. Each of these regions does have pronounced features of its own, characteristic of a distinctive individuality. These features arise out of geography, population, location, historical experience, and national as well as international interests. It is in this broad context that South Asia may be looked upon as an entity and as having a peculiar strategic environment of its own. Here are its more outstanding features :

- (1) The region is barricaded from central Asia by the massive Karokaram-Himalayan chain that runs east-west for over 2,000 miles.
- (2) Its northern border runs along that of the Soviet Union and of China, the world's two major powers.
- (3) It is further enclosed within two other mountain complexes, that run north-south from the extreme ends of the Karokaram-Himalayan chain. These separate South Asia from the Middle East on one side and Southeast Asia on the other, both among the more sensitive parts of the globe.
- (4) It is girdled by the Indian Ocean, with a peninsular shape within the Arabian Sea and the Bay of Bengal, which is unique.
- (5) It is a great midway junction on the "grand trunk road" that links the East with the West.

We must begin our discussion by examining the condition and situation in each state, which are no doubt basic to the understanding of the local outlook as well as the broader strategic setting. All states of the region are sovereign and independent and are members of the United Nations. But they have differences of size and strategic significance. There is also a marked contrast in their military capabilities, low in some and high in others. By this attribute, the states could be grouped in two categories, those with fragile defence establishment and those with sizeable or high military establishment.

INTERNAL ENVIRONMENT

SMALLER STATES

In the first category of low defence establishment fall four states : Bhutan, Nepal, Bangla Desh, Sri Lanka.

Bhutan. With population one million and area 47,000 sq. km., Bhutan is the smallest state perched on the crest of the Himalaya, facing Tibet. According to the World Bank, its per capita income is the lowest in the world. Monarchical government is stable but could hardly sustain itself without external assistance. India bears 90% of its development expenditure. It has a paramilitary force of 20,000 for

internal security, wholly dependent upon India for training and equipment. Under a treaty India is responsible for its external security. This includes defence of the 300-mile frontier with China. Bhutan is a part of the total defence that India maintains along the Himalayan line. India's problem is not only to supply and deploy military hardware but also to ensure that no other country does.

Nepal. With population of 12 million and area 142,000 sq. km., Nepal is a sizeable state, lying on Himalaya's southern flank between China and India. Under a monarchical rule, which permits only a party-less legislature with limited powers, it has dissident elements which surface now and again. Development is limited. Its military force is small, 21,000 men : an army of five infantry brigades, one parachute battalion and one artillery regiment, and an air force of 500 men but no combat plane. Weapons, equipment and training have almost wholly been supplied by India, although Nepal has been looking around for other sources. Lying between two giants, Nepal has often to undertake some difficult tight-rope walking. India once maintained a border defence team here but this has since been withdrawn; and the Indo-Nepalese Treaty of 1950 stipulating special relationship is worn thin. This has been the outcome of Nepal's desire for equidistance and neutrality. Nepal now calls for the establishment of a "zone of peace", meaning that it would not involve itself in any conflict between its neighbours. But Nepal's neutrality is conditioned by the climate of relationship between China and India, and, within that context, by the Indian attitude. For Nepal is much more dependent upon India not only for economic and military aid but also for an outlet to the outside world.

Bangla Desh. With a population of 67 million and area 143,000 sq. km., Bangla Desh is a most thickly populated state, a fact to which a good deal of its adversity may be ascribed. Agriculture has been its mainstay : rice, of which share per capita is falling, and jute, of which world prices fluctuate. No sizeable industrial infra-structure has come up. There is a vast army of unemployed, which in conjunction with guerrillas is still active in the mountainous tract, and constitutes a powerful fissiporous force. Three major military coups have been accompanied by large-scale assassination of leaders, abrogation of constitution, establishment of near martial law regime and threat to the stability of the state. Bangla Desh armed force has about 30,000 men, mostly army, having five infantry brigades, one tank regiment, three artillery regiments, and three engineer battalions. The navy has one patrol boat and three armed river patrol boats, while the air force has 7 Mig-21, 7 F-86, and four AN-24. Even with a paramilitary force

of 35,000 the military establishment of Bangla Desh is inadequate for internal defence.

The expectations that the relations between India and Bangla Desh would be close have not materialised. The new leadership, after the liquidation of the old, has brought up at least three areas of conflict : sharing of the waters of the River Ganges, common border security, and maritime jurisdiction in the Bay of Bengal. Of late Bangla Desh has been leaning towards China, though, apparently, not with much success.

Sri Lanka. With a population of 14 million and area of 66,000 sq km., Sri Lanka is separated from India by a narrow strait and is South Asia's southernmost outpost in the Indian Ocean. The earlier ruling party had a comfortable majority in the parliamentary form of government, but serious political, social and economic problems defied solution. Now, under the new regime a powerful minority group, the Tamils, are demanding autonomy if not a sovereign state. There is a vast array of the unemployed; and Sri Lanka has passed through, a phase of most violent outbreak of guerrilla activity which had to be quelled by the assistance of foreign troops. Sri Lanka's armed force of 14,000 is comprised of an army of 9,000, with one brigade, one reconnaissance regiment, and one artillery regiment. The navy has one frigate, 5 fast gunboats, and 24 coastal patrol craft. The force has 12 combat planes, including 5 Mig-17. Again, even with its paramilitary force of 17,000, the defence establishment is very inadequate.

Relations with India are good, judged by the recent maritime agreements. But it is to China that Sri Lanka has turned for closer economic ties : Peking is Colombo's biggest trade partner. A non-aligned state, Sri Lanka is a foremost exponent of Indian Ocean being made into a zone of peace and dismemberment of bases. Its concern is understandable : with centuries of maritime aggressions behind it, Colombo finds itself now very close to the routes which warships, in increasing numbers, adopt, and close also to the vulnerable oil route.

STATES WITH HIGH MILITARY POTENTIAL

In this category are also four states, with quite a distinguishable higher military potential—Afghanistan, Pakistan, Burma and India.

Afghanistan. After the coup in 1973, Afghanistan, with a population of 20 million and area 660,000 sq. km, changed from a monarchical to republican form of government under Mr. Muhammad Daud, who has promulgated a new constitution. The regime has been stable, but at least three conspiracies to oust the government have been reported. As a result of the massive aid from the Soviet Union and

recently from the Middle East Muslim states, particularly the neighbouring Iran, Kabul has enough funds to go round and the current seven year development plan is progressing well, except that it is slow for lack of local skill. The armed forces total 88,000, mostly army, which has three armoured divisions, six infantry divisions, and one mountain infantry brigade; the T-34 and T-54/55 tanks are Russian. The air force has 200 combat planes including IL-28, Mig-15/17/21, and one SAM brigade of SA 2.

The British used Afghanistan as a buffer against Russia. But today its strategic position is more complex, for it is linked with the Soviet Union, China, Iran, Pakistan and India. Relations with Pakistan have been hostile over the question of self-determination for ethnic minority in the common border zone; the confrontation persists but, under the auspices of Iran, in a low key. Kabul is keen to keep away from the great power rivalries, but it does not escape Moscow's long economic and strategic shadow.

Pakistan. With population 62 million and area 800,000 sq. km. Pakistan has been hard at work rebuilding its new posture after its war with India and breakaway of the eastern wing in 1971. Replacement of military by civilian rule, a new constitution, and restructuring of the economy were till recently major fields of endeavour. But there were several hurdles in the way. The Fifth Five-Year Plan (1976-81) was too heavily dependent upon outside assistance. The province of Baluchistan simmered with turmoil and was virtually under army rule. Opposition to Prime Minister Bhutto was strong, as demonstrated by outbreak of violence after March 1977 elections. The country was under emergency rule and the army was, ominously enough, in a commanding position. Now the inevitable has happened for army has taken over and Pakistan's future is once again in the doldrums.

The armed forces are impressive, with a strength of 500,000. The army is composed of two armoured divisions, 13 infantry divisions, two independent armoured brigades, one air defence brigade, and three squadrons of army aviation ; there are 1,200 tanks. The navy has three submarines, six 40-ton midget submarines, one light cruiser, four destroyers, four frigates and 15 patrol boats. The air force comprises one squadron of B-57, one squadron of IL-28, three squadrons of Mirage III EP, five squadrons of F-86, seven squadrons of Mig-19, and a few transport planes. The paramilitary exceeds 60,000. On the shopping list have been F-5E, A-7 and A-4, as well as Hawk and Redeye SAMs, all American, but any hope of getting these is dim at present.

Detente with India and Afghanistan has considerably eased tension in the subcontinent. Mr. Bhutto claimed special relations with the Middle East, especially Iran, kept on speaking terms with Russia, and wanted

closer ties with the United States, which were not forthcoming. China is still the closest of all its friends. With India, despite resumption of diplomatic relations last year, basic issues of conflict persist—Kashmir, India's "hegemonic ambitions" as perceived by Pakistan, and India's nuclear explosion. The armed forces of the two states confront each other along the common border. Prime Minister Bhutto wanted "equilibrium in South Asia", which at least partially explained his desire to develop nuclear capability in collaboration with France.

India. With population 620 million and area 3.1 million sq.km., India has the reputation of being world's largest democracy. In that context the year 1975 would be a landmark when emergency was declared, on the plea that there was a movement to dismantle the established authority and national security was jeopardised. The emergency lasted a year and a half, during which democratic processes were severely curbed. Some impressive gains were made in production, trade, foreign exchange reserves, and discipline in general. But when in March 1977 national election was held, the ruling party was routed. Prime Minister Indira Gandhi was defeated, and an altogether new government emerged, which promised to restore all freedoms. The world's largest democracy has swerved back to power.

India's greatest asset in this connection is its armed forces, which are disciplined, non-political and patriotic. The strength is one million. The army comprises two armoured divisions, 15 infantry divisions, 10 mountain divisions, 20 mixed brigades, and two parachute brigades ; there are 1,800 tanks. The navy has an aircraft carrier, eight submarines, 31 cruisers, destroyers and frigates, and several coastal craft. It has also a naval air arm, with an attack squadron of Sea Hawk, two maritime reconnaissance squadrons and three helicopter squadrons. The air force has 750 combat planes, including three of light bomber B-58, 14 of ground strike jets SU-7 etc., 18 squadrons of Mig-21 and Gnat, and a number of SA-2 SAMs. India has developed a high level defence infrastructure, but seeks a few special weapons like a powerful long-range bomber.

The nuclear explosion carried out in 1974 signifies sophisticated nuclear expertise, while the launching of a satellite in 1975 indicates India's achievement in the world of space. Would India "go nuclear" is a question widely asked the world over, although Prime Minister Desai has reiterated that it would not.

India's national security perceptions have very much widened of late, as the Defence Ministry reports indicate. Beside Pakistan and China, its traditional preoccupations, there are the Middle East, Southeast Asia, and the Indian Ocean falling within the enlarged dimensions. It watches closely the talks on the limitation of strategic arms, the Helsinki

treaty on European security, the issues of arms race, all of which figure in its security calculations. Alike in its capabilities and outlook, India is well among the world's major powers.

Burma. With a population of 31 million and area 700,000 sq.km, Burma is potentially rich but actually poor. The long range 20 year plan has misfired badly. Its isolationist attitude, which only now is being modified, is partly responsible for this. But a major handicap arises from the government's inability to effect national integration : the Shana, Kachina, Karens, etc. and other ethnic minorities constitute uncontrollable elements of defiance and revolt. There are also the undying pro-Chinese communists, a great variety of guerrillas, smugglers and plain gangsters, all law unto themselves. Early in 1977, several military officers, including former Defence Minister and Chief of Staff, were jailed for plotting against the government. Will President Ne Win last was then a question asked for the first time.

The Burmese armed forces, strength 170,000, include an army with three infantry divisions, two armoured battalions, 84 independent battalions, and four artillery battalions. The navy has two frigates, four coastal escorts, and a number of gun boats and river patrol boats. The air force has twelve combat planes. There is a paramilitary force of 40,000. Considering the widespread insurgency and the nature of terrain, the military establishment is poor. Burma is singularly unfortunate in its borders, which are the stamping ground of guerrillas, insurgents, and smugglers. Its relations with other South Asian states are correct, although trouble arises now and again from insurgents in the border zones with India and Bangla Desh. And despite its efforts at equi-distance, it has a perpetual problem with China.

REGIONAL STRATEGIC PROFILE

From the above pre-view, a number of important conclusions are drawn :

- (a) With its population of 830 million, one-fifth of the world total, South Asia is a thickly populated region. The population pressure on land, resources, management and transborder situations is immense and tends to upset regional stability.
- (b) All states of the region are among the developing category, with per capita income of \$ 70 to 100, which is among the lowest in the world. The region cannot survive without aid from outside and thus is exposed to external thrusts.
- (c) Even after a quarter century of independence, no state has yet achieved complete national integration, and the consequences vary from simmering dissidence to armed revolt.
- (d) South Asia has kings, military dictators, authoritarian govern-

ing corps, and tempered democrats, where coups are familiar enough, constitutions change, and political institutions are under strain. Here one must keep one's fingers crossed as to the future.

(e) In the above situation, the role of the military is crucial for without its cooperation and support no viable rule is possible. The military may be in command or may be in the barracks, it must be cultivated.

(f) There is a striking contrast in the military establishments maintained by the states. It is so weak in some that it is inadequate even for national defence, and it is quite impressive in others. In both cases however there is a demand for more arms. The influx of arms in the subcontinent is a phenomenon to be reckoned with.

(g) It is a curious fact that even though all the states, except Afghanistan, have till recent times been under one authority, the British, there is hardly an inter-regional machinery in existence, similar for instance to the Organisation of African Unity, Association of Southeast Asian Nations, or Council for Regional Co-operation and Development in the Middle East.

(h) One reason for the absence of institutionalised cooperation is the prevalence of mutual suspicion...Old history has not yet run out its course.

(i) Another reason is that there have been half a dozen armed conflicts in the region, whose aftermath lingers, including standing military confrontations across the borders.

(j) Lack of regional unity causes diversified, divergent, even antagonistic orientations, of which Pakistan's pronounced leanings towards the Middle East, in contrast to the more easily accessible India, is an example.

(k) Of the eight states of South Asia, India is incomparably the largest, with population more than $2\frac{1}{2}$ times and area nearly $1\frac{1}{2}$ times those of all the rest combined. Its armed forces are second largest in Asia. Its size and military capability are of the world class and the dimensions of its security extend beyond the region.

(l) Finally, South Asia is the third region in Asia (after China and the Soviet Asia) to have "gone nuclear". India's nuclear explosion, even though of limited value, has wide-ranging repercussions and must figure in all calculations of nuclear proliferation with which the world is so deeply concerned.

THE INFLUENCE OF MAJOR POWERS

From the local and regional perspectives of South Asia we lift our sights to its external setting. Here the role and interests of three major powers, viz. China, Russia and the United States, and of two major regions, viz. the Middle East and the Indian Ocean are important. Thrown into this is the power of oil, a recent, highly charged phenomenon.

China. It has a common border with six out of the eight regional states, the exceptions being Sri Lanka and Bangla Desh. It has two basic interests in South Asia. First, security of its southern frontier. In Tibet it maintains a force of five to six divisions, backed by a network of air bases, which confronts a similar force maintained by India on the opposite side of the Himalayan crest. At one extremity it has created close ties with Pakistan ; the road which links Tibet with Sinkiang, passing through Kashmir, has been built with Sino-Pak collusion. At the other extremity it browbets Burma. It is certain that any threat to its southern frontier would entail immediate intervention on the part of Peking. Secondly, outlet to the south. The great value of Burma as China's window to the outside world during the Second World War may be recalled in this connection. Presently, Chinese airline flies to the Middle East and Europe over the territories of Pakistan and Kashmir, and a direct road has now been constructed that links Sinkiang with the Indian Ocean.

China uses several methods to pursue its basic interests. These have included war (with India in 1962), incitement of guerillas in the India-Burma and China-Burma common borders, support of rebel activity as in Burma, and carrot-and-stick policy as in Nepal.

In its appraisal of South Asia's posture, India looms large. It seeks to temper New Delhi's paramount stature in the region by creating counterweights ; hence Pakistan is its favourite and Bangla Desh may well fall into its orbit. In the wider sphere, it expects that despite the Indo-Soviet Treaty, New Delhi does not develop anything like a military alliance with Moscow ; and it is always on the guard against any Soviet move to encircle it from the south with Indian participation.

The post-Mao era has ushered a shift in policy. This is partly the result of the movement of detente the world over, but there are also specific reasons. New Delhi realises that China's nuclear threat is more political than military and Peking would most probably avoid doing anything that further provokes India into escalating its nuclear power. New Delhi also realises, after the more recent revelations, that the Chinese conventional forces are not as strong as once estimated. And Peking, on its part, believes that India does not pose much threat to its basic interests in the region and would also not blindly do the Soviet bidding : it has noted its resistance to the Soviet hobbyhorse of "Asian Security". But while attitudes have become mutually responsive and have shed their hard lines, strategies are unaltered, and China, while not digging its feet deeply into the region, would be closely vigilant of its basic interests.

The Soviet Union. Soviet interest in South Asia goes well into the past but was accentuated after the Second World War on the point of rivalry with the United States. Its basic concerns in the region are three-fold. First, the Soviet Union has a common border with Afghanistan,

rendered all the more sensitive because of its proximity with the China-Afghan border. Secondly, a very narrow strip of territory (Wakhan) divides Russia from the Indian subcontinent. This was a juncture of intense Anglo-Russian power politics in the British imperial days. That has subsided, but the Indian subcontinent continues to be a sensitive peripheral region in the Russian wider global setting : the Indo-Soviet Treaty stipulates specifically that neither party would permit its territory to be used as a base of hostility against one or other contracting party. The third basic interest is of recent growth. A powerful fleet, backed by burgeoning merchant shipping, has widened the Soviet security horizons, and Moscow has declared that the sea route through the Atlantic, Indian and Pacific Oceans is necessary for its national security. South Asia figures in this concept.

Moscow has been forging studiously a nexus of special relations with the regional states. The nearest, Afghanistan, is sometimes described as the "Mongolia of South Asia", a virtually exclusive sphere of Soviet economic and strategic interests. Something like 60,000 million dollar worth of aid has been channelled by Moscow into Kabul by now. More than fifty projects have been completed, many in the border zones and some like airfields of a strategic nature. Next to Afghanistan, India comes closest to the Soviet Union outside the communist bloc. Close relationship began two decades ago, and are symbolised by the Soviet-Indian Treaty of 1971 which stipulates economic and scientific collaboration and military assistance. The recent agreements visualise doubling of mutual trade and dovetailing of economy. On a smaller scale Nepal has of late been given special attention, by means of aid for economic projects and provision of technicians. Both in Pakistan and Sri Lanka Russia is engaged in the exploration of oil. Only with Bangla Desh some strains have developed, but these are not serious. Moscow's feet in South Asia are fairly deep and firm.

The United States. American involvement in South Asia began immediately after the Second World War, specifically with Pakistan and India. With Pakistan it forged bilateral and multilateral alliances (SEATO), thereby providing arms and economic aid. The establishment in Pakistan of a spy base to reconnaissance over Russia and China was a symbol of the value of alliance. India received economic assistance, which helped keep it away from falling into the communist orbit. But thereafter came the India-Pakistan wars and America's disastrous involvement in Indo-China. Pakistan expected positive assistance in its conflict with India, which was not forthcoming. India complained that militarisation of Pakistan only stoked its belligerancy and charged that Washington was creating an artificial parity between itself and its adversary; and it also recalled the appearance of American carrier fleet in the Bay of Bengal in 1971 to brow-

beat India to come to terms with Pakistan. US presence in South Asia was markedly eroded.

More recent events have caused further estrangement. Pakistan is sore because the sophisticated weaponry it wants is not coming from the USA, and also because it is Washington which has stood in the way of France selling it a nuclear reprocessing plant which produces plutonium of weapon-grade. Mr. Bhutto said further that the US economic aid was not of much value. India has received no economic aid at all; on the contrary, the embargo imposed on the supply of enriched uranium has seriously affected the nuclear power supply of one of its power stations. Of the remaining states, Burma has just opened a chink for American assistance. Nepal is getting marginal aid, Bangla Desh has also received some encouragement, while in Sri Lanka a few American firms are exploring oil.

But, on the whole, the upshot is that the USA is just about sitting on the fence, as an interested observer, but with little further inclinations. However this does not signify a preparation for retirement. Its prevailing mood has been defined thus : "We have a deep interest that the subcontinent does not become a focus of great power conflict.....We would try to keep our activities in balance with other powers concerned.....No outside power has a claim to predominate influence." This was said by President Nixon, but broadly represents the stance of the Carter administration.

Actually American interests are wider. South Asia is the soft belly of Eurasian land mass. Its heartland is accessible from its two adjacent waters, the Arabian Sea and the Bay of Bengal, to the submarine-based intercontinental missiles. Very close to the southern tip of South Asia has come about the US Diego Garcia base, a cornerstone of America's nuclear deterrence. South Asia is also a link in the US global strategy. And finally, there is the most valuable oil of the Middle East. Pakistan is particularly well located in regard to the Middle East and the Indian Ocean oil lanes.

COMPARATIVE INFLUENCE AND OBJECTIVES

It would be interesting to view the interests of the three major powers together and see how they stand. Both China and Russia have vital security interests in the region, because of its peripheral location; while it is important for China as an outlet, it is a link in Russia's global oceanic communications. The USA has no direct interests, but South Asia does figure in its world strategy and its calculations of security of the Middle East oil. These interests are mutually compatible upto a point, that is, so long as there is no major clash in the region or elsewhere. In consequence, there seems to have emerged a highly significant common aim which includes : crisis management, by which any conflagration in the region

would be prevented from escalation; low profile presence; and assurance that none of them assumes an hegemonic stature in South Asia and no regional power becomes dominant.

There is plenty of evidence available to support this. One notes, for instance, that while Washington, Moscow, and Peking have been the principal suppliers of arms to South Asia, none has supplied weapons in profuse abundance or of the more sophisticated quality. Thus, despite wars in the region, arms influx has been in a low key. And while the major powers have not been able to prevent eruption of armed conflicts, they have done what they could to bring these conflicts to a speedy halt. Peace that followed the Indo-Pakistani war of 1965 was largely through the efforts of the Soviet Union backed by the United States.

The case of the 1971 war is equally pertinent. While India and Pakistan fought, both Washington and Moscow mounted fair-sized flotillas: the USA, with its Task Force 74 comprised of the attack carrier *Enterprise*, helicopter carrier *Tripoli*, three guided missile escorts, four destroyers, and a nuclear attack submarine; and the Soviet Union with its one cruiser, two conventional submarines, one SSM submarine, and two destroyers. But partly by design and partly by the time factor, these naval fleets never came anywhere close to each other. In fact behind the scenes both the super powers tried hard to call peace.

But in the overall score of establishing presence, Moscow has been the winner. Encouraged by the growing relations with the regional states, it also seeks to sell some of its ideas about the future of Asia: "Asian Security", for instance, in which it expects to play much greater role than the United States which prefers to sit on the fence or China which just does not have the wherewithals to operate on the Asian scale.

INFLUENCE OF THE MIDDLE EAST : OIL POWER

It would be surprising to contemplate how a single commodity can so powerfully influence a whole region. After its price hike and scarcity accentuated by the Arab-Israeli war of 1973, oil has exercised unabated influence upon South Asia. This region is extremely poor in the wealth of "liquid gold", producing annually only 12 million tons, as against 1,000 million tons in the Middle East and 150 million tons in Southeast Asia. Of the two consequences of this adversity, one is the frantic search for oil in the offshore zones. But here difficulties have arisen. Maritime boundaries have not been defined, except in the case of India and Sri Lanka; and in the absence of maritime law (which is still under formulation at the Sea Law Conference), rights over the maritime zones have already begun to be disputed. The second problem relates to maritime defence, particularly in respect of India and Pakistan. Both of them have

essentially been land-orientated states, but now oversea interests under oil compulsion have been aroused; and there has been a distinct widening of the dimensions of national security. A number of states are accordingly restructuring their armed forces. Stress is being laid on the navy and naval air arm; and South Asia is having more patrol boats, more submarines, and more maritime aircraft.

Apart from inciting South Asian's oceanic interests, oil has brought the Middle East within the region's strategic orbit even more deeply than ever in the past. Since South Asia has very little oil of its own, where does it make up its deficiency from? The answer is, the Middle East, and India's case is typical. Out of the 14 million tons of crude imported in 1976, nearly 12½ million tons came from Iran, Saudi Arabia, Iraq and United Arab Emirates. Pakistan gets its oil wholly from the Middle East, and so do others except Burma which just about produces sufficient for its needs.

Now, the Middle East has always been a very important region for South Asia, having figured in its history and strategy for century upon century. But prior to the oil crisis, it was rather out of South Asian focus. This has changed kaleidoscopically. Apart from supplying oil, the commodity indispensable for economic and political survival, it has now the petrodollars amassed by the Arabs and the Persians, a good proportion of which flows into South Asia, particularly the Muslim states: Pakistan's economy is crucially dependent upon assistance from the Middle East, highly valuable indeed after its chaotic experience of war with India and breakaway of the eastern wing.

On the strategic front the role of the petrodollar is subtle and deep with far-reaching ramifications. Iran provides a good example. Backed by its oil wealth, it is building up military power fast. This includes weapons of the highest quality and also deft diplomatic efforts to strengthen its strategic environment—by forging rapport with the Arabs, settling up its disputes with Iraq, and building bridges with South Asia. Thus it has helped control insurgency in Pakistan, cool down the heat between Pakistan and Afghanistan, and lent powerful support to Indo-Pakistan accord. A climate of detente has been created in the subcontinent, in which oil and the economic leverage have been a powerful factor.

This has been for the better, but has also been accompanied by the blowing of evil winds. The petrodollar has brought about unprecedented militarisation of the Persian Gulf. The Gulf is littered with bombers, submarines, missiles and tanks and has developed bases which are probably the most powerful in the Indian Ocean. The great military machine has inter-regional combat potential as well as long-range capabilities. Being contiguous to the Middle East, South Asia is affected deeply. Its western flank is well within the striking distance of air power based on the Gulf. Its sea communications in the Arabian Sea are exposed, and the sea

lane which brings oil from the Persian Gulf is vulnerable. There are hazards centred in the Gulf region itself: the influx of arms entails tensions, rivalries, and situations out of which armed conflicts arise; if there is a conflagration, it would be disastrous for the supply of oil and thus strike at South Asia's Achilles heel.

The depth of influence of this development would vary between state and state, but take India: yet another element has been added to enlarge its security dimensions which is bound to be reflected in its defence structure.

SOUTH ASIA AND INDIAN OCEAN STRATEGY

The influence of the Indian Ocean on the strategic outlook of South Asia may be gauged from history: during the last four hundred years the region has been the target of seaborne invasions one after the other, resulting eventually in the conquest of all its states with the exception of Afghanistan. Therefore when India and others talk again and again about making the ocean a "zone of peace", a "nuclear free" part of the world, they are not indulging in mere rhetoric, rather they are impelled by a frightful miasma of history that continues to hang.

To this is now added another factor. Contrary to what used to be the case in the past, when overland routes were more or less available, under the present climate of international life the sea is almost the only major channel of communications for the region with the outside world. To render it insecure would be tantamount to putting a noose round the neck of the South Asian states.

South Asians voice their concern in several ways. Diplomatically the peace zone concept is proclaimed in the United Nations forum, non-aligned conferences, and joint bilateral or multilateral declarations. At least one result of making endless noises is that the demand has gone home with those more immediately concerned with the ocean's power equation. The latest proposal from the USA under President Carter's administration, suggesting to the Soviet Union to mutually tone down their military presence in the ocean, shows that South Asians in conjunction with others have been broadcasting on the right frequency.

But there is a fly in the ointment. South Asian states are themselves building up naval power, which cuts right across the peace zone concept. Part of the build-up could be ascribed to the dictates of national defence, but when the crunch comes the navies are all tip-toe for a showdown: in the Indo-Pakistan war of 1971 naval power was very much in action, a fact which the present strategists have very much taken to heart.

But for sometimes to come at least naval power based on South Asia is not likely to be very effective, so that political pressure would be the

main tool to blunt the thrusts that might arise from the sea. Such thrusts are continuously present because of the geopolitical factors. South Asia is a grand junction for the east-west routes, by air or by sea, often indispensable, remembering that overland communication lines are very much restricted, while the southern part of the Indian Ocean serves little purpose for communications. As things are, the ocean is the principal means of transporting oil, for South Asia and also for the Far East for which the route followed is close to South Asia.

Because of its international importance, the Indian Ocean cannot be kept immune from external intervention and global strategy of major powers. The importance of South Asia in this context may be reiterated: the waters around it provide areas from which the Asian heartland is accessible by submarine-based nuclear missiles with ranges upward of 3,000 miles. These waters have thus become an important arena of nuclear deterrence, symbolised eloquently by the US Diego Garcia base. But despite the growing appearance of warships in the Indian Ocean, some of which have been seen plying close to the South Asian shores, the region has not yet felt the full blast of global strategy, such as the Middle East or Southeast Asia. It is possible the major powers may come to terms for the purpose of creating a "zone of peace". But this would be only a matter of mutual restraint and would not alter the basic fact that the ocean has a great potential of influencing South Asia's strategic profile.

CONCLUSION

The South Asian scene presents a mixed fare. The headline news emanating from it of late is that the region has caught the air of detente. Even though hardly six years have elapsed since the last war was fought on its soil, its memory has faded. Peace agreements have been signed, diplomatic ties where snapped have been restored, tension has eased even in the border zones, and the disputed territory does not arouse militant passions. There is a spurt of preoccupation with economic and political affairs.

But behind this edifying phenomenon there continue to exist some stark, disquieting realities. All states of the region are under military, authoritarian or pseudo liberal rule, except India; and even India has just passed through a convulsive phase of emergency rule. Under automatic regimes rapport between the government and the people cannot be taken for granted and problems of stability cause heavy, if not unbearable strains. Barring India, all the states have at one time or other suffered coups, some of which have caused the military to take over. Several disintegrating forces operate in most of the states—population pressure, poverty, slow development, political immaturity, prevalence of militant minorities, and romping guerrilla bands.

The curve of inter-regional relations has fluctuated sharply, and when it has dipped low, cold war or shooting war has erupted. More than half the common borders are in a state of tension or are militarised, and disputes over territory show no signs of settlement. Thus mutual trust as befitting among neighbours is not forthcoming; and this partly explains why South Asia has no inter-regional machinery, after the manner of the Middle East or Southeast Asia or Africa. One effect of this is that in the event of conflict reliance is placed more upon external intervention than bilateral dialogue. And another effect is that practically every state has developed an extra-regional orientation which renders joint efforts or common approach all the more difficult.

South Asia is a juxta position of states of very unequal stature. India is outstanding, which has now everything to put it into world-class powers, including nuclear expertise. Its security perspective extends beyond the region. While not displaying hegemonic ambitions, New Delhi nevertheless resents any effort to create parity between itself and the neighbours. This, along with its undoubted stature, give rise to misunderstanding, if not suspicion, which probably could be removed if common platforms are created.

All three major powers have basic interests in the region hinged round border security or safety of communications. Subject to respect for these interests, USA, Russia and China have all registered their presence in South Asia in a low key, with Russia having a slight edge. This is evident from their attitudes in war time and also from the character of economic and military aid. South Asia also carries a powerful imprint of the developments in the Middle East and the Indian Ocean, but here again, the thrusts are in a low key.

On balance, the strategic environment of South Asia has taken a turn for the better. While local upheavels, inter-regional confrontations, and external efforts for a more powerful presence cannot be ruled out, it would be in the interests of all parties concerned to prevent the outbreak of a major conflagration. If this surmise is correct, the regional states have a splendid opportunity to go ahead with the implementation of constructive programmes, while the international community could work seriously on the concept of the zone of peace. Whether this really happens is in the lap of future.

China as a Third World Power

ROHIT VOHRA

CHINA has of late begun to voice herself as a Third World Power. China claims to be a developing socialist nation determined to putting an end to the exploitation of the two super powers. Chinese statements regularly link the policies of the super powers with the practices of imperialism, colonialism, neo-colonialism, racism, zionism and hegemonism—all terms with a powerful negative emotional connotation for the Third World countries whose aspirations to the redistribution of political and economic power Peking seeks to harness. To begin any discussion on China as a Third World power we must be clear about the concept of 'Third World'. The 'Third World' concept does not have a concrete definition. It is being constantly altered and evolving new dimensions thus becoming more precise. The Third World group of countries can be generally said to have the following common features.

- (a) The Third World group of countries is developing on the path of modernization (Industrialization).
- (b) A group that shares a common colonial past when the imperialist nations carried out their exploitation.
- (c) Most of the Third World group adhere to the policy of non-alignment and believe in forming a unity so as to be able to market their raw materials at better bargained rates. Thus bridging the economic gap between the developed and developing nations. In order to see how China views the International Power structure we must examine the role it has played therein. In this regard the two major variables to be historically analysed would be China vis-a-vis the two super powers, and its (China's) role in the Third World countries. In particular its attitudes and policies in the Asian sub-continent where the Indian model of politics—economic transformation offers strong competition in the eyes of the Third World nations.

China has more than one third of the world population and not unnaturally aspires to rise to the status of the leading Third World power. Also certain features of historical evolution and similar level of economic development are factors inducing Peking to seek dominance in the Third World. The Chinese wish to control the huge human and material resources of the Asian, African and Latin American countries, thus enabling them to turn the balance of forces in the World in their own favour.

This plan for a dominant position smacks of the ideals of the past when imperial China was the 'celestial empire'. China's foreign policy is influenced considerably by the reflections of her past. After an interlude of about a century of dominance by numerous western nations China woke up to the challenge of modernization. The opium trade and raw material exploitation had, by the end of the 19th century, made China financially dependent upon the developed nations. China revolted against the foreign yoke in the Taiping rebellion and the Boxer revolt of 1900. The movement towards self-strengthening was followed in 1911 by the Republican government under Sun-Yat-Sen. The Chinese communist leaders remained isolated from the world during their Yuan phase. When they gained control of China in 1949 there were two ideas working in their mind.

- (a) As convinced communists they believed in the international character of their ideology.
- (b) As inheritors of the Chinese imperial tradition they were expansionist, they were authoritarian and they did not treat all nations as equals.

As a sequel of the second world war independent power centres emerged. The Chinese found that the recently freed Asian countries of the region were rid of their erstwhile masters (Dutch, French, British and the Portuguese). But they were convinced that this was not the end of colonial domination. They warned the newly liberated nations that foreign domination had not ended with the withdrawal of the European powers. It was not possible for them to make any changes in the condition of their people without a drastic internal revolution—of the communist type. The warning about the danger from foreign powers proved too true in the sense that U.S.A. started to interfere in the region. First of all in 1950, Korea was invaded by U.S.A. This was really motivated by fear of Russia marching into Korea. But it was China, suffering from its anti-US syndrome, that took up the struggle on behalf of Korea, and came through the victor. This raised the prestige of China in the eyes of the fellow Asian nations (analogous to the boost received by Japan in 1905 when it defeated Russia).

The Chinese communist leaders on their part felt that their "analysis" had proved right. They felt elated that they had foiled the "mechanizations" as they saw it, of U.S.A. to come in by the back door after the expulsion of the European Powers. The subsequent developments in the region seemed to confirm the Chinese analysis. U.S.A. tried to interfere in the internal affairs of Thailand, Laos and Vietnam (Although the motives of U.S.A. might have been different) from what the Chinese alleged they claimed that their interpretation was confirmed and South-East

Asia was still not free of imperialists. All this earned China the leadership of the 'Third World' powers in that part of Asia. The Bandung Conference of 1955 seemed to endorse this line of approach and confirmed the Chinese as their spokesman. In consonance with the Chinese dream of becoming an Asian super power it began concentrating its efforts in the South East Asian region.

CHINA AND THE SUPER POWERS

From the birth of People's Republic of China in 1949, the success of Chinese communist party in achieving its goals of state security and revolutionary development has been dependent upon China's relations with the Soviet Union and the U.S.A. The evolution of the Chinese Communist State can be divided into three phases.

- (i) Period of Sino-Soviet alliance of 1950 ushering in a decade of close if not satisfactory collaboration between Russia and China with the Soviet Nuclear shield against the hostile American-anchored alliance system.
- (ii) The ideologican polemics and severance of economic cooperation with U.S.S.R. in 1960—began a period during which Peking nurtured an independent nuclear force and pursued an ideologically militant and revolutionary foreign policy. Both the U.S.A. and U.S.S.R. were enemies. Though until 1968, with the Soviet invasion of Czechoslovakia, a direct threat was not feared.
- (iii) Finally the post-cultural revolution foreign policy period grounded upon a small but creditable nuclear deterrent, tilted towards U.S.A., Japan, Western Europe and the established Governments of the Third World to counter Soviet influence.

In accordance with the above break-up in the first phase the Chinese achieved a rapid transformation of their economy with Soviet and in accordance with Soviet model of development. In 1958 certain events encouraging necessitating the first change in the evolution of communist China's rift with the Soviet Union became marked and was to come into the open in 1960. The Chinese leadership prepared to go it alone and intensified their effort to become an atomic power. They were really isolated but this did not draw them into any other alliance—it only made them more inwardlocking and determined to strengthen themselves by self-help. They emerged triumphant out of this test, acquired atomic power and became a shining example to the other Third World countries as to what could be achieved by the developing countries on their own. This earned them prestige and leadership in Asia, Africa and elsewhere. They challenged Russian policy of peaceful change in the world, and advocated the inevitability of violence in the defeat of capitalism. The Russians became defendants in this ideological controversy in which China won the Third World sympathies. The world became used to a competition between

Russia and China for the sympathies of the Third World. But "Tea and sympathy" are not enough. In giving real aid, China could not compete with Russia. Russia continued to act as counter-magnet to the Chinese in developing countries.

The Chinese efforts, after her split with U.S.S.R. have been to involve the U.S.A. and U.S.S.R. in direct conflict so as to benefit from their mutual hostility. This can be seen from—when U.S.A. escalated its war against North Vietnam the Maoist leaders did everything to stop the flow of military supplies from the socialist countries across the Chinese borders to North Vietnam. Their aim was to compel the Russians to send those supplies by sea to Haipong port where the U.S. forces at this time were bombing. This was done with the hope of involving Moscow in a direct confrontation with Washington. Chinese leadership seeing itself unsuccessful with the super powers in gaining any advantage, next attempted to win over the leadership of the Third World nations who are potentially rich in raw material resources. The objective Third World unity under the leadership of China is part of a plan of struggle against the Soviet Union. The rapprochement with U.S.A. and other imperialist states was also part of this plan. The Chinese leadership revised its general line of policy (during the 8th Communist Party Congress of 1956) from one of socialist solidarity and friendship with U.S.S.R. and a common struggle against imperialism, to one of bracketing the Soviet Union in the camp of imperialist powers at the 9th Congress of the Chinese Communist Party in 1969. A year later in 1970, this policy became one of joint bloc of smaller powers to struggle against the two super powers. At the 10th party congress of August 1973, a clear pointer was made at the Soviet Union as the primary enemy and the struggle became clear cut for the Third World and China at its leadership against the two super powers. Though, criticism of the U.S.A. became milder and the year witnessed an improvement in the Sino-U.S. relations following the visit of President Nixon to China, at the initiative of Peking. Several major external considerations prompted China's initial interest in improving relations with U.S.A.

- (a) Perception of a direct strategic threat from the Soviet Union.
- (b) Desire to foreclose the possibility of a Soviet American detente aimed against China.
- (c) American threat did not exist for China in view of the increasing pressure of public opinion in favour of American military disengagement from the unwinnable war in Vietnam.
- (d) Desire to stabilize relations with U.S.A., Japan and other pro-Western regimes of Asia.

Thus of the two nuclear super powers, the policy shift was at this time towards U.S.A., while following a firm anti-Soviet line the anti-

American opposition was scaled down to a few questions in relation to China's national interest in case of Taiwan and such questions. This effort is connected with ensuring China favourable terms of alignment with a group of imperialist powers. During the last four years of Sino-American rapprochement, the Sino-Soviet relations have remained frozen in hostility. As regards Taiwan, in the Shanghai communique the U.S.A. pledged to progressively reduce its forces and military installations in Taiwan as the tension in the area diminished. But as late as 1975 May, about half of the 1972 numbers of American servicemen were still stationed on the island. The U.S.A. has continued to sell arms to Taiwan and allowed Northrup Corporation to set up production facilities on the island for construction of F5E fighter aircraft. Moreover since the collapse of South Vietnam in 1975, the power politics in Asia has entered a new phase. Almost for the first time a wide crack has ruptured open in the U.S. containment policy. The Ford Administration made no radical changes in American foreign policy. Whether the new Carter Administration can deliver what Mr. Carter has promised remains to be seen. Any new decisions of withdrawal from Republic of China (R.O.C.) and Republic of Korea (R.O.K.) necessitates their plans for self defence in future. U.S. withdrawal will create a vacuum in the region and further enhance the dominating position of China. Thus it is essential for R.O.C. and R.O.K. to strengthen economic ties among themselves as well as with Japan and also to develop self-sufficiency in military hardware since U.S.A. will no more get involved in protracted military engagements. The improvement in economic relations between U.S.A. and China that took place between 1972-74 is unlikely to be stepped up further nor can we expect any further dramatic improvement in Sino-American relations. America sees China as a de facto shield against any perceived Soviet threat.

Chinese on their part have been adamant in their condemnation of the detente between the two super powers. They view this detente, as strengthening Russia, by guaranteeing her Southern and Western flanks. Thus enabling Russia to concentrate attention upon China. Chinese do not feel the detente to be genuine and this is due to the imperialist nature of the two super powers. They view the present phase of "fraudulent" detente marked by a heightened Soviet-American competition in expansion of arms race in sophisticated high technology weapons. Thus according to the Chinese, the Vladivastok agreement of Nov. 1974 was "an agreement on limitation in the name of expansion in fact".

CHINA OPERATING IN THIRD WORLD

China in forging Third World Unity under her leadership, hopes to find a favourable climate because of various factors. She herself has been

subjected to Western domination and thus can easily appeal to the sentiments of Asian nationalism. Secondly, as an economically under-developed country it can claim a special kinship with the countries of the Third World. China in her effort to gain influence in the Third World has constantly attacked Soviet Union and wants to act as a counter magnet to Soviet influence. This it attempts to achieve by advocating a violent revolutionary ideology as opposed to the Soviet contention of a gradual and peaceful revolutionary change.

In the Indian sub-continent Chinese influence has to contend against that of India. At the Bandung Conference China had endorsed the "five principles of peaceful co-existence" (first enunciated in the agreement with India in June 1954) which was included in the 1954 constitution as applying to relations with any state. Despite these assurances the Chinese provoked border clashes with India in 1959. At this point we must examine the internal condition of China, which was chaotic. The experiment of walking on two legs had resulted in a failure (The Great Leap Forward). This was followed by a couple of years of bad harvests resulting in famine. Thus the Maoist found it imperative to divert the internal discontent by invading India. In 1960 at the conference of the Communist Workers Parties in Moscow, the Chinese representative demanded that the policy of peaceful co-existence be scrapped and a resolute battle be given to imperialism. In 1962 there were further border clashes at several points in the northern borders of India. The Chinese action was everywhere interpreted as smacking of the old arrogant past of imperial China. This was all in accordance with the Chinese dream of becoming a great Asian super-power.

China now began concentrating its efforts upon the South East Asian Region. The Peking geopoliticians were fully aware of the favourable geopolitical factors giving them direct access by land to such South East Asian countries as Burma, Laos and Vietnam. Taking advantage of the geopolitical factors is particularly important to the Chinese strategists since China does not possess a modern powerful navy. The presence of a large number of Chinese (15 millions) in the South-East Asian countries who are amenable to Peking propaganda gives them added advantage. A population of similar ethnic origin lives on both sides of the Chinese border with Burma and Laos. These 15 million Chinese make large remittances to their families in China. These Chinese remain strongly nationalistic in sentiment, way of life, language and culture. But in the post-cultural revolution phase there had been a change in policy and the Chinese living outside China had been exhorted to strictly abide by the laws of the countries of their residence and to adopt local citizenship. The Maoist aspiration for a sphere of influence

in South-East Asia has been an admitted phenomenon. Some American writers believe that China would behave as a status-quo power if granted a slice of the Asian melon along side the American sphere of influence. Following the end of the Indo-China war the Chinese have been attempting to improve diplomatic relations with the South East Asian countries—particularly with the ASEAN group of countries. There has been a similar effort from the side of the ASEAN group since the Nixon visit to Peking in February 1972. But the development of better relations has been slow and halting due to Peking's reluctance to unequivocally reject rendering of material aid and ideological support to the guerilla movements in these countries. In the spring of 1974 Peking was compelled under pressure of demands from Bangkok, Kaula Lampur, Djakarta, Singapore and Manila to commit herself not to support the guerilla movements. In May-June 1974 during the visit of the Malaysian Prime Minister Tun Abdul Rasak, he was told that the guerilla movements were an internal affair and they could do whatever they wanted. Chinese claims to normalize relations with India and the ASEAN group seem facile in the face of the support they have been giving to the Naga and Mizo secessionists, the Burmese communist rebels and the outlawed party of Indonesia to overthrow the Djakarta Govt. by armed struggle.

Of late the Chinese foreign policy has altered and they have stopped urging a "peoples war" in Asia, Africa and Latin America. Instead they have again taken up the cause of the Third World and declarations from Peking claim that the Peoples Republic of China belongs to the Third World group. Peking in this regard has advanced the new slogan of a 'broad united front of small and medium states' against the 'two super powers'. The growing interest of the Chinese in the Third World can be attributed to their failure to turn China into a first-rate military and economic power. Mao-tse-tung's much propagated efforts to catch up with the western industrialized nations has not resulted in any formidable success. Its share in the world industrial production does not exceed 3 per cent though its population constitutes one-third of the total world population. This state of affairs is not very different from that of other Third World countries. Since the past two years Peking's affirmation of affinity with the Third World group has become almost repetitive. The 4th National Congress of China held in Peking in January 1975 reaffirmed their desire to set up a united front of the enemies of world socialism upholding proletarian internationalism etc., also declared its resolute support for the struggle of the Third World to safeguard national independence and sovereignty. This stance of Third World leadership was again emphasised at the UN Conference on control of environmental pollution held at Stockholm in 1975.

The economic relations with the developing countries form an integral part of the general policy line of the Chinese leadership which aims at realising its plan to become a great power through establishing a dominant position in the Afro-Asian and Latin American countries. The Maoists have always harped on the principle of depending on one's own strength. As a result China has become a spokesman of Third World problems and is regarded by many as 'leader' of the Third World bloc in the United Nations. Even so China has failed to persuade any African nation to take her side in the Sino-Soviet dispute.

China's eight principles of foreign aid were deliberately drawn up to highlight the drawbacks of Soviet aid. Chinese aid is interest free and extending over long periods (20-30 years) while Soviet aid is usually at 2.5% interest. China stressed agriculture and labour intensive factories in contrast to the policy of the U.S.S.R. to establish heavy industries. Chinese aid was given for agriculture, light industry, irrigation schemes and road building. Chinese technicians were paid on an equivalent basis as their local counterparts and were asked to maintain a local standard of life. Teams of barefoot doctors have won praise everywhere in Africa. Chinese personnel even managed her prestigious project, the £ 170 million Tanzan Railway. All this has won appreciation for the Chinese in the Third World countries. Chinese specialists, furthermore forge close contact with wide circles of the local people so as to persuasively conduct anti-Soviet propaganda. The economic policy of the Chinese is an attempt to use a relatively small amount of aid to gain maximum influence in the countries receiving it. Chinese aid programme began after the Bandung Conference in 1955. In 1967, China concluded economic aid agreements with 24 Afro-Asian countries (10 Asian and 14 African). The share of the Asian countries in the Chinese credit amounted to 60% before 1967. Towards the end of 1966, Burma, Indonesia, Nepal and Pakistan accounted for 70% of the total aid to Asian countries. This amounted to 35% of the total aid given to Asia and Africa. Peking's aid to Pakistan was stepped up after 1965 Indo-Pak conflict. In 1969-70, Maoists offered Pakistan large amount of aid keeping in view the deepening conflict with India. It is note-worthy that 60% of the aid earmarked to Nepal was for the construction of highways of strategic importance. Nepal, Cambodia and Laos which are direct neighbours of China and of great political strategic importance were not given loans but free grants. Thus, aid in the Asian sub-continent is so as to reduce the importance of India and develop friendly relations with India's neighbours. In Africa aid is promised with similar political motivations, that is to reduce the influence of Soviet Union. Aid to Algeria was promised in building the Trans-Saharan highway but when Algeria refused to support

China in opposing Soviet participation in the Afro-Asian Conference, Peking grew cold over the construction of the highway. Similarly, the promise of 80 million dollar-aid to Egypt in 1965 was also not kept by Peking.

China's attempt to turn every conflict into a 'Peoples War' in the Chinese style and thus prove the universality of Mao's ideas by the African example has led to negative reaction in Africa. There was negative reaction to China's interference in the tribal strife between Ruanda and Barundi and the support for Biafra separatist movement in Nigeria. A still greater damage was done to China's position in Africa by the Cultural Revolution of 1966-68. The Government of Kenya broke off diplomatic relations with China accusing her of violating the countries' sovereignty. Tunisia also suspended relations with China. Thus, in 1968, only 13 African countries retained diplomatic relations with China as opposed to 18 in 1965. After an interval period in 1971-72 China reactivated economic and trade relations with 24 African countries. Total aid commitment to Afro-Asian countries at the end of 1970 amounted to \$ 1,900 million. These aid programmes are creditable considering that per capita income of China is almost the lowest in the world. To say that China gives aid for projects of consumers goods and light industries because she wants to keep these countries dependent upon capitalist countries by withholding industrialization (of capital goods industries) is not correct. Since a recent World Bank report has pointed out that for smaller nations, as most of Asian and African countries are, to develop quickly on the path of modernization must develop medium-scale industries.

In 1970, the Chinese balance of trade in exports to Africa was twice of the exports from Africa. This gap in the turnover with China is causing constant dissatisfaction in the Third World countries. But it is precisely on this gap that the Western business world is building its hopes. The various articles in the Times Supplement (London) expressed the hope that Peking would increase exports to the Third World and invest her earnings in Western technology since it no longer buys it from U.S.S.R.

China's trade with the racist regimes of Pretoria and Salisbury has doubled since 1963 reaching 8.6 million in 1970. China is very interested in purchasing Rhodesian chromium and is at present making an annual purchase of 70,000 tonnes. The African public also voiced repeated protest against China's illegal trade with Caetano's fascist Portugal which at that time constituted an important source of revenue used for the continuation of war against the people of Angola and Mozambique. This trade with South African colonial authorities is indirectly being conducted through western firms in Hong Kong. The behaviour of the Chinese in support-

ing the military junta in the fascist coup resulting in the assassination of President Allende and the subsequent repression unleashed against the socialist and democratic forces in Chile has shocked all the progressive and democratic thinking people throughout the world. While the entire world is breaking off diplomatic relations with Chile the Chinese are giving support to the Chilian Military Junta and solving its acute economic problems by importing goods which no other state will import.

CONCLUSION

The course of recent Chinese domestic and international relations has been marked by too many sharp changes to permit confident analysis of what future holds in Chinese foreign policy. Her main interest resides in East and South East Asia and Africa where all U.S.A., Japan U.S.S.R. and the Chinese compete with each other for influence. The Smaller powers of the region are less likely now to make any kind of alignment with a single major power. The setbacks suffered by Peking during the period of Cultural Revolution led to a new turn—this time to the right. The Maoists had begun to play down the slogan of 'Peoples war' and began to pick up relations with many imperialist countries. China also chose to declare itself affiliated to the Third World group and began the mention of policies of peaceful co-existence. At international forums like UNCTAD they officially requested to be excluded from the list of the socialist camp and declared that China was a part of the Third World. They even invented a new slogan on "forming a united front of medium and small states" against the super powers. Soviet Union remained the No. 1 enemy and a wholesale agreement was made with the imperialist nations. Chinese abhorance at this time of the Soviet Union was not consistant with the wishes of the Third World camp who are against the imperialist nations and want to forge closer relations with the Soviet Union and the Socialist bloc of countries to march along the path of national independence. Besides Peking's opposition to the freedom struggle of the 75 million people of Bangladash, its cynicism towards the bloody repression unleashed by the military junta against the patriots of Chile. Its provocative actions to obstruct peaceful settlement in the Middle East crisis and her under the glove trading with racist regimes of South Africa and Rhodesia have exposed the inconsistanty of Chinese policy principles. The finale thus presents two thoughts, one that China still has the respect of the Third World powers because China is self-supporting and has become a world power through her own efforts and poses enough threat for the two super powers to consider China seriously. Secondly, there is no ideological or fraternal angle to China's leadership. She is not in that sense a Third World leader. She looks after herself.

The interests of China and the Third World do not coincide at present. The Chinese seem to linger in between the super powers and the Third World countries attempting to make the best of both camps. The Third World is hoping through negotiations with the developed

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The Army As A Career*

LIEUTENANT GENERAL ML THAPAN, PVSM (RETD)

THE traditional isolation of the Army from the mainstream of public life; the fact that as a disciplined Service, it does not seek to ventilate its grievances through resolution, protest or strike, which avenues of redress are open to other civilian professions through their associations and unions; and a natural reserve; result in the Country being unaware of the inadequacies which service in the Army affords to those who seek to make it a career.

It is an odd phenomenon that, whereas in every civilian avocation, be it Government, commercial or private, new entrants are sought to be attracted by incentives and career opportunities; the State, as the Army's employer, is content to regulate its terms and conditions of service solely to meet its operational needs, and not to take into consideration the necessity of affording its entrants the prospects of a career. Thus, a jawan in the ranks and, each year, there are many thousands in this category, leaves after 15 years' service at the age of 33 or less; a commissioned officer of the rank of major (and he forms the largest segment of the commissioned cadre), is required to leave at the prescribed age of 50. On the other hand, in civil departments of Government, whether he be an officer, clerk, messenger or mazdoor, security of service is assured upto the age of 58 years.

This is only one aspect of wide disparity of career opportunities, which does not appear to cause anyone, other than those serving in the Army, any great concern. In earlier days, perhaps, it did not matter so greatly. The soldier traditionally, came from rough, peasant stock and could go back to his land on completion of his military service. The Army was a prestigious Service and ex-servicemen widely respected in the community. The officer cadre was mainly British; generally with private means and, in any case, living costs very low. All this has changed with the transformation of social and economic values. The joint family is no longer the cohesive unit of the past. The soldier today, has less to fall back on and, if a land holder, acutely apprehensive of dispossession during his service, through inability to cultivate his land himself. Officers no longer

*Courtesy : Statesman.

have private means and cannot possibly save enough, to live on during their retirement, at the end of a truncated career. This is not all; they leave at the height of their domestic commitments, with children still to be educated and settled. Pensions, in this age of inflation are, at best, only a subsidy towards meeting the costs of bodily survival.

That the Army has taken these hardships in its stride, and accepted them as part of its occupational hazards, is a tribute to its stoicism. As guardians of the Nation's security, its members have placed duty above self, and have not been found wanting in heroism and sacrifice, whenever there has been a threat to territory of the country. They would be less than human, however, if they did not fail to observe the relative security of their civilian counterparts and the apparent solicitude of political leaders to placate them. The Army is remembered only in times of national stress, when seemingly grateful tributes are paid to its bravery and devotion. This is the pattern the world over. Rudyard Kipling, portraying the lot of Thomas Atkins, the British private soldier, in a memorable poem said :

"For its' Tommy this and Tommy that and
 'Chuck him out, the brute !'
But it's 'Saviour of his country !' when the guns
 begin to shoot."

What the Army would wish is a closer understanding of the special features of its peace time service—prolonged stationing in inhospitable areas, long periods of separation from families, and truncated careers at the end of this sacrifice. Does this ring a bell in the political conscience ? Or only in times of war ?

Terms and conditions of service in the Army, looked at as a career for Indian officers, have never been the subject of a collective detailed examination. Prior to 1932, the number of Indian officers commissioned into the Army was extremely small, and they were governed by the terms and conditions applicable to British officers of the Indian Army. In 1932, the Indian Military Academy was established, and the first big step taken towards Indianisation of the Army. This, as then visualised, was to be a very slow process; only three Cavalry Regiments and twelve Infantry Battalions were selected as the nucleus for Indianisation. The fact that the career problems of officers, commissioned from the Indian Military Academy, had not been taken fully into consideration, is evident from the terms and conditions drawn up for them at the time; particularly those relating to their pay and pension, which envisaged their not attaining a rank higher than Lieutenant-Colonel. World War II intervened, before the limited experience gained in the process of Indianisation could be used, to give practical shape to the planning of career prospects. It was abundantly clear, however, that the conditions of service then prescribed, could

not stand the test of War and, in 1944, certain ad hoc measures towards improvement in pay and allowances were announced, resulting in Indian commissioned officers, for the first time in this respect, being equated with other British officers of the Indian Army. In 1947, the New Pay Code was introduced, which reverted, arbitrarily, to more or less the pre-War position. This was formulated, by an unrepresentative Committee, in some haste and in isolation; pensionary terms being left for consideration later. Promotion rules, ages of compulsory retirement and allied matters were not considered at this time; indeed it was assumed that pre-War rules would apply, although the latter had clearly been framed to suit conditions of service of British officers. The new Pension Code was promulgated in 1953 and was based, necessarily, on the framework of the New Pay Code, however irrational that may have been. The rules regulating substantive promotion, ages of compulsory retirement, and tenures admissible to officers of various ranks have been the subject of spasmodic revision, on the basis of the New Pay and Pension Codes, which tend now, to be regarded as sacrosanct.

It is unfortunate that various Pay Commissions which have been set up since Independence, have not fully recognised the peculiar features of military service. This is due partly to a general ignorance of service conditions; only a very small number of those involved in the decision making process at the higher levels of Government having ever served in the forces. It is also due to the peculiar nature of our bureaucracy—largely civilian in character—which views every proposal for special treatment for the Armed Forces as likely to cause repercussions on the civil side. The safest answer, invariably given, is the maintenance of the status quo.

When, in 1946-47, the Post-War Pay Committee deliberated in broad terms, on the career which was intended to be offered to an Army officer; it was decided, quite arbitrarily, to equate Indian Commissioned Officers with officers of the Indian Police Service. The reason for such equation is not readily discernible; unless it was a follow on from the general principle, that the Indian Administrative Service was to occupy first place in the hierarchy of Central Services; and the Army and the Police, perhaps by virtue of both being in uniform, were considered to be analogous in occupations and functions. That this was and is a fallacy is too obvious to be laboured on. Indeed, the supremacy of the Indian Administrative Service, in the Government hierarchy, has been the subject of recent heated debate. Whatever may be the merits of their respective cases, it is clear that the roles of the generalist and the specialist are complementary and that the era of the master and servant relationship is over.

The difficulty in applying the same yardstick to the pay scales of

officers of the Army and civil servants is that, historically, the pay of officers of the Army has been linked to rank, whereas the pay of civil servants, is regulated in two scales; junior and senior, and a selection grade. In the Army, promotion only upto the rank of major is on a time scale, and this is subject to the passing of promotion examinations, which are comparably superior to the elementary Efficiency Bar, which operates in the case of civil servants. The maximum pay drawable by a major is considerably less than his civilian counterpart, in the senior time scale. Above the rank of major, promotion is by selection to fill specific vacancies. The quantum of appointments carrying such higher ranks not only is limited, but under constant financial and administrative review. It bears no career relationship to the total cadre of officers in the Army. This is a fundamental difference. Whereas in the case of the civilian services, advancement to the maximum of the senior scale is wholesale, subject only to the exclusion of the unfit; in the Army it is the exact opposite and advancement to higher ranks is only of those selected, after very careful screening from amongst the fit, and then subjected to quantitative restrictions.

In their anxiety to prescribe uniform, 'all inclusive', scales of pay for officers of the Army; service considerations appear to have been overlooked by the Post-War Pay Committee. An officer is not commissioned for General Service in the Army, but is commissioned into a particular Regiment or Corps. For the greater portion of his service he remains in his parent arm/corps, and it is only when he is to be considered for promotion to the rank of Colonel and above, that his employability in the General Cadre comes up for consideration. In determining the employability of officers in the General Cadre, the functional and operational requirements of the Army impose an additional consideration. It is not practicable to equate the fighting arms and ancillary services, for the purpose of allotment of vacancies in the General Cadre. This must be governed primarily by the needs of the Service and, as the primary business of the Army is to fight, fighting arms, understandably, get a greater share. This does not suggest that officers of the Services should be placed otherwise at a disadvantage; this handicap had long been recognised and made up by the grant of corps pay to such officers, so as to compensate them, to some extent, for their loss of prospects in the General Cadre. Unfortunately, the Post-War Pay Committee, whilst recognising the principle of different pays for different trades, when formulating the pay and allowances of other Ranks, did not take this factor into consideration when formulating the pay of officers, and withdrew the grant of corps pay. The illogicality of this differentiation is patent.

It is of interest to make a general comparison between the career opportunities available, in the higher selection appointments, to the Army and the Indian Administrative Service. The selection cadre of the Army,

i.e. appointments of the rank of the Lieutenant-Colonel and above, comprises only of approximately 12% of the total officers' strength ; the remainder consist of appointments of the rank of major and below i.e. 88%. More than half of the Army's minuscule selection cadre, is taken up by appointments carrying the rank of Lieutenant-Colonel, who retire at the age of 50. In any given year, only about 20 to 25% of officers of the rank of major, can hope to be promoted to the rank of Lieutenant Colonel, by selection. The remainder, perforce, have to retire in the lower rank. Likewise, only about 10% holding the rank of Lieutenant-Colonel can hope to attain the higher ranks, entry to which becomes progressively constricted. In the Indian Administrative Service, all entrants can aspire to the minimum status of a Joint Secretary to Government before retirement ; the nearest comparable Army equivalent being Brigadier/Major General. In the higher echelons, the contrast is even more marked. Whereas the Army, with an officer cadre ten times larger than that of the Indian Administrative Service, has only one full General, who might be equated with a Secretary to Government ; there are nearly 100 such appointments available to IAS officers in the Centre and States. The Indian Police Service, with an officer cadre one fifteenth of the size of the Army, has five appointments which are equated to that of the solitary Army General. Other equations of military ranks/civil grades are equally disproportionate. The axiom that the rank/appointment structure of any service should, if expressed in geometrical terms, approximate to that of a pyramid, does not apply in the case of the Army, whose rank structure is shaped more like a pagoda, if not a drawing pin.

Differentiation is painful enough ; what is worse is the devaluation of the status of Army officers vis-a-vis civilian officers since Independence. The status of officers of the rank of major general and above is regulated by tables of precedence issued by the Central Government ; that of brigadier and below is left to be determined by State Governments. There has been a progressive downgrading of Army ranks ; ironically, after every war in which the Army was engaged and several of its members made the supreme sacrifice in the service of the nation :

(a) After 1947-48 Kashmir War

- (i) Chiefs of Staff of the Three Armed Services were moved below judges of the Supreme Court.
- (ii) Major Generals were placed below Chief Secretaries to States Governments.

(b) After 1962 Indo-China War

- (i) Chiefs of Staff moved below the Cabinet Secretary.
- (ii) Major Generals moved below the Director of the Intelligence Bureau.

(c) After 1965 Indo-Pakistan War

- (i) Chiefs of Staff were moved below the Attorney General.
- (ii) Major Generals were placed below General Managers of Railways.

(d) After 1971 Indo-Pakistan War

- (i) Chiefs of Staff were placed below the Comptroller and Auditor General.
- (ii) Lieutenant Generals were put below Chief Secretaries of States (even though an Army Commander of this rank may have operational responsibility over half a dozen States).
- (iii) Major Generals were moved below the Deputy Comptroller and Auditor General.

The relative status of officers of the rank of brigadier and below, which was left to the States to determine, has led to some ludicrous anomalies. In Tamilnadu, Bihar and Orissa, a Brigadier is ranked above a Deputy Commissioner and to IAS officers with less than 25 years service. However, in Rajasthan, Manipur, Mizoram and Nagaland, brigadiers are ranked below Deputy Commissioners. In Rajasthan, a brigadier with 25 years service or more, is ranked lower than an IAS officer with 9 years service ! Such disparate placing is an administrative absurdity.

What does a soldier seek when he enlists, or is commissioned into the Army ? Perhaps it is the spirit of adventure and the unrivalled comradeship which the Service offers. It is true that the profession requires a high degree of physical fitness. It is for this reason that service in it is relatively short and its members have to leave at a comparably young age. Professional needs, however, should not absolve the State from its responsibility to the members of this Service, when they are compelled to leave prematurely. If the State views all Government service, as an opportunity to serve the country, upto a specified age, thus offering an active life-time as a career ; there is no reason why the active career interests of members of the Army, should not be similarly safeguarded.

What can the Government do to rectify matters ? At the outset, it must be stated that routine examination of the recommendations which follow will not help. Such examination is doomed to get lost in the slough of despond of our archaic bureaucratic procedures. What is needed is a Parliamentary Commission, on the lines of those set up for Law, the Police and other areas of national concern; to go into this subject and other related matters. The Army should be adequately represented on this Commission and associated in drawing up its detailed terms of reference.

In so far as soldiers are concerned, the Centre must assume statutory responsibility for employing all ex-servicemen, who so desire, and who have completed their terms of service in the Army, in other Central Government or State Government assignments, up to the age of 58. Although much has been done, in recent years, to make reservations in Government appointments for ex-servicemen; not all ex-servicemen in need of employment are successful in obtaining it. The onus of finding such employment rests on themselves. It is well known how frustrating this can be, in the face of heavy competition, in the present general high level of unemployment. What is now recommended is mandatory action, on the part of the Centre, to position ex-servicemen in suitable Government assignments, according to their aptitudes and skills, immediately on their discharge.

There is a similar need to provide Army officers, employment in Central State Governments and in the large public sector, upto the corresponding age of civilian retirement. Our political leaders stress repeatedly, the need for discipline in our personal and public life. Where else could better ambassadors of this quality of character be found than in the Army ? Is it not sheer public waste that dedicated men, who have been educated and trained, at considerable State expense in managerial and technical skills; who have served the country with demonstrated devotion; who are physically fit and at the peak of their output, and who have ten years or more of active life ahead of them, should be consigned to the oblivion of the rocking chair of retirement ? If the all pervading civilian bureaucracy can find no place for them in public appointments, because they regard them as the preserve of the civil services, it is time for fair minded politicians, untrammelled by prejudice, to put matters right. Merely because the civil servant is closer to the seat of power than the soldier, should not imply denial of the latter's claim to equality of treatment.

There is also the need to rationalise the pay scales of Army officers, by disassociation of pay from rank, to the extent feasible. As a beginning, it should be accepted that the maximum of the senior scale, prescribed for the civil services, should be the maximum drawable by officers in the rank in which the great majority have to retire, i.e. the rank of major. Thereafter, a selection grade of pay should be prescribed, as in the civil services, where the different higher ranks of the Army could be fitted in. And since, by virtue of functional needs, the Army is organised in different Arms and Corps, who perform specialised functions, promotion in which cannot be uniform; the reintroduction of corps/specialist pay should be approved, to compensate such officers for the lack of career opportunities to them, while they are in service. An increase in the quota of higher ranks,

though necessary will, by itself, not provide the answer to this very complex problem.

When all is said and done, perhaps the greatest argument used by the bureaucracy against any improvement in the terms and conditions of service of the Army is that, because there is no shortage of applicants for entry, their career prospects have been provided for, adequately. This is the standard refuge of the protagonists of the status quo. We would do well to appreciate that the general educational and industrial development of the country has led to an awakening of our youth. A natural economic law is for intellect, knowledge and skill to seek the higher reward. If such reward is obtainable only in civil life or in Industry, it is but natural that the best of our youth is attracted to those occupations. Men of lesser quality then gravitate to the Defence Forces. This can operate only to the detriment of the Army and the country. The warning of a distinguished wartime Commander and a former Chief of Staff of the United States Army, General Omer N. Bradley is ominous : "Inferior inducements bring second rate men. Second rate men invite second best security. In war there is no prize for the runner up."

Leadership in the Armed Forces— Some Aspects

MAJOR GENERAL KS BAJWA

LEADERSHIP, in any walk of life, involves decision making to determine objectives and to evolve plans. Execution of plans requires successful handling of resources of men, materials, and time. Of all these, the most vital, and difficult to manage, are the human resources.

In the Armed Forces, critical parameters of time and space, imposed by the interaction of imponderables and fast changing operational, situations, place a heavy premium on quick and sound decisions. Equally, life hazards due to the vast destructive potential of the modern weapon systems, call forth very special techniques of handling men as well as materials. Much has been said about efficient and economic utilisation of material resources, including all types of weapons and equipment. Most of the techniques involved can be reduced to well-defined processes and a well-organised routine. Successful handling of human resources cannot on the other hand be stereotyped. There are ever fresh challenges in this field. The quality of relationship between the leaders and the extent of enduring motivation shown by their commands, will in the final analysis determine the full extent of achievement. Consequently, the desirable content and style of leadership ought to be further studied in the light of factors peculiar to the Armed Forces. Moreover, the inter-leader relationship with its tremendous potential for good or harm, often not fully appreciated, needs special examination.

The main factors, both organisational and environmental, that have a vital and specific bearing on the exercise of leadership in the Armed Forces are :—

- (a) critical parameters of time and space under which decisions are taken and plans executed;
- (b) life hazards faced on the field of battle and to a lesser extent in peace time;
- (c) dominant position of the leader in the organisational structure; and
- (d) limitations to proper quantifications of performance.

CRITICAL PARAMETERS OF TIME AND SPACE

The total resources of men and materials for waging war that any country can mobilise are never generous. In a theatre of war, at a given period of time, the distribution of these resources to the strategic advantage of the country is not always adequate for producing decisive superiority over the enemy at selected points as well as providing a comfortable balance everywhere else. Consequently, manoeuvres to produce decisive superiorities at chosen points and acceptance of calculated risks elsewhere, are an essential part of military doctrine on the battlefield. The opposing forces are vitally concerned in gauging each other's intentions; estimating the resources available and the different ways that these can be brought to bear on the battlefield, and the measures that are likely to be launched by an opponent, including the utilisation of terrain and obstacles, to deny or limit the adversary's power to manoeuvre. All these are imponderables. The intelligence available is neither conclusive nor timely enough to completely eliminate uncertainty of the enemy's course of action. As a result, the time and space within which resources can be marshalled and decisive action taken, is invariably critical. The command system must, therefore, be geared for centralisation at the highest level in the theatre of operations so that decisive resources can be concentrated where needed and calculated risks accepted elsewhere for a determined time span. An overall design for battle with a capacity for firm direction at the highest level relevant to it within the critical parameters of time and space become essential for success.

The interaction of imponderables related to the enemy, terrain and weather tend to produce fast-changing operational situations. Given the limitations of dissemination in the stress and strain of battle, decisions to meet such situations, if only confined to the highest level, may be neither sound nor timely. Consequently, a measure of liberty to take decisions and freedom of action within the overall design must be retained at all levels of command.

A sound balance between the conflicting requirements of centralisation at the highest level relevant, and retention of a fairly large measure of initiative at all lower levels of command would be essential for success in battle. The pyramidal structure of Armed Forces leadership and the consultative system of planning and decision-making advocated, is designed to resolve these conflicting requirements. In actual practice the system is open to abuse depending upon the personalities of the commanders. Whenever commanders exhibit an excessive concern with success at any cost, there is an accompanying tendency to overcentralise. This is particularly so in peace-time, when the full impact of

adverse effects of overcentralisation is not felt due to the absence of the imponderables of war.

LIFE HAZARDS

Modern weapon systems have acquired a vast potential for destruction. The delivery systems have become increasingly accurate. Much more than the actual destruction, fear of life hazards thus created, weighs heavily on the minds of soldiers. Consequently, for a soldier to give of his best on the battlefield and display an enduring will to win, belief in the plan to which he is committed and those who lead him is essential. Amongst the leaders at every level of command, there is a vital need for positive involvement in the process of decision-making and planning. There must be free interaction of ideas in the process of consultation. The sense of commitment to decisions once taken, should be such that these are implemented by dynamic determination at each level. The soldier must clearly understand what is expected of him; have faith in the skill of his leaders to evolve sound plans and have the confidence that the leader, with his devotion and daring, would lead him to success with a reasonable chance of survival. Even when the situation is adverse and the odds unfavourable, given the above process of involvement and mutual confidence amongst the leaders and the troops, many a glorious chapter is added to the feat of arms.

POSITION OF THE LEADER

We have seen that a military leader has to take decisions within critical parameters of time and space. In battle these decisions also involve life and death situations. For these very reasons a military leader is placed in a clear position of authority backed by a legal code of discipline to ensure unquestioned obedience. This deliberately inculcated an essential dominance of the leader, bereft of proper balance, can also be counter-productive. It has a grave potential for promoting authoritarianism, which may ride rough shod over the legitimate views and aspirations of subordinates. One of the essential features of the process of interaction of ideas and creative decision-making is the acceptance of dissent and the resolving of opposing views. When lacking, not only might decisions be ill-considered, the subordinate leaders also tend to withdraw mentally. This inevitably has an adverse effect on their performance and achievements in crucial battle situations.

While clear cut authority and its exercise by the leader to achieve the aims assigned to his command, is generally expected and accepted by the subordinates, motivation and job satisfaction require more of leadership than mere exercise of authority. Recognition of this fact has become particularly important in view of the growing uni-

versal trend towards personal liberty and equality. This is even more so in India, where rapid and far reaching changes are taking place in our social ethos. The generally stoic resignation to environment and unquestioned acceptance of feudal authority is rapidly being overtaken by an awareness of individual rights and the quest for a better way of material existence. There must, therefore, be a more enlightened approach to discipline and exercise of authority. The example of self-denial set by the leader and the veritable mystique of his personal valour have assumed even greater importance in the democratic set-up of today.

QUANTIFICATION OF PERFORMANCE

In industry and business, magnitude of production and the volume of sales provide an easily applied measure of achievement. Even in civil administration development targets can be set and success measured. This quantification provides for evaluation of merit and consequent job-satisfaction. But in the Armed Forces, except in the field of logistics and engineering, performance cannot be easily quantified. While most individual skills can be measured fairly effectively, it is difficult to do so in the case of tactical group activity. In the absence of tangible quantities, the assessment of performance tends to become merely a sum total of impressions and formulated opinions. In peace time due to the absence of the influence of life and death hazards the task is rendered even harder.

The primary concern of trade and industry with profit and loss acts to maintain individual merit in correct focus. In the services, achievement feed-back and recognition is regulated by the opinion of the leader, at and above the level where the activity is controlled. This makes the position of the leader even more pre-eminent. It is significant that in such arms and services, where quantification of performance is feasible to a larger measure the interaction of leadership is well-modulated and the organisation well-blended. Where this is not so, the opinion of the leaders at each level of the pyramidal structure is more dominant, with the attendant potential for tensions and lack of initiative below.

While quantification of performance must be further explored, there is a limit to which this can be done within the parameters obtaining in the services. It must, therefore, be accepted that personal assessments by leaders at all levels are inevitable and relevant. It is very important that this exercise in formulation of opinions and evaluation, be made as objective as possible. Frequent and close assessment of personalities and performance is, therefore, a necessity.

One of the primary functions of an executive is to build up his organisation so that it is capable of achieving its goals. Since this objective is rather intangible in peace time, administrative targets that are within reach and more easily perceptible, tend to divert attention and effort from the primary objective of building up service organisations for war. Equally the rather human preoccupation of making a personal mark in the invariably short tenures, may obscure the long term goals of the organisation. Senior commanders must constantly apply themselves to resolve this tendency towards goal substitution, which is often cleverly camouflaged by ambitious subordinates.

Another significant and very substantial difference between all sections of organised activity and the services, is the right to register collective protest, which for obvious reasons cannot be availed of by the services. Consequently, besides the institutional safeguards, the onus of anticipating, discovering and resolving individual and group needs rests with the service leaders. This is both an enormous responsibility and a unique privilege, which shapes the content and style of the military leadership.

From the brief analysis of the above factors, it is evident that the nature of leadership in the Armed Forces is very human-intensive. Moreover, in the final crunch conduct and style of leadership is substantially self regulated. This pre-eminence of human factors remains unchanged in spite of all the technological developments. The content and style of leadership, must therefore, be designed to channel interaction of human thought, emotions, needs and activity for success in battle.

DESIRABLE CONTENT OF LEADERSHIP

Clarity of Doctrine and Concepts. In order to act in concert to meet critical challenges, it is essential that there must be a common theme for the conduct of military affairs. A common doctrine is an evolutionary process, which must be constantly studied and its concepts clearly understood by all soldiers to the extent that it is relevant to their level. Clarity in this respect goes a long way to create mutual understanding, confidence, and cohesion.

A Design for Battle. A logical extension of the common operating theme is an overall design for action. While a clear cut aim would be set at the highest echelons, the design itself must be evolved by participation at different levels of command. There must be ample scope for exercise of initiative at all subordinate levels. To curb the potential for authoritarianism, there is tremendous need for senior commanders to practise patient understanding, exercise restraint in

enforcing their own views, and avoid overcentralisation. A complete understanding of the design must be attended by a sense of involvement and conviction which will generate positive dynamism and ensure ultimate success.

Sound Commander to Commander Relationship. Relations between commanders must be based on mutual respect, trust, understanding and confidence. An appreciation of the ego needs of subordinates and limitations imposed by the military system, where legitimate recognition is largely dependent on the opinion of the superior in command, would clearly establish that the onus of developing healthy relations with subordinates must rest squarely with the superior commander. It is he who must rationalise behaviour, promote understanding, encourage free exchange of ideas, resolve dissent, allay fears and motivate greater freedom of action. There is a need for more open and honest relationships. How often one hears it said with a tinge of admiration that so and so is a hard task master but you know where you stand with him.

Leader-Man Relationship. The need for good leader-man relationship is as relevant as the necessity for sound interleader relationship. While mutual trust and confidence is the key-stone, good command relations are a creation of the leader and more so of his style.

Sound Organisation. Sound organisation is the basis of effective leadership. Chains of command and functions of key posts must be well defined and clearly delineated; judicious delegation allowing for simultaneous activity and scope for freedom of action must be blended with an effective yet unobtrusive supervision to ensure a fail-safe performance. Much of the routine must be organised into self-conducting activity so that commanders are free to tackle challenges presented by changing situation.

STYLE OF LEADERSHIP

There is need for a functional approach to organisation and a democratic style of leadership. How can this be reconciled with the basic need for steady discipline and unquestioned obedience? On the surface the requirements may appear conflicting. Closely analysed, it becomes evident that these are complementary. A more dependable and enduring discipline is inculcated by an understanding of the needs that dictate certain codes of conduct for the soldier. Obedience is prompt and unquestioned when the necessity for action is well known and the leader trusted. In both cases a reasonable and well accepted leader would have no difficulty in exercising his command functions.

The essence of the functional approach is to organise into homogeneous groups based on the needs of weapon systems and balanced tactical freedom of action. Each group must have a clearly defined leader who is aware of the requirements of the task allotted to his group, the needs of the group as whole and those of each individual. It is inevitable that there would be points of conflict between these three different sets of needs. The leader must then develop the knowledge and skill to resolve these conflicts; keeping in view that the needs of his task are paramount. He must determine and lay down priorities to meet these needs according to the prevailing situation. For instance, after a hard approach march and a successful attack, the requirement of the task is to reorganise the objective captured speedily, while the group as a whole may need rest, and there would be individuals requiring medical attention. The leader must motivate and direct his command to reorganise immediately, regain poise, arrange for medical attention and then replenish and rest. The ultimate aim is to achieve maximum identity of group and individual needs with the task needs.

The essential functions of a leader with regard to the three different sets of needs can be briefly summarised as under :—

- (a) *Task.* The leader must clearly define the task; break it down into tangible objectives; make a viable plan; check and supervise execution; ensure desired quality of performance; review progress and adjust plans where necessary and ensure timely completion of task, despite the problems encountered.
- (b) *Group.* The leader must foster a group identity by setting individual and collective standards; identify himself fully with his group; select and train sub leaders; inculcate a sense of purpose and maintain discipline; train, motivate and build up team spirit; encourage free and useful interaction within the group and promote a tradition of success.
- (c) *Individual.* The leader must ensure that the basic needs of each individual are adequately met; ego and emotional needs of belongingness, status and recognition are ministered to; ample scope is provided for creativity and achievement and the need for security, safety and survival is rationalised.

Democratic Style. In suggesting an increased democratic content in the exercise of leadership, it is not intended that there be watering down of the authority essential for the peculiar job requirements in the Armed Forces. Such executive authority as is necessary must be preserved and where needed, enlarged upon. What is advocated is the softening of personal and institutional authoritarianism for which there is considerable potential in the organisational structure. Essentially, being democratic implies that the leader consults before he comes to a decision and commands when implementing the decisions or facing a crisis situation. The

consultation by no means should suggest a decision by consensus. It is primarily a process of increasing the content of willing participation while reducing any sense of coercion. Throughout, however, the leader retains the capacity and option of making the decision which would further the aims of his command. Another essential ingredient of the democratic tone is the quality of personal example set by the leader. The leader must conform to the code of conduct that he sets for his subordinates; never arrogate to himself ease, comfort or advantages not enjoyed by his command as privileges of his office and willingly join his command in all dangerous, hard or unpleasant tasks. In fact his capacity to intervene personally during crisis situations, full of life hazards, must be an enduring refrain in the exercise of leadership at all levels of command. A platoon and company commander, who exercises direct command must adopt a "follow me" style of leadership most of the time, but particularly so in hard and dangerous situations. A battalion commander must be a happy blend of conceptual, directive and a follow me type of leader. Brigade and divisional commanders must be prepared to intervene personally during crisis situations and even otherwise, frequently share the hazards of front-line fighting with their troops. Above this level, besides conceptual direction, presence of key senior commanders with formations and units is essential for executive assessments, for organisational build up and to accord recognition and appreciation.

Priorities of Leadership. A military leader must constantly train and motivate his command to achieve and retain professional excellence. He must at the outset establish mutual confidence, and create an identity of organisation and purpose. Forging of a well oiled routine will enable day to day problems being tackled with the minimum of leadership effort. His primary effort should be directed to build up a sound organisation, particularly a smooth and effective command channel ; to determine critical areas of training both individual and collective ; organise and conduct need and priority based training imaginatively oriented to the specific object of readiness for war ; determine the legitimate needs of the group and the individuals comprising it and ensure that these are met ; determine the key elements of group and individual motivation and ensure that it is maintained at a satisfactory level and as the ultimate objective of his exercise of effective leadership, develop a battle winning elan and a tradition of success.

CONCLUSION

Leadership in the Armed Forces must be designed to function effectively under the stress and strain of war. Both the organisational structure and the style must cater to promote quick decision making

at the highest level and dynamic implementation down the chain of command. At all times the decision making must be a consultative process and the theme of an operation shared above and below. As important as the requirement for a centralised authority, is the need for elbow room at all levels which permits requisite freedom of action and exercise of initiative. Human intensive as the forces organisations are, the style and practice of leadership must be fully responsive to the legitimate needs of groups and individuals. There is inevitably a high premium on the development of mutually satisfactory relations between leaders and enduring confidence between the leaders and those they lead. Through institutional as well as traditional steps, the subjectivity of personal opinions must be eliminated from evaluation of performance. In the final analysis in all human equations, and more so in the Armed Forces, the initiative to resolve conflicts and to build up a sound organisation lies at the top of the executive pyramid. Exercise of such vast and nearly absolute authority must be tampered with self restraint, deep understanding, and total personal commitment.

Contd. from page 220

world in the United Nations and elsewhere to bring about certain structural changes in the economic world order, so that, the balance of trade becomes equitable and realistic. Also that the inflow of capital for their development is adequate, without strings and on lower rates or interest free. China is not a candidate for such aid, nor herself able to provide it to the Third World. Yet, if China adopts a distinct line in her foreign policy, its position can be of tremendous help in bargaining with the developed nations. China, being a member of the U.N. Security Council and possessing a large Military Industrial Complex, can help to substantiate the bargaining position of the Third World. But in all this to be of any use China must merge herself in the Third World unity since it will not be possible for the Third World to toe the Chinese line. Since the Third World is not a homogeneous gathering of nations it is difficult to imagine a situation in which different countries with diverse politico-economic interests and different levels of socio-economic development shall accept any country as their leader.

First Round Hit in Tank Versus Tank Engagement

BRIGADIER RD LAW (RETD)

INTRODUCTION

Until a few years ago very little progress was made towards improving the capability of hitting a target with the first round fired at it by a tank. In many contemporary tanks, the gun is laid on the target by means of a telescopic or peri-telescopic sight. After the first round is fired subsequent corrections are made by observing the strike of the previous round or by using blind ranging techniques. The probability of the first round scoring a hit is rather low. The hit probability increases substantially with each successive round fired after correction, and by the time the third round is fired, hitting the target becomes almost a certainty. It follows, therefore, that the tank which opens fire first against its adversary, irrespective of the fact whether the first round scores a hit or not, would also fire the second and third round before its adversary. The chances of survival of the tank which fires first are, therefore, considerably more than those of its opponent.

The survivability of a tank will further increase if it is provided with the capability of firing the first round in the minimum time possible after acquiring a target and if the chances of first round scoring a hit can be increased. Conversely, a tank which does not have this capability, will be at a serious disadvantage against one possessing such a capability. Various systems for improving the first round hit probability of tanks have been developed and it is proposed to discuss these in this article.

An improvement in the first round hit probability can also help a tank to overcome some of its inherent weaknesses, which are incapable of being otherwise rectified owing to its basic design inflexibility. As an example, a tank which is inadequately armoured can improve its chances of survival by acquiring a better first round probability.

An improvement in the first round hit capability must be in keeping with the necessity of avoiding over-sophistication and keeping the weapon system cost effective. This is of particular importance to a developing country like India which has to maintain an armoured force with severe financial constraints.

ERROR PRODUCING FACTORS

THERE are a number of factors which can cause an aimed round fired by a tank, not equipped with a modern fire control system, to miss its target. These factors are enumerated below :—

- (a) Estimation of range to the target.
- (b) Cant angle or trunnion tilt of the gun due to the tank being on uneven ground.
- (c) Rate of movement of the target, in the case of a moving target.
- (d) State of the tank gun i.e. degree of barrel wear.
- (e) Characteristics of the gun i.e. jump, drift and droop.
- (f) Ammunition or powder temperature.
- (g) Meteorological conditions i.e. outside temperature, air density and crosswind.
- (h) General characteristics of the tank armament and ammunition such as muzzle velocity, trajectory etc.
- (j) Human errors.

The above factors, other than human errors, are discussed in the succeeding paragraphs.

ERRORS IN RANGE ESTIMATION

In visual estimation of range, despite training, large errors are possible, particularly when engaging targets at longer ranges, i.e. beyond the normal battle range, and in varying conditions of visibility. Range error is the most common cause for the first round not hitting the target. Although, tank guns firing hyper velocity, kinetic energy ammunition can, to some extent, overcome the effect of range error by virtue of their flat trajectory while engaging a tank size target, which will have some height. This is, however, so only upto about 1000 metres or so. Beyond this range the trajectory begins to get steeper.

Various devices have been tried in the past such as range measuring graticules for targets of known height, optical range finders and ranging machine guns. Of these the range measuring graticules are the simplest, but also the least accurate. They can only be used if the enemy tank, on the dimensions of which such ranging graticule are based, is fully visible. Frequently this is not the case.

Optical Range Finders. With optical range finder range can be measured with reasonable accuracy, but the time taken to take the range is fairly long. This defeats the purpose, as an enemy tank would be able to open fire in the meantime and possibly even fire the second round before fire can be

opened after taking the range. In fact, one of the reasons for the success of the Centurions against the M-47 and M-48 tanks during 1965 and 1971 Indo-Pak Wars was this factor. It was often found that before a M-47 or M-48 could open fire against a Centurion, the latter could knock it out employing a blind shooting technique.

Ranging Machine Guns. A Ranging machine gun is used to fire short bursts at different ranges in succession to determine the range before firing the main gun. This method also suffers from the same drawback as optical range finders, but with the added disadvantage that firing of the ranging machine gun may give away the position of the tank before it is able to open up with its main armament.

Laser Range Finders. A more effective device is the laser range finder which can measure range to targets with extreme accuracy almost instantaneously. Such a range finder by itself also involves some delay in opening fire as there is a time lag between the measurement of the range and its application on the gunner's sights. However, this can be overcome by interfacing a ballistic computer, to feed the range data automatically to the sights. This system, which is adopted in modern fire control systems, enables the problem of range estimation to be effectively overcome without materially effecting the gunner's response time.

In most fire control systems, the gunner uses the range finder. When the target has been ranged, the information is injected into the gunner's eye-piece in the form of a read-out. At the same time, it is also fed into the computer which uses the information to solve the ballistic equation. The answer is fed back into the sight where an aiming mark appears and to the gun servos which impart the necessary super elevation to the gun. This entire process takes place virtually in real time.

Sometimes more than one laser echo is received when ranging on a target, for example, if the target is partially hidden, an echo each can be received from the target as well as the cover in the foreground. Similarly, if there are trees or rising ground behind the target, another echo can be received from the background. A simple solution to this problem is for automatic selection of the first or the second echo.

Cant angle. Cant angle has an effect on the accuracy of fire. With a change in the elevation of the gun in a tank which is tilted one way or another in relation to its axis, the azimuth is also disturbed. Conversely, a change in azimuth also alters the elevation. The measurement of cant angle can be achieved by a very simple device i.e. a pendulum moving on a graduated scale suspended in front of the gunner. However, it is not easy for a tank gunner to convert this angle into the necessary correction

for his sights. By feeding the cant angle data into a computer, corrections can be made automatically to the sights.

Target Rate. In shooting against moving targets an 'aim-off' is necessary to cater for the time of flight of the projectile from the weapon to the target. The amount and direction of the 'aim-off' or the lead-angle, depends upon the speed and direction of movement of the target. In the case of a target moving at 90° of the line of sight on level ground, the 'aim-off' is in terms of azimuth only, the quantum depending upon the speed of movement. However, if the target is moving uphill or down hill or moving obliquely to the line of sight an 'aim-off' in terms of azimuth as well as elevation becomes necessary. For a target moving along the line of sight, an 'aim-off' in terms of elevation only is required. It is, difficult for a tank gunner to assess, with any degree of accuracy, the speed and angle of movement of a moving target, and to apply the required 'aim-off'. However, if such a target is tracked by the tank gunner with his sights, traverse and elevation pick-ups fitted in the tank can measure the angular rate of movement and, through a ballistic computer, the necessary correction can be automatically applied to the sights.

Barrel Wear. The degree of wear in the barrel of the gun affects the ballistic performance of the gun. The difference is negligible from round to round but after a time barrel wear has a significant effect. Sensors have been developed which measure the effect of barrel wear and, through a ballistic computer, apply the necessary correction automatically to the sights. A simpler, though equally effective device, is a round counter fitted on the gun which keeps a count of the number of rounds fired. The correction can be made automatically to the sights through a ballistic computer. A more economical but equally effective method is for the crew to manually set barrel wear data on the basis of the quarter or half of a quarter of life in which the gun is at a given time. This information will be known to the crew from their records and can be manually altered from time to time.

Weapon Characteristics. Each gun has certain characteristics in terms of jump, drift and droop and these characteristics remain almost constant throughout its service life. Jump, drift and droop affect the ballistic performance of the gun. Special sensors are available to automatically measure these characteristics and apply them on the sights through a ballistic computer. However, a more economical method is to apply the data manually as and when a gun is replaced on a tank.

Propellant Temperature. Temperature of the ammunition propellant at the time of firing the gun has a bearing on the muzzle velocity, which

in turn, affects the ballistic performance of the projectile. The temperature in the ammunition stowage racks can be determined by placing temperature probes in the ammunition racks and feeding the required data into a ballistic computer which can in turn apply the required correction to the sights. A simpler method can be for the crew to periodically note the temperature in the tank on a thermometer provided for the purpose and set it manually. Normally, within an hour or two of operation, the temperature inside a tank more or less stabilises and thereafter changes are not frequent. It should be sufficient for the crew to reset the temperature setting manually about 2 or 3 times a day.

METEOROLOGICAL CONDITION

Variations in meteorological conditions have an effect on the behaviour of projectiles fired from guns. Conditions which cause variations are as follows :—

(a) *Outside Temperature.* Variations in outside temperature can cause distortions to the gun tube particularly when different parts of it are unevenly heated, e.g., in the case of tank exposed to the hot sun, the top surface of the gun gets direct heat from the sun and lower surface, being in the shade, is cooler. Similarly, when moving under cool or cloudy conditions with the gun fixed in the travelling lock to the rear, the lower surface of the tube, which receives radiated heat from the engine, becomes hotter than the rest. This distortion is usually the cause of a gun zeroed in the cool of the morning mysteriously failing to fire accurately later in the day. A very simple and effective solution to this problem lies in providing a light weight thermal sleeve around the gun tube.

(b) *Crosswind.* A sensor to measure the direction and speed of the crosswind can be mounted outside the turret and data fed to the sights through a ballistic computer. This is, however, only a partial solution because such a sensor can only determine the crosswind at the location of the firing tank. The direction as well as the speed of the wind can be different at other points in the course of the trajectory upto the target.

Furthermore, the effect of crosswind at the firing end would be the minimum as the velocity of the projectile is the maximum when it leaves the muzzle. Additionally, the effect of crosswind on hyper velocity discarding sabot projectiles, due to their high remaining velocity and small cross section, is considerably less than on other types of ammunition. As this type of ammunition is fired at targets which have some lateral width, the deflection of a projectile by a few centimetres by crosswind is unlikely to result in the target being missed on this account. The provision of the facility of crosswind correction in a tank is, therefore, debatable. When firing ammunition other than hyper velocity discarding sabot, i.e. HE, pin point accuracy is not really necessary. Alternatively, a correction can be applied manually by estimation of the crosswind by the tank

commander. This can be done within reasonable limits by attaching a small inconspicuous pennant on the tank.

(c) *Air Density.* The variation caused in the ballistic performance of a hyper or high velocity low trajectory project within direct firing range is negligible to warrant the provision of a special sensor, though some sophisticated systems cater for them.

GENERAL CHARACTERISTICS OF THE ARMAMENT AMMUNITION

These factors are catered for in the design of the sighting system of every tank. When a ballistic computer is used a manually operated selector switch is provided to cater for the different types of ammunition fired from the gun. No system can improve the inherent characteristics of the armament or the ammunition.

THE IDEAL FIRE CONTROL SYSTEM

An ideal fire control system would be one which automatically eliminates all possible error producing factors, except human errors. A few such systems have been developed in various countries. Most of these systems are, however, expensive to the extent that their cost represents a very substantial percentage of the total cost of a main battle tank. Systems of this type, though they substantially improve the first round hit capability of a tank, tend to cease being cost effective. For instance if such a system was to be introduced in a tank like the Vijayanta its cost could even amount to almost 50% of the present cost of the tank. It would be debatable whether to increase the cost of the tank by this extent justifies the operational advantages obtained. It may work out more advantageous to have a larger tank strength and rely on numerical superiority.

Conversely, it can be argued that a tank which has more chances of destroying its adversary would have greater chances of success and, therefore, better survivability. In other words, the wastage rate will be lower, thereby reducing the cost of fighting a war.

A COST EFFECTIVE SOLUTION

It has been seen earlier that the main causes of inaccuracy in tank gun fire are :

- (a) Errors in range estimation;
- (b) Cant angle;
- (c) angular rate of movement of moving targets;
- (d) weapon characteristics;

- (e) barrel wear;
- (f) propellant temperature.
- (g) meteorological conditions.

We have also found that, of these, the first three, which are constantly variable are the most difficult to assess by estimation. They are also the most frequent causes of inaccuracies in shooting. Weapon characteristics are taken into account in the design of all sighting systems and the condition of the armament does not alter from round to round and can be put in manually periodically. Similarly, propellant temperature, once the inside of a tank reaches the normal operating temperature remains more or less constant for a good part of a day. A facility for manual input which can be adjusted two or three times a day can overcome the problem.

Of the meteorological factors a simple thermal sleeve can take care of changes due to outside temperature. A crosswind sensor which is only a partial solution can be dispensed with and other meteorological factors can be ignored. The efficacy of such a simplified fire control system can be seen from Figure 1. It can be seen that by fitting a simplified fire control system the first round hit probability jumps up very considerably. This can be obtained at a reasonable cost with comparatively lesser sophistication. Fully integrated systems provide a little further improvement, but at a very much higher cost.

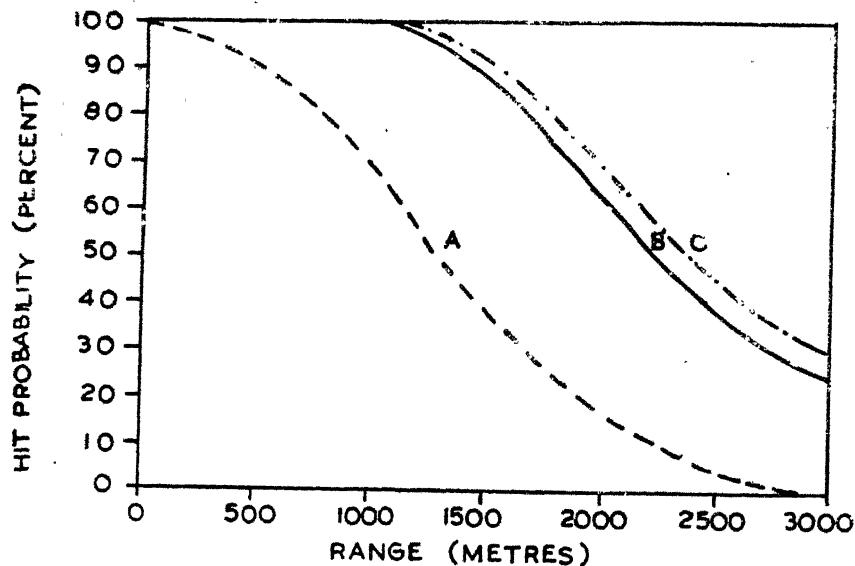


Figure 1: First Round Hit Probability Curves on a Moving Target with 105mm APDS Ammunition

CONCLUSION

It is evident that the survivability of a tank on the modern battlefield increases in proportion to its capability of scoring a hit with the first round that fires at every target. With almost all modern tanks being fitted with some form of fire control equipment, a main battle tank without any fire control system stands a poor chance of survival.

The addition of a fire control system also enables a tank to overcome, to an extent, some of its basic design weaknesses which may otherwise be impossible or impracticable to overcome.

The means adopted to achieve a higher probability of a first round hit must necessarily be cost effective. Over sophistication can often add to the cost without achieving proportionate advantage in terms of performance. For a developing country like ours, the solution is a simplified fire control system which can be provided within a reasonable cost.

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Ex-Servicemen and Small Industries

MAJ GEN TNR NAYAR, PVSM (Retd.)

THE traditional Indian society is currently experiencing the convulsions of modernisation, brought about by the radical forces and aspirations released while attaining political independence. From actual experience, we now know that even two or three decades of planning and education, and preaching and performance have proved to be insufficient to make any appreciable dent in our economically poor, though culturally rich social order, which is overwhelmingly based on agronomics. The peasants (including the trader), the soldiers and the holy men have richly contributed to make our heritage. But, by and large it is the peasants who constitute the bulk of the populace who dominate the Indian society. Their innate desire for security, freedom and power have so far found satisfaction by obtaining ownership of land, and strict adherence to rituals. Modern India is trying hard to bring about a reorientation in our traditional beliefs; but, we have a long way to go to convince a rural person that a bank draft is as good a security as a plot of land, or that many of our customs are really taboos of a bygone age, and as such they would merit modification in a scientific age.

By and large the armed forces have left the onerous task of rehabilitation of ex-services to the goodwill of the civil authorities. True, that many regiments have carried out a modicum of pre-release training, and the set up of the Director General of Welfare and Resettlement has the specific aim of resettling ex-servicemen. So has the All India Ex-Servicemen's League, which has been raised by our first soldier, General K.M. Cariappa. But the indisputable fact glaringly stares at the Services that the majority of the released jawans cannot find suitable employment, and are left to fend for themselves. Surely, this brings discredit to the Services. Even more pertinently, demoralisation and penury of ex-servicemen are bound to have an adverse influence on the morale, discipline and efficiency of the Servicemen in the long run. Hence a closer look is immediately necessary at the level of the Chiefs of the three Services whether they

cannot use their skills, funds and organisational abilities to help the ex-servicemen more effectively.

The new Finance Minister Shri HM Patel, while introducing his annual budget for 1977-78 has given it an unmistakable bias towards village, small scale and consumer industries. Budgetary allotment to village industries has been increased from Rs. 54 to 83 crore, while the allotment for consumer industries has gone up to Rs. 130 crores from Rs. 85 crores. Similarly, Shri HM Patel has given a forceful thrust to agriculture, power and water by placing substantially higher monetary resources for these undertakings. There is no separate provision for job creation, and rightly so. Jobs and employment would depend upon the efficient functioning of various sectors. But, it is one thing giving a bias in favour of small industries by conferring on them preferential treatment and income-tax exemption etc. and another to bring to fruition the hopes bestowed on small industries and other measures. Over 180 products are reserved for small industries. The new Industries Minister has also forcefully made it known that small industries would receive every consideration from the Government. The foremost requirement in small industries is the motivation of eligible entrepreneurs. It is this kind of motivation that armed forces could bestow on suitable ex-servicemen. As a matter of fact, the performance of small industries in India is far from healthy. Many industrial estates and small industries have been started. According to registrations, there should be almost five lakh small scale industries, but, many of them are non-functional, and registered solely to obtain infrastructural and monetary advantages. Well over 10,000 units are totally sick, while very many more are inefficiently performing. There has been organised efforts by SIDCO, IRC, and selected banks to provide assistance to revive many sick units. The successful outcome of their efforts is of vital importance as that may well define the future course of small industries, particularly in rural areas.

The armed forces can provide the lead for rural industries as far as ex-servicemen are concerned. The success of ex-servicemen's enterprises would guide other entrepreneurs as well. Actual examples of sustained success are necessary for others to emulate. It is generally conceded that on an average a small scale industry would give direct employment for about ten workers and indirectly to double that number. In view of the paucity of additional agriculturable land, the immediate future of employment in our country definitely lies in developing rural, agricultural and small scale industries. As it is, only about 20% of labour force is non-agricultural in India. Unless this percentage is radically increased, the pressure on the land cannot be relieved, which is

tantamount to saying that jobs cannot be found and poverty cannot be overcome.

An enterprise, big or small can be considered as an open system interacting with the environment. The enterprise employs men, material and energy from the environment. What does it do? It turns out products for use by the environment, and wastes to be disposed of. It is the skill of men which brings about the desired transformation, and makes human life unique, colourful and satisfying. Entrepreneurship has to have a content of ability and shrewdness which are found in a resourceful military leader. For it is the entrepreneur who courts risks, and displays the non-definable dynamism or life-force so essential for an enterprise. An entrepreneur ought to become a total person—for he has to obtain from other employees their whole-hearted co-operation, and not just limited outputs. His role is limitless, and far above any manager's. Unless the entrepreneur has faith in rural society, and in its beliefs, philosophy and culture, he cannot succeed in his enterprise, however brilliant a technocrat he may be. He should always remember that his workers have peasants' outlook and aspirations. More than in corporate sectors, in small industries man-management is of prime importance. I would say that an entrepreneur should be humane and fair in his treatment of customers, creditors, suppliers and workers, to succeed in small industries. The entrepreneurs' personality will have a direct impact on the quality as well as the quantum of his business. Such need not be the case in large-scale industries, where organisational pulls tend to play a more decisive part. The entrepreneur should be good in decision making. A business decision is not a guesswork, but it comes after detailed study and earnest attention of the job in hand. His integrity, trust-worthiness, and judgement must be beyond reproach. Otherwise he will not be able to sustain his business for any length of time. The rural people have an innate ability to distinguish the bluffer!

Small scale industries are not difficult to start. Normally money is not a restraint. As a matter of fact, with about 10% of the required capital, these days a pushing entrepreneur could start and run an industry. What is required for success is the know how of the particular business which would actually be possible in the location, and an expertisation in marketing trends, particularly concerning the locality. As far as possible small industries should confine their activities within the district they are located and its neighbourhood. This will make packaging, freightage and advertising less expensive and their products less costly. Without economical functioning an industry will not be able to flourish for long. A normal tendency seen is to pay undue attention to immediate monetary gains and become rich too quickly. Small industries are not suitable

for such an approach, i.e. to get rich quickly. It is of considerable importance to steadily keep on improving, by planning and modernising. The per capita output of small industries would be smaller than the capital oriented big industry. Both the management and labour should realise this limitation, and maximise production. Otherwise small industries would have to bear considerable strain due to competition. But small industries have other advantages in lesser depreciation, cheaper packaging, lesser freight charges, advertising, overheads and financing.

The absence of necessary inputs would lead to the closure of an industry. Industrialists—big and small, are living in a competitive world, and just to retain one's position one has to keep on running faster all the time! Otherwise, others would overtake one without any pity. Thus, we see the necessity to evolve a working equation with local environment, as a prime condition for small industries to succeed. The importance of selecting an industry viable in the region where it is being located has not yet been fully realised by many entrepreneurs. A correct decision at the outset would make matters easy throughout.

An explanation about the social responsibilities of the entrepreneur is called for. These days, major industrial concerns have developed both, corporate citizenship with an identifiable image, and a personal style of functioning. They have even got their social objectives well established. It is more important for small industries to develop a helpful and humane attitude towards local inhabitants. The ex-serviceman entrepreneur should constantly bear in mind the welfare of his employees and partners/shareholders. While this aspect is normally remembered, one tends to forget that he has to keep the consumers and the suppliers happy as well. The latter need is equally important, as finally it is these people who have to support a small industry. The good-will of the consumers would be there if quality is maintained, delivery schedules are promptly kept up, and the price is not enhanced too much! The local community should be made to feel that their small industry is a local institution and the pride of the place. On his part the entrepreneur should remember that a ship is much more than the crew, and that a game is more than the players in the team. Similarly, a small industry is much more than its management and workers. It has got moral and social responsibilities which should not be lost sight of. Normally it is those entrepreneurs who take liberty with this philosophy, who get into trouble.

The policy of the Government is to increase the number and scope of small industries, with a view to solve unemployment and other problems. My suggestion is that Regimental Centres and similar establishments should be specifically charged to form Advisory Boards for Ex-Servicemen, on a zonal basis and raise small industries. A small capital amount and

some recurring annual contribution, primarily for the expenses of the Board may be sanctioned. In the Board selected retired officers, JCOs and suitable advisers should be included. One of the main jobs of the Board is to help the ex-soldier to select a suitable industry where he wants to settle down and reduce his paper work. I realise that Centre Commandants etc. should not be encumbered either with detailed work, or financial responsibility. I feel confident that a proper organisation could be evolved in which a suitable 'cut off' arrangement could be built in to cater for the requirements and discipline and financial safeguards of the Centre. To start with, at any rate, only selected ex-servicemen need be inducted into this Scheme.

For such arrangements to succeed, as far as possible ex-servicemen should participate in a small industry, as soon as he is discharged. At that time, he is still disciplined, amenable to motivation and would have some money of his own to invest. This, in turn, would mean that the Regimental Centre's Ex-servicemen Board should have a fair number of schemes ready. This pilot work should be undertaken by Directorate General of Welfare and Resettlement in conjunction with the All India Ex-Services' League, both of whom have branches all over India. At present 2,400 products, with a total output of Rs. 5,700 crores are being manufactured in small scale sector. Surely the ex-servicemen could find acceptable items for manufacturing in whatever zones they are intending to settle down. What is needed is detailed preliminary work and comprehensive preparation of project reports and imaginative follow up action.

Charity begins at home. Let the Services show their flexibility, boldness and resourcefulness which are called forth by the challenging times in which we live. In the bygone days services had fought for the allocation of land to ex-Servicemen. In the modern age let the fight be taken up to provide ex-servicemen with a respectable employment in rural and small industries.

Counter Attack

LIEUT COLONEL JN VIRLEY

INTRODUCTION

DEENCE is adopted to prevent enemy penetration into areas of ground essential for the conduct of operations, absorb his momentum of attack, blunt his superiority, inflict maximum casualties by a process of attrition and reduce his offensive capabilities until we are capable of assuming the offensive.

Defence has to be offensive in nature, if the above has to be achieved. At no time, a feeling of defeatism and trench/bunker based defence should be allowed to creep in the minds of the defender. Ditch cum bund, concrete bunkers and all other obstacles, artificial or natural, are just means of blunting the enemy onslaught, slowing him and inflicting casualties. But at no time one can produce a defensive position where no penetration is possible by the enemy. Penetration has to be accepted in the defences at all levels, but the same has to be neutralised by offensive actions by the defender.

Defence must be active and aggressive, so as to foster a feeling of superiority over the enemy. This can be achieved by active patrolling, ambushes, limited offensive operations and counter attacks.

Well planned, coordinated, executed and successful counter attacks are the hallmark of any defence. It brings back in the psychologically depressed defender a sense of superiority, faith in their leaders and fulfilment of desire of revenge, having given in earlier, which is one most important factor in motivating the defenders to give in their best.

Counter attacks have remained hitherto, like an unplayed symphony of a maestro (defence) yet talked about a lot. Counter attacks have been launched even in the very primitive wars, possibly even before wars came into being. A cat when cornered and in danger, attacks even the most ferocious dogs or animals as a last resort. Weaker men, societies and armies have done the same, if their honour was involved and the same was priced as the most important aspects of their lives. No proper concept has been evolved so far for counter attacks. Even though it may be in the minds of our tacticians but nothing is found on paper about the concepts. The aim of this paper is to evolve a concept for counter attacks, both local and deliberate in a divisional sector. The study is confined to the terrain obtaining in the plains of Punjab and the deserts of Rajasthan.

This paper is being discussed under the following headings :—

- (a) Definitions.
- (b) The present concept.
- (c) New technological advancements and their effects.
- (d) A new concept—General.
- (e) Concept for Punjab.
- (f) Concept for Rajasthan.
- (g) Conclusion.
- (h) Summary of recommendations.

DEFINITIONS

LOCAL COUNTER ATTACK

An attack launched by a unit or sub unit commander, to destroy or evict local enemy forces which have penetrated or threaten to penetrate into his defended area/locality. It is planned and coordinated during the preparatory stage, but no reserves are earmarked or held for the same.

Emphasis is on destroying or evicting the enemy before he has a chance to reorganise himself fully on the captured area.

Point to note is that it is organised at unit or sub unit level and from within the resources available.

DELIBERATE COUNTER ATTACK

It is a planned and coordinated attack, organised by a formation commander, to achieve the same results as in local counter attack, employing his reserves.

Here the emphasis, is on reserves, but seldom, it is seen that at divisional level or below, infantry is earmarked as reserve for counter attack which is uncommitted.

At present, all the infantry, normally, is employed to cover the likely enemy approaches and are deployed on the ground. It is only the armour that is held and earmarked as reserve for the above task.

DIFFERENCES BETWEEN LOCAL AND DELIBERATE COUNTER ATTACKS

Roles. The local counter attack is purely a unit or sub unit matter and in most cases has no great effect on the formation defensive battle. On the other hand, the success or failure of a deliberate counter attack will determine the result of the formation battle and failure may well lead to a major break-through by the enemy.

Speed. While speed in launching a counter attack is more essential, the lower the level is, it is none the less a major factor in ensuring success at any level. Local counter attacks take, comparatively, much lesser time than deliberate counter attacks.

Supporting Arms. The lower the level, lesser are the chances and resources available for close fire support. In a deliberate counter attack, it is most essential to have the maximum possible fire support, from all available means, to balance the launching time lag and to compensate for lesser force being launched.

Ground Holding Responsibilities. At battalion and lower level, all sub units are given the primary role of holding ground, as there will be little if any ground which is not of tactical importance in the forward defences. At formation level, the counter attack force, specially armour, is free of any ground holding role, deliberate counter attack being its primary task.

Armour. Due to the inherent characteristics of armour, in the plains, it is boldly used in deliberate counter attacks, whereas due to paucity of the same, it is hardly ever available for local counter attacks at unit or sub unit level.

Quantum of Troops. Because of its importance, the quantum of troops employed in a deliberate counter attack are much more than in a local counter attack.

THE PRESENT CONCEPT

The counter attacks are launched with the following aims :—

- (a) To stop further penetration of the enemy or to take back the ground of tactical importance or the vital ground if lost.
- (b) To annihilate the enemy in the penetration zone and re-establish the defended sector to its original shape.
- (c) Due to political constraints, to recapture any piece of territory lost to the enemy.

Any commander who undertakes counter attack as a means to gain the lost ground also achieves the following :—

- (a) Gains confidence of his subordinates.
- (b) Raises the morale of his men.
- (c) Imbibles in his command, the spirit of revenge.
- (d) Clearly indicates to his adversary that he means business and has the means to accomplish it.

All these aims and the plus points mentioned above, are achieved if

the counter attack launched, succeeds. Hence no commander, worth anything, should ever venture on this unless he has planned it well rehearsed and ensured success.

PREREQUISITES

The following are the prerequisites for launching a counter attack :—

- (a) The leading troops have fought effectively, blunted the attack and inflicted casualties on the enemy by the process of attrition.
- (b) At division level, the counter penetration force has been launched and they have effectively absorbed and halted the momentum of enemy attack. At lower level, sufficient steps have been taken to contain the penetration.
- (c) Enemy reserves have either been launched and thus fully committed or have not been launched into battle and can be delayed by air or long range artillery till the counter attack goes in.
- (d) If the enemy is not thrown out and blunted at the correct time, the defences may completely crumble without much extra fight.
- (e) The enemy is not given a long enough pause to consolidate his captured areas and reorganise.
- (f) Commander has read the battle correctly and is sure in his mind firstly, where the main thrust of the enemy is, and secondly, the counter attack on this main thrust stands a fair chance of success.

TIME

Decisions to launch counter attacks are taken by commanders :—

- (a) at brigade and lower levels, when the enemy is still fighting in the forward defended localities;
- (b) at divisional and above levels, when fighting is continuing in the forward battalion defended areas and enemy's main axis of assault becomes apparent.

After the enemy has penetrated with infantry across the laid/natural obstacle, which a determined enemy would always do, it is very important that enemy armour should not be allowed to join up or his reserves allowed to marry up, before the counter attack is launched.

TROOPS

Troops employed for counter attacks are :—

- (a) Armour, earmarked as reserve. It is generally a squadron at brigade level to a regiment less a squadron at division level.
- (b) Infantry holding ground but earmarked and depending on the situation, different permutation are worked out with armour. Infantry element is normally a battalion at divisional level but committed on ground.

PLANNING

Counter attack plans are worked out after defences have been organised. Because of the set pattern of positional defence, no significant changes are accepted in defences to accommodate the counter attack plans. We seem to stress more on fighting the last man the last round; which does not in any way foster an offensive spirit or a dynamic defence.

RESERVES

Because of all infantry committed on ground and no reserves, different contingency plans are worked out using same armour with different infantry units/sub units for the counter attack tasks nominated. For each plan, however, detailed orders, coordination, fire plan and rehearsals are carried out.

OBSTACLES

It is only while laying and planning obstacles that counter attack axes are given due consideration and gaps/lanes catered for.

NUMBER OF COUNTER ATTACKS BY SAME FORCE

At brigade level and below, only a maximum of one counter attack, which may or may not have been planned, is launched. At divisional and higher level, with the reserves specifically earmarked, a maximum of two deliberate counter attacks are launched, not simultaneously, using same armour but different infantry.

DRAWBACKS

The present concept has the following drawbacks :—

- (a) Infantry is not held as reserve, but is committed to hold ground.
- (b) The counter attacks are launched with inadequate troops whose primary task is something different.
- (c) Because of shortage of armour, it is very difficult to concentrate it, due to numerous commitments for the same in defence.
- (d) With the advancement of Science and technology, breaching of obstacles have become much easier and quicker; mobility of forces and destructive capabilities of modern weapon systems have increased considerably, yet the concepts and techniques of counter attacks have undergone no significant change.
- (e) The concepts of counter attacks are not clear cut.
- (f) Counter attacks are planned to be executed when vital ground is lost or about to be lost. If we are to wait that long, it may be too late. Once vital ground is lost, defences are compromised and the defender

is incapable of fighting a successful defensive battle. Enemy knowing this will ensure adequate protection while tackling the same.

(g) Local counter attacks at unit or sub unit levels are not well co-ordinated and are mostly launched to capture insignificant areas lost to the enemy.

(h) Time taken to launch the counter attacks is appreciable, as committed troops are lifted and then launched.

(j) By the time, the counter attack stage comes, most of the defensive battle is already over and morale is low, thus success is extremely difficult to ensure.

(k) At brigade level only one and at divisional level two counter attacks can be launched and that also one at a time. At battalion level, it is always launched with inadequate troops.

(l) The very basis of planning of defence is to ensure trench based warfare and counter attacks and other offensive actions are always after thoughts.

NEW TECHNICAL ADVANCEMENTS AND THEIR EFFECTS

GENERAL

Some of the technical advancements which have brought about significant changes in tactics in defence and attack operations of war, with particular reference to the counter attacks, have been discussed in the succeeding paragraphs.

DEFENCE

Obstacles. Obstacles are laid, to strengthen the defences, along likely enemy approaches. Mines are one of the most common means used to delay, harrass and inflict casualties on the enemy. Canal and ditches are some other, which are of more permanent nature. Mines have always been used in the past, but the modern techniques of laying them have improved considerably. Mines themselves have been made much more destructive and effective. It is increasingly becoming more difficult to detect and neutralise mines. Aerial, artillery shells and even mechanical mines layers are commonly used to lay mines, which give greater flexibility to the defender. In counter attack plans, the defender has to leave gaps for the force to be launched through, without casualties.

Surveillance Devices. With the introduction of new and effective surveillance devices, it is becoming very difficult for the attacker to surprise the defender and concentrate large enough force, early enough, for any decisive results. Use of radars, image intensifier, television, infrared and such electronic devices are making darkness no longer an effective cover. These devices help defender to obtain early and timely information regard-

ing enemy moves and concentration. Enemy can, however, still choose the time and direction of attack by concentrating well back and moving only at the last moment. Moreover, electronic counter measures are also being used by attacker to mislead the defender.

Fire Power. New weapons have been invented and old ones modified to become much more destructive and effective at the same time. Long effective ranges of weapons have made close reconnaissance very difficult. Weapons are lighter and with the use of electronic devices, can be used effectively at night. This has resulted in the concept of holding ground by fire more than by physical occupation. Yet in our context, because of lack of sophisticated equipment, possibly, we still lay emphasis on physical occupation with smaller frontages. Gaps between defended localities and areas are more mainly because of shortage of troops rather than due to effectiveness of weapons. In counter attacks more concentrated fire support would be required to neutralise the enemy penetration and thereafter throw them back by physical assault. When enemy has penetrated own defences, it may even be possible to make his stayingput there extremely difficult by effective and concentrated fire support.

Mobility. With the introduction of armoured personnel carriers fast moving tanks and helicopters, tactical mobility of the Army has increased considerably. This mobility is very significant to note as far as movement of reserves is concerned. Reserves move faster and are able to reach their objective much quicker than earlier. This, then gives much lesser time for the attacker to reorganise before the inevitable counter attack. Mobility is equally applicable to the attacker, but where the defender has an edge, is that the attacker has to breach the obstacle before bringing up supporting arms and tanks, and this is the time, in which, the defender with mobility has a chance to neutralise the penetration. Due to a good network of roads in Punjab, mobility has been enhanced, but the same is not true for the deserts of Rajasthan.

ATTACK

Obstacles. Race between mine laying and mine breaching is very old and it continues even today. The attacker tries to breach it with the help of new mechanical and chemical means. The urgency being to reduce the time lag between the assault echelon and the bringing up of reorganisation stores. This time lag has been reduced considerably, and in case the defender delays his counter attack, the attacker will be able to meet it, well prepared. New types of light bridges have been invented, which take comparatively much lesser time to construct over dry ditches or water obstacles. All these innovations are meant to allow the attacker to withstand a counter attack. Use of helicopters in this regard cannot

be ignored in the foreseeable future. Use of amphibious and wading tanks have reduced the chances of attacker loosing the bridgehead. Use of anti-tank guided missiles, which can easily be manpacked, gives the attacker, the anti-tank capability which is desired, during day time. Third generation anti-tank missiles are not out of our reach and these will give us the night fighting capability as well. The question is then what are chances of a counter attack succeeding. It will still be the shock and bold action over own known ground which would help the defender to achieve success.

Fire Power. Because of the initiative and superiority of fire power, at a given point, the attacker can neutralise the enemy effectively. Attacker even has the capability of isolating the area by fire support till defences are coordinated. Defender again has to use the knowledge of ground to its advantage and press on his counter attack with determination and boldness.

Mobility. New equipment and techniques have been developed to increase mobility of forces. These include all the equipment used for mine breaching and new types of light bridges. Coupled with these are the modern modes of transport themselves, which have given greater mobility to the attacker. Mobility is a relative term and is also applicable to the defender.

Air. Air has started playing a dominant part in the progress of battle specially during day time. This is, in the form of close air support and reconnaissance. No significant operations can be undertaken during daytime without first achieving a favourable air situation. Helicopters are being used for movements of troops, into or near the battlefield. Days are not far when air will be used to one's great advantage even at night. In case attacker has been delayed in its execution, and is unable to cross over armour before first light, then air can be used in conjunction with counter attacking forces to neutralise the bridgehead.

Night Fighting Capabilities. With the introduction of infrared devices, image intensifiers laser and such other equipment, nights are no more than mere cover from the air only. Tanks, guns and small arms can be used at night with the help of these devices and also with the help of numerous flares available. Unless the attacker makes an attempt to neutralise the electronic measures of the defender, the defender will be able to find out exactly which is the main thrust and which others are subsidiary and feints.

Administration. With all the sophisticated equipment, the administrative backup is equally more complex and difficult. Without proper administrative backing, no significant operation can succeed. This aspect requires special attention both in attack and defence.

A SUGGESTED NEW CONCEPT—GENERAL

The new suggested concepts of counter attacks are being discussed separately for the plains of Punjab and the deserts of Rajasthan as the physical characteristics of these are different. It is essential to study in very brief the characteristics of terrain available in Punjab and Rajasthan, before a constructive and analytical study of counter attacks can be undertaken. This has been discussed in the succeeding paragraphs. It is also important to spell out the basic considerations before the technique is discussed. This aspect has also been discussed after terrain discussion.

TOPOGRAPHY OF PUNJAB

The plains of Punjab are plain and extensively cultivated. Crops are generally quite high specially of sugarcane when nearing ready. The area is highly developed and is served with a vast network of means of communication. It is criss-crossed by a well planned network of canals and in some places ditches have been constructed to facilitate defence of own territory. Canals and ditches provide a formidable obstacle for tanks and vehicles unless bridged. Varying of water level by the defender poses serious problems to the attacker for bridging the gap. A large number of the canals along the border are defence oriented, like across the border Pakistan has developed Ichhogal Canal and the like. The area is densely populated with mostly brick and masonry houses in villages. Build-up areas provide good defensive positions. Movement of troops is very easy because of network of roads. The defender has to pay particular attention to the large number of bridges if these have to be denied to the enemy. Operations are going to be confined to period when there are no rains and also during winter time as the summers are treacherous. The best period being from September to March. The terrain on the whole favours the defender because of innumerable artificial and even natural obstacles.

TOPOGRAPHY OF RAJASTHAN

It is a vast arid and waste land with little vegetation and is sparsely populated. It contains the old stabilised sand dunes in the East, which are stationary and the rolling dunes in the West, which are still in the evolutionary stage and hence keep shifting. Movement of wheeled vehicles, across dunes and over vast tracks of shifting sand is extremely difficult. Going maps are a must.

The area contains sand dunes and hills of weathered rocks. No cover of any significance is available. Means of communication are

lacking which poses a great difficulty in logistics. With careful reconnaissance, tactical cross country moves are possible.

Because of very negligible rainfall, there is acute shortage of water and hence vegetation. The heat of summers saps the energy of the soldier and increases his water consumption. Sand storms, frequent in summers, reduce visibility. Visibility is good during starry and moonlit nights thus making operations both for attacker and defender easier. The dust raised by vehicles is visible at long distances even at night. The best period for operations is again from September to March.

BASIC CONSIDERATIONS

Some of the points which must be remembered before launching a counter attack are as under :

- (a) It should be launched as a result of a considered appreciation and not just an automatic action.
- (b) Reinforcement or readjustment of positions should be considered.
- (c) It will denude the area of troops, once counter attacking troops are lifted, in case no reserves are kept.
- (d) It must have a fair chance of success under the circumstances prevailing when the decision is taken.

Quantum of Troops. Counter attacks must be launched with sufficient strength to ensure success. If a battalion defended area is attacked, the enemy will use a minimum of a brigade. Even if enemy suffers about 20 to 30 per cent casualties, there will still be about two battalions of the enemy on the objective if allowed to consolidate. The defender brigade commander has option of attacking with the reserves available with him and aim at the most dangerous and sensitive area or wait for the divisional counter attack force to be launched. Whatever the level may be the conventional 3 : 1 superiority cannot be achieved. Also it would be unbecoming of a commander at any level to pass the 'buck for someone else to handle. Counter attacks must be launched starting from company level, right upto Corps and army level. All will have their own objective depending on their levels. It would be quite prudent, to employ the same quantum of force to counter attack which was there on the objective, before it was captured by the enemy. To compensate for the numerical disadvantage, some balancing factors which can be used are as under :—

- (a) *Armour* in assault role.
- (b) *Surprise.* The element of surprise is gained by speed in launching the counter attack.
- (c) *Support.* Use of all available fire support including air, without causing delay in launching the counter attack.

Direction. Direction of attack, about which the enemy keeps guessing, requires due consideration. From the most vulnerable and weak flank, if counter attack is launched, it will ensure a superiority of atleast 2 : 1 at that point and thus adding to the probability of success. At times, commander would be well advised to choose the objective in the centre of the intrusion or the bridge-head of the enemy, thereby divid-ing the enemy force into two and allowing the remaining bridgehead to be neutralised subsequently. Use of surveillance devices in this respect will be most useful to determine the exact number of enemy troops.

Timings. Due to the imponderables after the assault, enemy will take some time to reorganise. The correct time to launch a counter attack is, when the enemy has suffered casualties, is looking over his shoulders for his reserves to fetch up and is still not gone to ground or dug in. Advantage must be taken of this situation and counter attack launched when the enemy is suffering from the following more disadvantages :—

- (a) Confusion due to leaders becoming casualty.
- (b) Attacker being on unfamiliar ground will be exposed.
- (c) Enemy suffering from the psychological effects due to the ordeal of the assault and the inevitable counter attack.
- (d) Isolation for a while, after having assaulted across the obstacle laid.
- (e) Having only limited, if any, close support weapons available.

Reserves. Reserves must be held or created at all levels if possible. Reserves foster a feeling of confidence and offensive spirit. The very fact that reserves are held, the commander must earmark them for offensive tasks and counter attacks.

Fire Support. To compensate for numerically smaller counter attack force, concentrated fire must be brought to bear on the objective. This will include fires of small arms, tanks, artillery and air. But to trade sufficient superiority of fire support with time, would be foolish and disastrous.

Rehearsals. In counter attacks, the intimate knowledge of ground pays handsome dividends to the defender. Further, to reduce the time lag in launching a counter attack, rehearsals are most essential. Some of the other reasons for carrying out rehearsals are as under :—

- (a) To ensure that all troops taking part or in support of a counter attack, are aware of their tasks, the signals to launch the counter attack and the routes by day and night.
- (b) At higher levels, to practise the integration of the fire plan with the movement of assaulting troops.
- (c) To test under local conditions, all communications and control

systems with a view to improving both their efficiency and simplicity.

(d) To practise simple battle drills and techniques which will assist in saving time in launching the counter attacks.

CREATION OF RESERVES

General. In all our teaching, and thinking we only stick to the conventional way of taking up defence. We have been so dogmatic in the past that the so called 'flexibility' has only academic value to be talked about but not practised. Time has now come when the conventional methods and tactics may not succeed as much as they did in the past. In future wars, new techniques and tactics would achieve successes beyond recognition. In a given situation in defence, if the commander can somehow create reserve, it would solve a lot of problems and also ensure flexibility.

Reserves for Local Counter Attack. To illustrate the above point, if we take an example as given at Sketch P, we find that the battalion commander normally likes to go in for a box/rectangular type defended area. This type of defence allows a two companies frontage to be presented to the enemy, from whichever direction he may choose to attack. Similarly, in the case of a brigade defended sector, as shown at Sketch Q, we find the conventional two up defences. In these types of defensive position it will be seen that commanders at all level make large number of contingency plans to deal with different situations, with the troops deployed and no reserves held. Cry is always that no infantry reserve is available. Let us critically examine, as given below, if with some modifications or changes, it is possible to create reserves within the resources available :—

(a) In a battalion defended area, in most cases, when three company localities have been lost and a local counter attack launched, the fourth company locality is left with very limited defence potential. In the example given at Sketch P, it can be seen that when either A, B and C or A, B and D have been lost, after a counter attack, the localities at D or C, respectively have limited or no defence potential left, as only one platoon may have been left and the remaining company used to counter attack.

(b) Similarly, in the example given at sketch Q, of a brigade defended sector, if six company localities are lost and counter attacks have been launched, it would be very difficult for the remaining two companies in the forward battalions to give any appreciable fight.

(c) Let us now see a new method of deploying our companies in a battalion and battalions in a brigade. If we were to base the battalion defended area on three company basis, then one company will be available to the battalion commander for counter attacks. In the example given at Sketch R, we see that in Areas X, Y and Z,

D, H and M companies are available, respectively, to the battalion commanders as reserve. This would mean :—

- (i) No adjustment of defences ;
- (ii) Commanders at all level will have the opportunity of regaining lost ground by using their reserves, as no troop lifting is involved ;
- (iii) A great morale booster for the defender as reserves are available at hand ;
- (iv) In case, the three company concept of a battalion is introduced in the Army, it will not involve an altogether new concept.
- (d) The new concept of defence will allow commanders to launch counter attacks as and when the need arises.
- (e) Some other offensive actions can also be undertaken by commanders, with the reserves available now.

Reserves for Deliberate Counter Attacks. Let us now see, if it is feasible to create infantry as reserves at divisional level :—

- (a) If the vital ground is in depth, then loss of the same would be too late for the defender to react. What, if we prepare the defences on the vital ground but leave it unoccupied and cover all possible approaches to it as we do now ? These prepared positions can be occupied subsequently, by troops falling back from forward brigades. This would mean that once the battle is joined at the vital ground, all approaches are covered by fresh troops : vital ground is occupied by troops already fought an action, possibly the battalion not involved too much in the initial battle and yet a battalion is available to the Divisional commander for offensive tasks, uncommitted.
- (b) In our teaching and also in application, one finds that the Engineer Regiment once free from their engineer tasks, is given the responsibility of a particular sector in depth which is least threatened. On a closer look, one finds that an engineer regiment possesses a fair number of light machine guns (quantity 43) and sturm grenade rifles (quantity 24), which are by no means insignificant fire power. With some extra fire support allotted, they can be grouped as the third unit of the depth brigade. This again would give us an infantry battalion as reserve uncommitted.
- (c) Lastly, though it may sound absurd initially, is the idea of making one of the forward battalions, which has fought an action earlier, as the mobile reserve. Don't we use a force second time during an offensive operation ? A force which has suffered casualties, defeat and whose morale is low, if given an offensive task, can and will raise upto the occasion and produce goods. This, to my mind, is the best way to boost up their morale and give them an opportunity to take revenge. This means of creating reserves could be resorted to in case the fresh infantry reserves are committed and a second counter attack task is to be undertaken.
- (d) All reserves thus created must be mobile, if they are to succeed.

Armour as Reserve. There are numerous tasks for this regiment in defence. Starting from covering troops, screens, flank protection, special mission, they land up in the defences doing anti tank role, counter penetration, and counter attacks. With the introduction of anti tank guided missiles, tanks have been free to do their traditional mobile offensive tasks. It is desirable to give a squadron each to the two forward brigades. This then leaves only one squadron as divisional reserve initially. With the remnants of the forward squadrons, it may be possible, at any one time, to form a regiment less a squadron as the Divisional reserve. There is a requirement for atleast another squadron to be made available to the Divisional Commander for offensive tasks and counter attacks.

I have suggested some of many ways by which reserves can be created. It would largely depend on the ground, tasks allotted and the enemy threat that a commander has to find the best via media. There cannot be any scope for discussion, however, for the offensive nature of any defence in Punjab and Rajasthan. We have to change our thinking from defence to offensive defence.

CONCEPT FOR PUNJAB

In the plains of Punjab, there are numerous water obstacles and artificial ditches created. Defences are mostly based on these obstacles. However, defences on communication centres, tactically and nationally important places are also taken. The concept discussed here for counter attack is confined largely to defences based on canal or ditch-cum-bundh.

It would be quite prudent to see, in very general terms, the pattern of offensive which would be adopted by Pakistan in Punjab.

PATTERN OF ENEMY OFFENSIVE OPERATIONS

The aim of the enemy is likely to be secure on adequate lodgement across the obstacle and pushing forward, sufficient armour for its protection as early as possible, after commencement of operations, with a view to subsequently inducting his armoured and mechanised forces into the bridge-head for the breakout. The enemy is likely to make an endeavour to achieve his aim before first light so that our air does not hinder his furtherance of the operations in a restricted area.

Bridge Head. At a brigade level, the lodgement desired initially would be approximately 1000 by 200 metres which would subsequently be enlarged to approximately 3000 by 1500 metres to enable the engineers to start bridging the obstacle. At a divisional level, the lodgement desired would be at least at two places employing a brigade each, of the same dimension as mentioned above. These bridgeheads may be in the same brigade sector or in two different brigade sectors.

Pattern of Operations. Enemy is likely to have two options. Firstly, to start his operations by afternoon or evening, push back the early warning and protective elements deployed ahead using armour and infantry, establish a lodgement during early hours of the night, bridge the obstacle after breaching the minefield, and have enough time during hours of darkness to induct armour and mechanised forces. Secondly, he may spread this operation over two nights, by pushing the troops deployed ahead of the obstacle during first night and establish the bridgehead and induct armour the second night. Enemy is likely to contact the obstacle on a wide front and then try and establish the desired number of bridgeheads to ensure success atleast at one or two places.

PATTERN OF OWN DEFENSIVE OPERATIONS

The aim of the defender is to neutralise all penetration depending on its size, quantum of troops employed and the area choosen by the enemy. Defender is most sensitive to the breaches which are likely to be used by the attacker to build bridges and hence he aims at neutralising/eliminating these before the first light. The infantry bridgeheads, where there is no likelihood of a bridge being constructed, could be dealt with subsequently even during day light.

Pattern of Operations. Because of linear nature of the obstacles, troops are deployed mostly in a linear fashion where the units and sub units occupy extended defences. Reserves are catered for at brigade level in the form of depth localities and at division level from depth brigade. Because of the proximity of the border from these obstacles, enough desired troops cannot be deployed ahead of the obstacle for early warning and protective role. Obstacle itself compensates for lack of troops. Once the obstacle has been crossed in strength with armour by the enemy, the obstacle would loose its importance. Hence all penetrations have to be neutralised according to their importance. Once penetration takes place in an area, readjustments of localities is resorted to, to confine the bridgehead. Local counter attack would then be launched to eliminate it. In case this fails, the troops employed, act as counter penetration force and help a bigger force to launch a deliberate counter attack and eliminate it.

LOCAL COUNTER ATTACKS

Local counter attacks must form part of our defensive posture as brought out above. The dictum should be 'Offensive is the best form of defence.' These must be well planned and executed with full determination and zeal.

Timings. As has already been brought out earlier, the best time to launch a counter attack is when the enemy has established a lodgement

across the obstacle and is in the process of breaching minefield for his bridging operations to start. Enemy would try and cross over at a large number of places. He must be hit at the places where he is intending to launch bridges. Use of surveillance devices must be made to gain maximum information about the enemy.

Role of Other Arms. Artillery support plays an important part to ensure success by concentrating at the given point. Artillery must be integrated at the planning stage. Engineers would also be required to clear mines laid hurriedly by the enemy to ward off counter attack. They will also be required to restore the obstacle belt laid earlier, to its original shape. Signals would ensure re-establishment of line communications.

Mechanics of Local Counter Attacks. With an example, as given at Sketch S, let us see the mechanics and quantum of troops required for a local counter attack. The example taken is of a brigade defended sector on a canal obstacle.

- (a) Enemy will try and cross over at more than one place using possibly one or two brigades. Let us take the case of enemy two battalions effecting an assault crossing against say localities at 2 and 7 and both are captured by him.
- (b) In this case, the Battalion Commanders of Areas A and B must use their reserve companies from localities 4 and 8, respectively, to counter attack localities 2 and 7 after informing the Brigade Commander. This is important as the troops are being lifted from forward localities.
- (c) Unless both these attacks are pressed home with all the fire support and determination, chances of success may not be very bright. Say company locality at 2 is recaptured and locality at 7 is still with the enemy. The company which put in the counter attack at locality 7 must firm in and act as new counter penetration force. Here the Brigade Commander must use his reserve force of squadron of armour and one of his two companies to counter attack locality 7.
- (d) At night, on an obstacle, it is most difficult to recognise friend or foe. The counter attack commander must be briefed before success could be ensured. The best person to brief the counter attack force commander is the Commanding Officer of the battalion or his Second-in-Command. Some of the points which may be covered are as under:—
 - (i) Extent of the objective. Some innovation to indicate the extremities will have to be devised.
 - (ii) Approximate strength of the enemy.
 - (iii) Location of own troops. Along the axis of armour attack there will be no own troops to ensure own troops safety.
 - (iv) Fire support, the flanking localities would provide.

- (v) Action after capture of the objective. Arrangement to re-establish the defence line would be told.
- (vi) Radio communication to be tied if not already done.
- (e) The forming up place for the counter attack force could be anything from 700 to 1000 metres from the obstacle. It is more beneficial and better for command and control to attack along the perpendicular line to the obstacle. Tanks go right up to the obstacle where tank ramps are prepared well in advance and try and destroy enemy trawling equipment and the bridging train following. Infantry follows right behind the tanks and mops up the enemy which may still be there. Once the reorganisation is complete and no serious threat exists, the infantry is relieved by the holding battalion in that area. Armour is released only once the breached minefield is closed and restored or threat to the sector becomes minimal. For this a troop or so may be kept till relieved.
- (f) Let us now take the case when enemy effects an assault crossing with three battalions against this brigade sector and all have been captured. In this situation the Brigade Commander must come into the battle straightforward. He has the following options available:—
 - (i) Using his reserves and that of battalions, counter attack all the lost localities after balancing forces.
 - (ii) Request the Divisional Commander to make available his reserves and in the meantime contain one locality and counter attack the other two with his reserves.

DELIBERATE COUNTER ATTACKS

General. A determined enemy will cross over obstacles and overcome any opposition it encounters. It is only by a process of attrition that his superiority and will to carry on is halted. Enemy will cross over any canal or ditch, with superiority, at a large number of selected places. Wherever he succeeds, he will consolidate and thereafter exploit. In a divisional defended sector, enemy is likely to use a corps to assault. This means that the following alternatives may be used by the enemy:

- (a) Attack both own forward brigades, say A and B, with a division each, say X and Y, and use the reserve division Z to attack our depth brigade C, once success in one of the sectors is gained.
- (b) Use X Division to breaking through say a Brigade sector, hold or contain B Brigade with a brigade of Y Division only, and use the remaining Y Division with Z Division through A Brigade sector, once success is achieved, to attack C Brigade.
- (c) A number of other alternatives may be used.

The most difficult situation for the defender is when enemy concentrates his forces against one given area, as given in Para 71 (b) above. In such cases the battle will have to be taken over by the Divisional Commander right from the beginning. In the normal manner of attacks

by enemy, local counter attacks will be launched at unit and brigade levels. On defences based on canal or ditches as brought out earlier, deliberate counter attack will be launched on the canal banks itself. In a normal defence, the technique of counter attacks is discussed under concept for Rajasthan, as it would not be different.

Timings. If a deliberate counter attack is launched too late then it may not achieve success and the reserves once committed may not be available for another situation. By then the whole defensive battle may be lost. The best thing for the defender is to ensure that most of the penetration of the enemy is neutralised before he can bring in his armour or it is day light and his anti tank weapons and guided missiles are also effective. In the plains of Punjab, the battle is that on the obstacle. Once it is lost, there would be little to stop the enemy. It is for this reason, the timings of deliberate counter attack must be quick and of course after deliberations. Reserves must be located close enough to reduce the launching time. Decision to launch them by commanders must also be taken early enough to save time. Timings for battle procedure must also be worked out and known to all commanders.

Location of Reserves. Location of reserves requires special attention. They must not be involved in the initial battle of the forward brigades. Their location should :—

- (a) be close enough to reduce launching time ;
- (b) provide cover from ground and air ;
- (c) provide suitable routes to the forward brigades ; and
- (d) provide enough dispersal space for the force.

Quantum of Troops. As already brought out in the basic principles, the force used must be large enough to ensure success. Armour will be predominant in this and must be given the overall responsibility for the counter attack plans. Some elements of engineers will also be required to clear mines laid by enemy and to restore own obstacle belt to its original shape after the counter attack. If due to some reason, the time of launching deliberate counter attack is more than desired, then the quantum of force will have to be suitably increased to cater for enemy build up. The following is the minimum force required at a divisional level :—

- (a) One armoured regiment, may be less a squadron.
- (b) One mobile infantry battalion uncommitted and one more infantry battalion which may be committed but available for counter attack.

Fire Support. Deliberate counter attacks must go with a bang and all available fire support should be integrated in the counter attack plans.

This is one of the main factors in restoring confidence and morale in the defender by ensuring success. Fire of armour and infantry must also be integrated with the fire of artillery in the fire plan. In case air can be used, it would help neutralise the objective a great deal.

Surveillance. As already brought out earlier in the basic principles, surveillance devices allow early information and correct employment of reserves. For this surveillance devices will have to be deployed in depth also.

CONCEPT FOR RAJASTHAN

Due to wide open spaces and lack of natural obstacles, a high degree of mobility is essential. A force with superior tactical mobility has a decided advantage over its adversary. In desert, defences are normally based on communication centres, sources of water and administrative installations. They may also be organised on tactical features, if available, international boundary, astride roads and railway lines. In both offensive and defensive operations, large reserves must be held while committing the minimum essential troops to holding ground. The reserves must be mobile. Deserts are most suitable ground for mobile defence. We must adopt mobile defence in our teaching and practice as well. Mobile defence caters for large mobile reserves and these are used to counter attack and destroy the enemy, once he comes into our defended sector. In the absence of resources, as it is in our case at present, a via-media could be found till we are able to fully practise mobile defence. Even if we are to resort to improvisation, in which we are experts, it would be well worth the trouble as generally, no positional defence can ever succeed in its aim in the deserts of Rajasthan.

There are few areas that can be nominated as vital ground. In the desert, communication centres and water sources are generally designated as such and will be included in the defended areas or sectors. If a position is considered very important, it should be held strongly initially and mobile reserves catered for.

PATTERN OF ENEMY OFFENSIVE OPERATIONS

Aim. It is same as that in the case of Punjab wherever obstacles have been created. In other places, he is likely to grab as much territory as possible, to be able to bargain at a later date.

Pattern of Operations. Wherever obstacles have been created by us the pattern of the enemy would be same as that of Punjab with an added advantage to the enemy as no natural or artificial obstacle will hinder his advance, once he is across the obstacle. It is going to be an

ideal area for his armoured division to be employed to hit deep into our territory. If that happens, he would concentrate a large air effort to support his operations. He would also try and secure the corridor he is utilising for his breakout. The pattern would be somewhat same in areas where no obstacles exist and the enemy is likely to break-in our forward crest with lesser force initially and then move in his mobile forces to break out.

PATTERN OF OWN DEFENSIVE OPERATIONS

Aim. The aim of the defender remains the same as for Punjab along the laid obstacles but where no obstacles exist, the aim is to delay the enemy as much as possible along the international border, inflict casualties and try and establish his main thrust. Once his main thrust is established, then the defender would take such measures as found necessary to stop, destroy and push back the enemy penetration.

Pattern of Operations. The pattern over obstacles has been discussed under concept for Punjab. In areas without obstacles, the defender either can hold the initial crest lightly or strongly. Due to political constraints, the border may have to be strongly held not to give away any ground. But after the last two wars with Pakistan, it has been proved beyond doubt that this policy is not very sound. The defender must hold the crest thinly and delay, harrass and inflict casualties on the enemy. Once his main thrust has been established the defender has two options as under :—

- (a) Use the reserves available to hit the enemy on his flanks or from the rear.
- (b) Use a minimum force to stop and contain the enemy penetration and make a thrust with own mobile reserves in the enemy territory to counter his thrust.

LOCAL COUNTER ATTACK

Local counter attacks in desert, are much easier to launch than deliberate counter attacks because of distances involved. The basic concept of counter attacks in the desert remains the same as that of Punjab except for the following peculiarities :—

- (a) Local counter attacks are not necessary for each locality lost unless it is important, when it must be counter attacked with utmost speed.
- (b) Reserves must be created at unit level and these reserves must be mobile.
- (c) The element of surprise can be achieved by the following:—
 - (i) Make the reserve mobile.

- (ii) Launch the reserve from an unexpected direction.
- (iii) Speed with which the counter attack is launched.
- (d) Armour must be used in assault role and the commander must accept greater percentage of casualties in tanks.
- (e) Infantry reserves must be employed mounted on either armoured personnel carrier, if available, and ground permitting or in B vehicles with balloon tyres to give them cross country mobility.
- (f) In the desert, instead of waiting for a locality to be lost and then counter attacking it, it may be advisable to launch the reserves to attack enemy build up and while he is moving for the assault, with armour and mechanised infantry.
- (g) Use of the sun and bad weather must be utilised for own advantage in the counter attacks.
- (h) Fire support requires detailed consideration because of the distances involved. Artillery units are, generally, decentralised and thus concentration of fire at any one place is very difficult. Use of all available weapons must be made to achieve concentration of fire.
- (i) Early information about the enemy must be obtained by early warning system and surveillance devices.
- (k) Mechanics of counter attack in this case remains the same as discussed earlier.

DELIBERATE COUNTER ATTACK

As already stressed earlier, deserts favour mobile defence. With this, the importance of reserves is enhanced. In deserts, counter attacks must form the basis of defences. Basically, the technique of launching a deliberate counter attack remains the same as that of Punjab except for the need for more reserves and also that the counter attack would be launched later after actions at lower levels have been taken and are unsuccessful. Even in Rajasthan, wherever the canal and ditches have been used/constructed for defence, the concept of Punjab would apply. In the normal defence, in the deserts of Rajasthan, deliberate counter attacks are of a much more deliberate nature and provide commander more time to judge and react.

Quantum of Troops. Because of distances involved and also the time lag in launching the counter attack, the quantum of troops will have to be large enough. A regiment of armour and an infantry battalion mechanised is the barest minimum to be launched. In Rajasthan, two infantry battalions may be earmarked as the divisional reserves and both must be mobile, either with armoured personnel carriers or with balloon tyre vehicles. Allotment of armour to brigades should be over and above that of the divisional reserves. In case not possible, due to paucity of

resources, then alternatively, use of missiles and extra number of recoilless guns and medium machine guns mounted on jeeps must be provided.

Firm Base. Due to defended areas/sectors being isolated, at times, it may be difficult for own troops to provide a firm base at the time of launching the deliberate counter attacks. Arrangements will have to be made, well in advance, to ensure that a firm base is secured for the counter attack force either by the troops in location or even by the counter attacking force themselves.

Fire Support. Maximum possible fire support must be arranged for ensuring success of counter attack. This means that more medium artillery should be available in support of counter attack. Further, even regrouping of field guns may have to be done as time would be available for the same, if they are not occupied elsewhere.

Air. In desert, as has been brought out, the visibility even at night is good unless sand storms or rains reduce the visibility. Air plays a very important part in any desert operations and it must be integrated in the fire plan.

CONCLUSION

Unless defence is offensive in nature, the successful conduct of the same is difficult. Morale, one of the greatest single winning factor, may be at its lowest ebb, if we only hope to conduct a positional defence in the trenches, face assaults by the enemy and withdraw once forced to. Morale can once again be built up, in the defender, by offensive action and achieving success. Counter attacks are the main source of achieving this and must be launched with all its ferocity, determination and strength.

The time and direction of attack still remains the nightmare of all enemy commanders inspite of all the technical innovations and advancements to help them reorganise faster on the objective.

In the plains of Punjab and the defences on obstacles along the border in Rajasthan, counter attacks have to be launched with the greatest of speed to eliminate the bridgeheads established by the enemy. It may well happen that Corps, divisional and brigade, apart from the battalion own counter attacks, may be launched during one night in one particular battalion defended area. The aim is to eliminate the bridgehead of the enemy before his armour joins up with the infantry.

Strength of the force, fire support, preparations and rehearsals require special attention while planning counter attacks.

No commander can give a better gift, than a victory by counter attack, to his command, which is tired, defeated and possibly mauled badly earlier. Should it not then demand our earnest efforts and resources to achieve this, even in the face of great odds ?

SUMMARY OF RECOMMENDATIONS

ARMOUR

- (a) Armour with night fighting capabilities, must be used in assault role, at night also.
- (b) Anti tank guided weapons must take over the anti tank role in the defences and relieve armour for offensive tasks.
- (c) Armour must be used boldly and casualties accepted in battle by all.
- (d) If possible, armour must be made available for local counter attacks. This is possible, if more armour is made available to the Division.

INFANTRY

- (a) Uncommitted reserves must be held at all levels. At brigade level, it may be from two to three companies and at divisional level a minimum of a battalion uncommitted and another battalion committed to ground or used earlier in the defensive battle.
- (b) All infantry reserves must be mobile. Armoured personnel carriers are most desirable.

ENGINEERS

Engineers after having performed their engineer tasks must take on operational responsibility of a depth sector, thus relieving infantry as reserve.

RESERVES

Reserves must be created as under:—

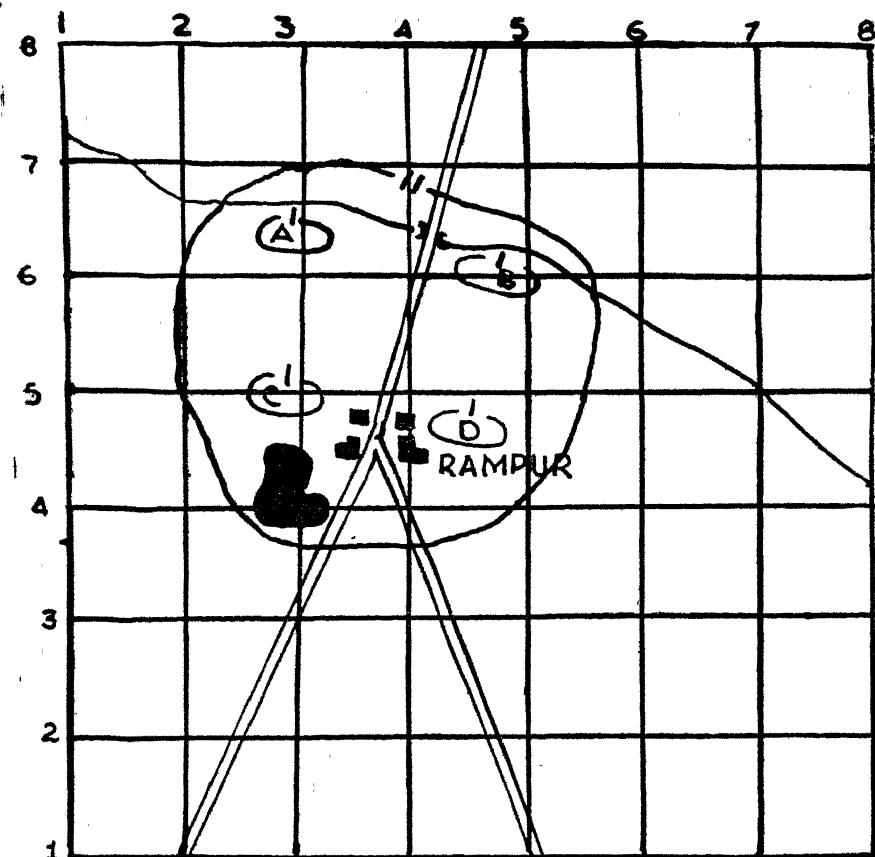
- (a) *Battalion/Brigade Level.* Deploy only three companies in a battalion on the ground and use the fourth company as reserve. This may be necessitated also with the three company concept of a battalion coming in.
- (b) *Divisional Level.*
 - (i) Use the Engineer Regiment in the depth brigade sector and use one of the infantry battalions of the depth brigade as the reserve.
 - (ii) Use one of the infantry battalions of the forward brigades who has already fought an action, to hold a depth area or alternatively use them as the second infantry reserve for other counter attack tasks.

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Sketch P

Refers to Page 262

BATTALION DEFENDED AREA—OLD CONCEPT

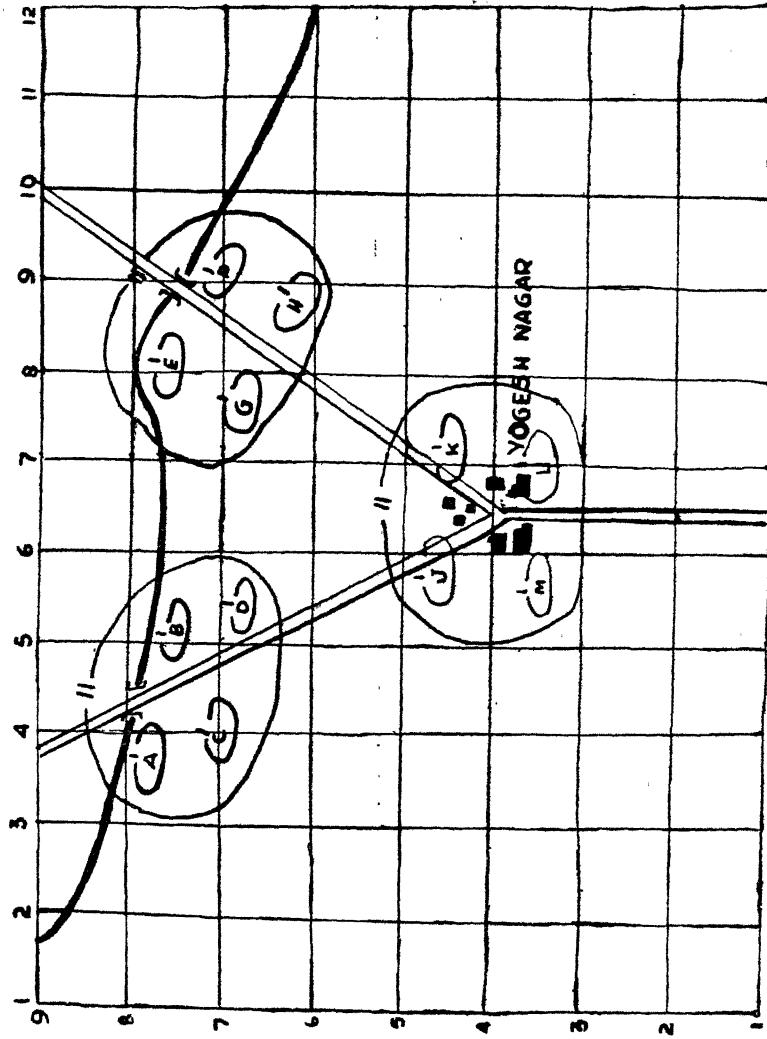


SCALE : ONE SQUARE=1000 MTRS

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Sketch Q
Refers to Page 262

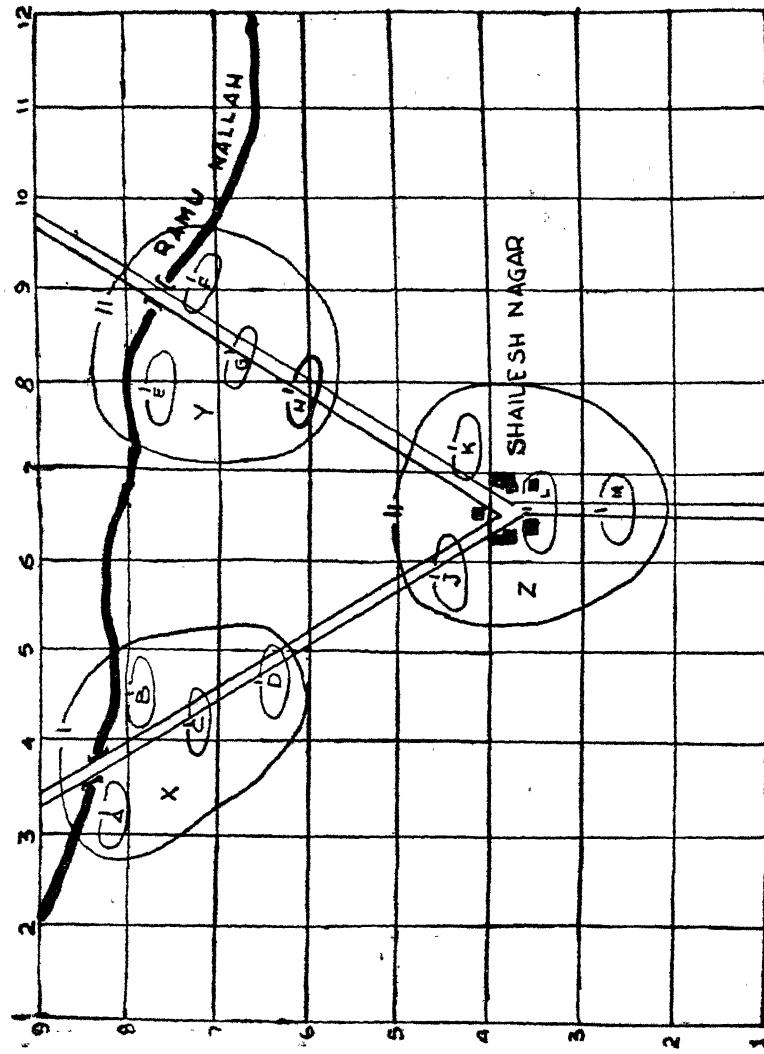
BRIGADE DEFENDED SECTOR—OLD CONCEPT



SCALE : ONE SQUARE = 1000 MTRS

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BRIGADE DEFENDED SECTOR—SUGGESTED NEW CONCEPT



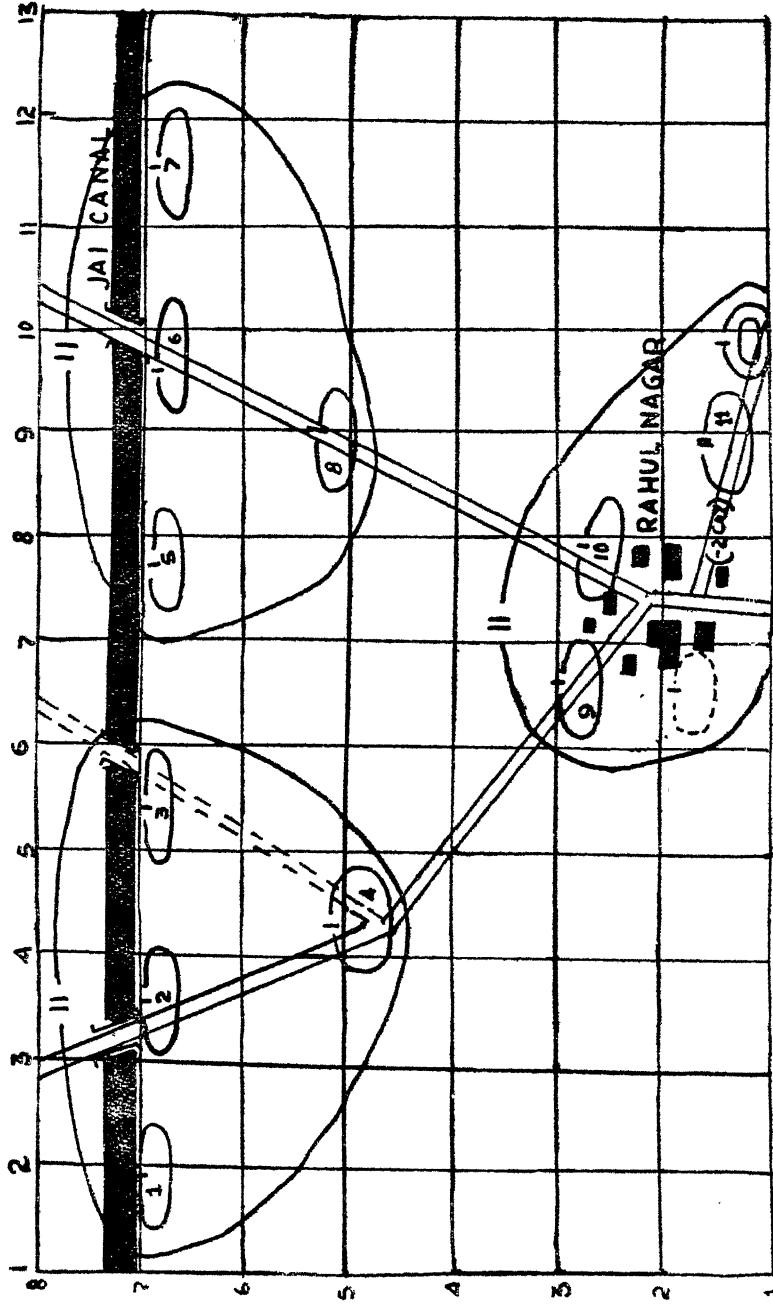
SCALE : ONE SQUARE = 1000 MTRS

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Sketch S
Refers to Page 266
BRIGADE DEFENDED SECTOR—CANAL DEFENCES

COUNTER ATTACK

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SCALE : ONE SQUARE = 1000 MTRS

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No Place for Crime : A Police Novel

(A REVIEW ARTICLE BY MAJ GENL. AM SETHNA, AVSM)

“Who killed Vasanti ? Who is Mahatarba and where does he hide out ? What is the clue to the identity of the Big One ? Can the Patri Sarkar be run to ground ? Was Black Magic used in the gruesom murders of the several young girls in Nasik ?”

THESE are some of the topics dealt with in ES Modak's enthrilling police novel “No Place for Crime”* in which investigation, detection, and police work under a variety of circumstances are recounted in detail. There is drama, right upto the very end, covering a wide gamut of crime—theft, dacoity, murder, smuggling, with the 1942 “insurgency movement” thrown in for good measure. It is an episodic novel consisting of a series of adventures of Kumar, an officer who joins the old Indian Police (IP), in the period immediately prior to the “Quit India Movement”. The story goes on after Independence and into the ‘seventies.

The author is currently Inspector General of Police of Maharashtra and it is obvious that the novel has an autobiographical overtone. It is indeed a pleasure to see this novel flowing from his pen. We look forward to some more of his writings ; it is understood that he has one more novel on the anvil.

To this reviewer, who too joined “His Majesty's Indian Land Forces” within a year or so of the hero of this book, this novel provides a peg on which to hang the hat of army-police relationship and to view how our respective Services have evolved over the years. In doing so, it is not the intention to detract even an iota from the “story and drama” of the novel as such. This in itself, would be of great interest to most Service readers, especially the younger ones. On the other hand, in this review article, what is intended is to see how another uniformed service functions, and how it has evolved over the years.

The British modelled the old Indian Police on the Royal Irish Constabulary. Ireland provided a better setting for the police in India

* No Place for Crime : A Police Novel by E.S. Modak, New Delhi, Vikas Publishing House, 1977, PP. 314, Price Rs. 7.00.

than did England. It was also said, rather patronisingly at the time, that those Englishmen who opted for the IP, were those who had tried to get into Sandhurst or Woolwich but could not ! It is, therefore, not so surprising to read in the earlier parts of the book, where the old Police Training School at Nasik is described in some detail, that the type of training imparted there was so very similar to that we in the army had undergone. There is even similarity in the type of "ragging" the new entrant was subjected to. The mess life and the general behavioural pattern as existing there, as also the "father figure" of the Commandant does not seem very different from that which obtains even today at any military academy or officer cadet training school. One wonders though, if today, a similar atmosphere prevails at the Police Academy. They still seem to do a lot of drill ! Young IPS officers are now also attached to army units, usually in field areas for a brief period of training. Present day police officers also revert back to their Academy for refresher and other courses. Thus there is very great similarity between the initial training philosophy of the Army and the Police.

What, however, is surprising is the fact that after their initial training, unlike service officers, police officers, are left to fend almost entirely for themselves for many years before their refresher course is due. Unlike service officers, they get posted to various assignments in districts where they are very much on their own. Not for them the gregarious living conditions of service units with its peer group pressure of other young officers and direct supervision of their seniors. One therefore wonders whether the type of cadet training we have, really fits the bill for young police officer today. It is, for consideration whether training in drill, musketry, equitation and the "Police Manual" (PM) are sufficient in themselves. This reviewer would like to suggest that during the formative period of training, it might be more profitable for the young police officer to be so educated and brought up that he can continue his self education at a later date, especially as he joins after a good degree and after a careful screening process by the UPSC. For service officers, especially the junior ones, who come into contact with police officers, while in the course of duty or socially, this aspect of his upbringing comes as a surprise. Our officers could learn from them how they are forced to become so much more self-reliant than our junior officers. The only problem is to find them—in most cases their officer cadre is so diffused and their numbers, comparatively so small, that most of their work has had to be delegated to the Inspector grades.

At the same time, we often fail to realise the pressures under which the junior police officer, or for that matter, even their seniors, function. The junior police officer, in many cases, starts off with noble ideals, but

the irritations and pressures on him are such that he may very often take the line of least resistance and fall in the normal rut of conformity so that he can keep rising in his career without "blotting his copy-book". In this context, the adventures of the hero of the novel under review are worth following.

Another aspect of police work which is of great topical interest is the method of interrogation. The author brings out the traditional method which is called "interrogation by the Bharamappa".

"Kumar was mystified, but he followed Mazumdar to the temple. In the temple, Shiva was held by two policemen in the posture of a public school boy getting six of the best. A third policeman was beating him on his buttocks with a leather instrument that looked like the sole of a chappal — only longer and larger. At every strike Shiva would let out a yell. The policeman and Shiva were both sweating with the exertion."

The hero of the novel soon finds that he can produce far better results by a more humane approach of interrogation and detection by more scientific methods. We can be sure, however, that every police officer from his junior days, is well aware how most of the required evidence is obtained. In the recent past, we have been inundated by the grossly inhuman methods used by the police. We can be sure that far greater refinements of the "Bharamappa" must have been used. It is for consideration whether only the lower police hirelings are involved. It is doubtful whether seniors are completely unaware of what goes on. They can only be turning a blind eye to them, having got into the rut and realised that they could get away with it. In any case, other methods of getting evidence are so much more difficult, time and effort consuming!

The police have to function, and in most cases, these routine, old fashioned methods seem to produce results. Further, the officer:NCO:man ratio is far lower in the police than in the armed forces, and as such, most of the functioning is done at the subordinate and not officer level. The Thanedar and Station House Officer are the traditional policemen with whom the public comes into contact. It is also they who have to bear the major brunt of dealing with criminals and in the maintenance of law and order. At a time when so much extraneous influence can be brought to bear on both the police and on the criminals, we can not be over squeamish in the manner in which they function. Is it not said that the "country gets the police it deserves"? This is all the more so, when so much crime today is carried out under the "protection" of those in a position to exert pressure, on the police, and on society as a whole. Political pressure is only the better known type, but there are others of money, threats and worse, especially when crime is made to pay. We could not have had our economy twisted out of shape by the impact of large scale

smuggling and black-marketing had these not been the facts of life. If we want a clean society, authority should not only exist, but seem to exist, for the maintenance of such a society, and the police must get full backing of society as also authority. They must not be demoralised as has often happened in the past.

All this notwithstanding, it is for consideration whether our entire administrative machinery and the public posture towards the police does not need a major overhaul. The police should be the first to indicate in what manner this should be done. They need to be trusted by the public as guardians of the law, and for the maintenance of order in all spheres of activities, and their behaviour has to be such as to instil that confidence. In each country, there has to be a different manner of approach to the problem. Far too often, we hear of the example of the British Bobby and the French Gendarme, but little do we realise the manner in which they function, and the manner, in which they are selected and most importantly, paid. The calibre of individual policemen has to be such that with fewer number, they should be able to exert their influence. The tendency, on the other hand, has been to increase quantity, at the cost of quality. More important than that is the necessity for the police hierarchy to be sure that in their functioning, there is a human and humane method of dealing with the public, both the law abiding and the criminal. They should realise that they are open to investigation for their action, but will get support where it is due. They too have to function lawfully under regulations which must be updated to meet today's conditions. In this, we trust that our V.I.Ps will understand the requirements and not demand, what has become the norm of the recent past, policeman not merely to act as security escorts, but to indicate the importance of the visitor—the thicker the police cordon, the greater the importance of the dignitary !

Another aspect with which this reviewer found of interest is best explained in the following incident from the book under review, which takes place in the early 'fifties.

"Kumar was worried. Normally the IG's Inspection was an important event for a DSP. But Kumar was not worried because of that. He had had a letter from the DM only the day before saying that the President of India would be visiting Nasik on the 17th of May for a day. In Nasik the President would have a very crowded programme, receiving the address of the Municipality, performing opening ceremonies and visiting a hospital and a college. Kumar had to make elaborate security arrangements and he had to draw them up carefully. 'In addition to the President's visit, to have the IG breathing down my neck is a bit too much,' Kumar told Shefali (his wife). 'I'm thinking of writing to the AIG suggesting that the IG put off his visit till later.'

'I wouldn't do that if I were you,' Shefali said. 'I heard from one of the officer's wives during the last Police Week that this man Tasker is peculiar—full of his own importance; he might think it's cheek on your part to ask him to postpone his visit.'.....Kumar wrote to the AIG, and when he got his reply he wished he had listened to Shefali.....

On the 16th, Kumar got into his Review Order uniform and went to the Railway Station with his senior officers. According to the Police Manual, a Guard of Honour had to be provided at that time of the IG's arrival and departure consisting of twenty rank and file. The Guard was usually drawn up at the place where the IG was staying—normally the Inspection Bungalow—but the AIG had said that the guard should be provided at the Railway Station with a band in attendance, which latter, was not provided for in the PM Rules. Obviously, the idea was to impress the onlookers with the importance of the IG's arrival.

Kumar found out from the Station Master the approximate place where the IG's compartment would stop and stood there along with his officers. Unfortunately, the IG's compartment stopped further down, and when he alighted, followed by his wife, there were no officers standing in front to receive him. He had to wait for a minute till the officers came running up and saluted.

'Where's the photographer?' he asked.

'I'm sorry, Sir, I didn't think of it,' Kumar said.

'It's a DSP's job to think of these things,' the IG said, as they got into the car. "What's the point in having a Guard of Honour here without a photographer?"

We in the Services, have not been completely unaware of such situations. Fortunately, we have now reached a degree of maturity and we trust that our seniors are not concerned so much with the photographer as with the standard of the parade. At the same time, there is a tendency within the country itself, whereby a junior does not want to take a chance, and he would rather "lay on" the maximum he can to impress his superiors. It is for consideration whether seniors in all walks of life should not give clear-cut and unambiguous directions to indicate that they are impressed only by the quality of work and the quality of the person performing it, and are mature enough to see through "Bull".

If the reader has gone this far with this article, this reviewer believes that he will see for himself how valuable this novel is for a greater understanding of the functioning of the police. We, especially in the army, come into contact with the police not only for internal security but also in insurgency situations. Staff officers at various levels have necessarily to work in close contact with the police in a variety of ways. We should,

(contd. on page 292)

Book Reviews

NUCLEAR SECRECY AND FOREIGN POLICY

by HAROLD L. NIEBURG

(Published by Public Affairs Press, Washington, 1964) pp. 255, price \$ 6.00.

THE advent of the atomic age posed a major question before the United States decision-makers, whether they should observe the policy of absolute secrecy and control over nuclear technology. When the United States finally adhered to historically proven principle of "Secrecy of Technology", it did create serious problems for its foreign policy and introduced new trends in domestic politics. Its nuclear policy also subsequently became exposed to some serious contradictions.

Nieburg's book analyses the role and relevance of 'the policy of nuclear secrecy and exclusion' in the U.S. Foreign Policy since the days of the Manhattan Project to the conclusion of Partial Test Ban Treaty. The author claims to have "put into a coherent whole the story of secrecy, its political, military and diplomatic significance." It is substantiated in this book that "Technological Progress cannot be arrested whether good or bad".

He holds that the policy of nuclear secrecy has brought disastrous effects on American Foreign Policy. It created complications in its relationship with European countries and Anglo-saxon allies. Contradictions in its disarmament policy and military strategy are also due to this policy. Thus the book is primarily a critique of US nuclear policy.

The book however, suffers from two basic flaws which reduce the value of the book to a certain extent. Firstly Nieburg attempts to explain the entire dynamics of U.S. foreign policy with the help of a single tool "Nuclear Secrecy". It naturally compels him to assume many things and present certain generalisations which are questionable. For example, is it valid to hold that the crack within the N.A.T.O. or nuclearization of Britain and France have been necessitated by the policy of Nuclear exclusion only? The book does not acknowledge the role of other factors which may have impinged upon this relationship.

Secondly, he does not present a case for the "nuclear secrecy" before criticising it. One can assume on the basis of vast material he had surveyed and the discussions held with scientists, military men and politicians that why United States favoured a policy of "Nuclear Secrecy" and made every effort to maintain it. There was no illusion in the minds of the people responsible for the formulation of this policy that nuclear weapon cannot be denied for long to other nations.

An introductory chapter on "Nuclear Secrecy" was all the more necessary to avoid other stylistic mistakes—the absence of unifying theme and the repetition of the same material in various forms. Certain chapters of this book appear to be independent, analytical essays on various problems of U.S. foreign policy. Moreover having chosen a non-chronological and introspective style of presentation, in the absence of a proper framework, these weaknesses are natural.

Brief Introduction by Morgenthau delineating the problems created by nuclear weapons, raises a fundamental question : where is the alternative to nuclear laissez faire and nuclear monopoly ? He concedes, it is easy to state that policy of nuclear secrecy has failed than stating, what ought to take its place ? On approaching the book to find an answer to this question one is bound to get disappointed. Nieburg explains the failure of this policy without suggesting any policy alternative. At times he pleads for liberalization of the policy of "Nuclear Secrecy and exclusion". It raises a question. Did he really believe that we are for open flow of this technology ? It would perhaps be the best policy as it will reduce the cleavages between the "haves" and the "have nots". But one must examine if we want it with or without control and safeguard mechanism and what mode of cooperation do we suggest to it ? The author does not touch upon these questions.

Despite these weaknesses the book is of permanent value for providing analysis for such a serious subject which is being practised even today by advanced technologies. As such it should be an eye-opener to the neocolonialists. To the exploited section of states it carries a word of caution. His analysis and depth of the subject is brilliant. Dynamics of the relationship of the congress and the executives ; Joint Committee on Atomic Energy (J.C.A.E.) and the Atomic Energy Commission (A.E.C.), Usurpation of executive powers by congress on Foreign affairs are by any standard most valuable contribution. Similarly, discussion on "Atom for Peace Programme"—its genesis, growth and decline are very nicely worked out pieces. He has been able to highlight the possible motives of U.S. decision makers in pursuing this programme. Similarly his analysis of declassification process, and the role of the United States

in Euratom, Common market etc. has also been able to present picture of the growing complications with European and Anglo-Saxon allies.

In all these discussions one point is not adequately emphasized : the motivating force behind Nuclear Secrecy was not simply their desire for prestige, political control or imposition of its strategic doctrine. It was rather well planned long term economic interest. The policy of nuclear secrecy and exclusion in this respect is being tightened through the N.P.T. and safeguard arrangements as a last resort to patch up its cracks from within in the name of so called 'international security'.

O.N.S

THE LONG AFTERNOON : BRITISH INDIA 1601-1947

by WILLIAN GOLANT

(Published by Hamish Hamilton, London, 1975) pp 270, Price £ 4.75

THIS is a rapid survey of the early expansion of British rule in India and a more detailed account of the Raj after it was firmly established.

That is why the author calls it the Long Afternoon in which the *dramatis personae* are George V., Gandhi, Churchill, Nehru, Attlee, Jinnah, Irwin and Lajpat Rai. It is thus not a 'history' of the British period in the strict sense of the word. It could not be possibly so, and was not intended to be, in the small canvas of 270 pages. It is thus more in the nature of an account of British-Indian relations particularly during the 19th and twentieth centuries—upto the partition of the country in 1947. It must be said to the credit of the author that he has dealt with the subject as fairly and objectively as an Englishman can possibly be capable of.

The English came to India because it stirred their enthusiasm and imagination as a "somewhat unreal place of fabulous wealth, an El Dorado". Once here, they quickly learned how hazardous to health a stay in India could be. So from the very beginning their mind seems to have been made up *not* to colonise or settle but to be "merely sojourners in the land, only camping and on the march". So, the English came, in the words of the author, "to rule but not to live". Had it been otherwise, they would have had on their hands an intractable problem like that of Rhodesia today. In that sense it was a fortunate thing for both India and England.

In another sense this was a misfortune. For, though the British supremacy in India lasted for nearly two hundred years, no effort was made to take the so-called 'benefits' of the Raj to the basic unit of Indian life—the village. As the author himself writes, some villages even by the twentieth century had not yet heard how Britain had replaced the

Great Mogul ! The 'blessings' of the Raj, like internal communications, transportation, English education, railways, the telegraphs, hospitals, etc (a fond theme of British historians) were all oriented towards keeping the country safely under British rule, making life as livable and comfortable as possible for the rulers and getting the cooperation of a small minority of local (native) people to help them administer the land. The modernising or civilising process was therefore kept at the minimum necessary for the purpose. The vastness of the country might have been a contributory cause of this neglect of the village and inadequacy of progressive measures even in towns, but the root cause was the fact that the English came here merely as sojourners. There were many who made a quick buck here and then went back to England to settle down there as 'Nababs'.

In refreshing contrast to the common run of British historians of India the author frankly admits in the chapter titled 'Intractable Realities' : "The British system of education in India indicated that the political and administrative needs of ruling India took precedence over the social and economic ones, with the result that the life of ordinary people remained the same as it had always been. India's 'dumb millions' under British rule did not acquire the special training they needed to cope with their many problems."

This reviewer is happy to give full marks to the British rulers of India for having introduced the English language in this country. He intended to create a class of civil servants and babus to help administer the empire, the study had the side effect, perhaps entirely unintentional, of exposing a small number of English educated middle and upper middle class Indians to the liberal and nationalist ideas of nineteenth century England. The English language served as a 'window' on the modern world, and it is an undeniable fact that almost all the leaders of the national movement in India were the products of the English education. This is a debt which India owes to Britain and must be ungrudgingly acknowledged. The development of rebellious India and its clashes with authority both in India and Britain culminating in independence and division of the country, makes a fascinating story which has been told with zest in a racy style.

The book is well documented and there is an impressive bibliography of which good use seems to have been made. There are some illustrations, including one by Rabindranath Tagore captioned 'Agonised Cry'. Printing and get-up of the book are good and there is a useful index.

A readable little book whose perusal can serve as a quick refresher course in the political history of British India.

P.N.K.

ARABS AND BERBERS

Edited by ERNEST GELLNER AND CHARLES MICAUD

(Published by Gerald Duckworth, London, 1973) pp. 448, price £ 12.50

NORTH Africa is a fascinating country where history is rapidly being made through colour and meaningful rapid changes. As indicated in the Introduction by Ernest Gellner while sharing Muslim and Arabic civilization with the Middle East it differs from it in a number of significant and probably basic ways. North Africa or the Maghreb has a peculiar type of religious homogeneity though with strong points of differences and there are only two groups of dialects—Arab and Berber both of which have had a distinctive growth. This scholarly and illuminating book has a series of well-organised chapters written with an in-depth study pointing out the perceptible differences and affinities between the Arabic-speakers and the Berber-speakers. The various elements in the jig-saw of North Africa that often look like irreconcilables have been carefully and sympathetically analysed and presented by a number of historians, political and social scientists. The chapters are well-edited and sewn and overlappings have been cut down to the minimum. The processes of modernisation have had their toll in various ways and out of this tangled web of intense religiosity and equally intense traditionalism the strains of nationalism have been well traced.

From Tribalism to the Coup of 10 July, 1971 Morocco has been well presented by the different writers grouping their discussions under (1) The Traditional Base, (2) Ethnicity and Nation, (3) Ethnicity and Social Change and (4) The Coup of 10 July, 1971. The discussions are balanced and well substantiated. The discussions on the social and conceptual framework of Arab-Berber relations in Central Morocco and how the Berbers conducted before and after the Coup and how they fit in the political and social fabric now are extremely interesting and instructive. The book is a very valuable contribution. The get up is superb.

P. C. R.

**THE SWORD AND BAYONET MAKERS OF IMPERIAL GERMANY
1871-1918**

by JOHN WALTER

(Published by Arms and Armour Press, 1973) Price £ 2.00

LONG before unification and the founding of the Deutsches Reich in 1871 the German military tradition was well established in Europe. From the middle ages contingents from Prussia and other German states had been fighting in battles on the continent. They had taken part in Marlborough's wars at Blenheim, Ramilles and Oudenarde.

To meet the military requirement, swords and other edged weapons were being produced from the time of the Crusades 1095-1204, and by 1573, Solingen was a town composed entirely of swordsmiths. The Thirty Years War 1618-48 intensified the production of these weapons.

In the introduction the author has listed over seventy swordsmiths of the period—1450-1700—who had either closed down or migrated by the eighteenth century. It was however in the nineteenth century, when with the new won freedom and the advent of the industrial revolution that German sword and bayonet makers came into their own. The excellence of their weapons got them lucrative contracts. This was based on the overall progress of the German middle class, which was by then better educated, superior in chemical knowledge, and the art of design, than any other community in Europe. With the knowledge, and the ability to combine in the right proportion the qualities of flexibility, temper and hardness they could produce edged weapons of quality.

This book is an alphabetical register of the firms of the period engaged in the manufacture of edged weapons. Over 180 firms are listed. Some closed down after the First World War or lost their machinery due to destruction or war reparations; others reverted or switched over to manufacturing cutlery or surgical instruments. A brief history of each firm is given with the insignia, crest or trademark shown alongside, in many cases. There are notes on inspection marks, patent marks and cyphers. At the end 21 illustrations of swords, sabres, bayonets and knives used by the German Army of the period are given. A useful and handy reference book for command libraries.

V. N. M.

OPERATION VIJAY OR THE LIBERATION OF PORTUGESE COLONIES IN INDIA

by P. N. KHERA

(Published by Historical Section, Ministry of Defence, New Delhi, 1977)
Price Rs. 15.00

OPERATION Vijay deals with the liberation of Goa which was accomplished by 17 Inf Division and the troops under its command in about 36 hours, and the capture of Daman and Diu by the 1st battalion, Maratha Light Infantry and 20th Battalion, the Rajput Regiment. There was practically no resistance at Goa but there was some fighting in Daman and Diu, which our troops speedily overcame. The Naval and Air Force actions are also recounted in full.

The book sets out the events in a chronological order and the events upto the surrender are fairly accurately portrayed. It suffers from the

fact, as most official histories do, that it was compiled entirely from records and so mention of the difficulties encountered and the reactions of the Commanders and troops are not reflected as well as they could be.

The actual intelligence available or the lack of it to Commanders actually conducting operations could have been dealt with more fully. There are too some minor errors such as the officer shown as Brigadier Gurbux Singh Commander 48 Inf Brigade "not the Brigadier Gurbux Singh who commanded the Brigade" and the statement that 50 Para Brigade was responsible for the administration of Panjam area for the latter was the responsibility of 48 Inf Brigade.

However, all in all, it is a readable book and chronicles the actions which led to the expulsion of the Portuguese from India.

K. P. C.

INDIRA GANDHI : A BIOGRAPHY

by ZAREER MASANI

(Published by Hamish Hamilton, London, 1975) pp 331, Price £6.50

THIS biography covers fifty seven years of Mrs Gandhi's life. From her lonely and troubled childhood through the turmoil of the nationalist struggle, the long apprenticeship in the arts of diplomacy and Government under Nehru, and over eight years as Prime Minister, the book ends with the political situation and the worsening economic scene in the closing months of 1974.

There is a lot of personal trivia like the colours Indira Gandhi likes, the many interests she has, her taste for good living and freedom from the "Puritanical Gandhian ethic of self denial as an end in itself. It is however, her beliefs and her thinking that to an extent influenced national policy. The author has tackled this most effectively. Indira Gandhi's thoughts according to Masani are "a somewhat pale and confused imitation of her father". "She herself is no intellectual", and "her grasp of the social sciences and of economics particularly, is nebulous and uncertain". "Questions of political ideology find Indira Gandhi's thoughts at its weakest". Her brand of Socialism is described as "a mixture of Vague popularism and pragmatism which can scarcely be called a political ideology. In its radical aspects, it is based on emotional and maternalistic sympathy for the under-dog which has yet to be allied to a viable theory of social change".

During her final tenure as Prime Minister major changes were made in the central power structure which led to the decline in the independence

and initiative of individual ministers, and concentration of decision making powers in the Prime Minister and her secretariat.

The author describes how power became over-centralised. Instead of heeding to the recommendation of the Administrative Reforms Commission where "the Prime Minister should not ordinarily be in charge of a Ministry", but should concentrate on the task of coordination and general supervision, she not only retained the portfolios of Information and Broadcasting, Atomic Energy and Chairmanship of the Planning Commission, but became the deciding voice in External Affairs, Defence and Economic affairs. By taking over control of the civil services and economic intelligence the Cabinet Secretariat had become the citadel of Indira Gandhi's power.

Books have been written during and before the Emergency on Mrs. Gandhi in flattering terms. Recently some quick publications have come out claiming to reveal the inside story. This biography, on the other hand is a balanced appraisal of Indira Gandhi's role, achievements and failures. It was written before the events of the last two years. They have only proved its worth.

As Indira Gandhi's supremacy in its outward manifestations soared higher than Nehrus, the damage done to the structure of the Government, to the democratic processes and to the Congress Party Organisation became obvious. Within the party by 1974, discussion and criticism had almost disappeared, and she came to be surrounded more and more by sycophants, leaving no place for real supporters who could share power with her. An example given of doing away with democratic procedures is the case of Abdul Ghafoor. After his selection as Chief Minister of Bihar by Mrs. Gandhi, he flew back to the State Capital, drove straight to the Governor's residence and was invited to form a Government. It was only later, that someone remembered that he had not yet been formally elected leader of the Congress Legislature Party.

Perhaps the most valuable parts of the book are the last two chapters—"Image and Reality" and "Trends". Writing more than six months before the clamping of the Emergency in June 1975 Masani has suggested "increasing reliance on repression" as a likely line on which Indira Gandhi's political strategy may develop. There was reason for this. While the gap between promise and performance remained and economic hardships increased a "new tribe of manipulators and Courtiers had installed itself near the centre of power". There was also the experience of the ruthless suppression of the Railway strike of May 1974. In spite of her achievements and the good she had done especially in the sphere of foreign policy, Indira Gandhi's image began to suffer, and her popularity dwindled.

She could not bring about the desired social changes or economic self sufficiency. She was probably as much responsible as the Congress party which was "exposed as a house of cards lacking ideology, organisation, or discipline".

This is a well produced and scholarly work. The only factual error is on page 253, where the date of the pull out of Indian troops from Bangladesh should be 17 March 1972, and not 17 March 1971. The author has quoted extensively from the leading papers, magazines, books, correspondence and interviews, and left hardly any source untapped. The book answers the question as to what factors and compulsions led to the clamping of the Emergency, and also that at heart Indira Gandhi is a democrat. This has been proved by the way, she ordered the elections and that she imposed no restraints on electioneering.

The author has succeeded in giving a remarkably balanced and impartial appraisal of a personality on which Indian opinion has been divided.

V.N.M.

THE NATURE OF MANAGEMENT

by H. R. LIGHT AND L. F. URWICK

(Published by Pitman, London, 1974) pp 167, price £ 1.50

SUCCESSFUL administration whether in Business, Industry or government requires a sound knowledge of Management. Realising this need, the author has been able to successfully blend the requirements of students as well as professionals. It is concise text on fundamental concepts supplemented by a large number of practical problems—a happy union between idealism and pragmatism.

The treatise on the nature of management highlights the purpose of Management, Organisation, Purchasing, Production, Marketing, Personnel and Control. There are also chapters on Development with special reference to Operational Research as well as Coordination and Communication.

The book is intended to give the students as well as the professional managers an orientation into the field of managements and economic background against which modern management practices have developed.

The information in regard to nature of management as embodied in this treatise is informative and interesting. Its major virtue is the author's focus on the oneness and continuity of the nature of management and

presents the basic concepts in a logical manner; as such this book will be useful not only to the students at the graduate level but will also meet the requirements of those members of the management staff who have no formal orientation in business management. Imaginative use of the illustrations and numerous exercises serve as an aid to comprehension of fundamental management techniques and their application in real life situations. The book with certain modifications can be adopted as an additional teaching aid in the fundamental areas of management classified by the author himself. This book is ideally suited to the needs of students of management courses of Indian universities and institutes of Management. The most striking feature of this book is its versatility.

The author has condensed the essence of management in a handy volume wherein the basic concepts have been explained in an easy style and the illustrations will help both the students and the practising managers to understand and apply the various techniques of management in their related fields.

M. K. S.

(Contd. from page 282)

therefore, take every opportunity not only to understand their modus operandi but also the circumstances and manner in which they have to function and the ethos of their upbringing. We in the Service have fortunately been insulated and isolated from the pressures under which the police have had to function, and often do not realise how lucky we have been. Our understanding of the police will increase once we are able to see their functioning in the correct perspective. The Police too on their part, may learn a thing or two by following the all-round intensive Service educational system.

SECRETARY'S NOTES

MEMBERSHIP ANNUAL SUBSCRIPTION

Unfortunately, there are a few members who have not paid their annual membership. If you are one of those, would you please pay it at your earliest convenience, as it will save the Institution the cost of sending reminders and also enable all accounts to be properly completed by the end of the year for auditing. There are some members who have also to pay their membership subscription for 1976. They are requested to make the payment for both the years to avoid unnecessary reminders. Mess Secretaries are also requested to assist by forwarding the annual subscription. Effective from 10th January 1978, annual subscription rate will be Rs. 20/-

CHANGE OF ADDRESS

Several cases of non-receipt of Journals have been reported due to members not informing the Secretary of their change of address. Members are requested to inform this office promptly whenever there is a change of address.

NEW MEMBERS

From 1st July 1977 to 30th September 1977 the following new members joined the Institution :—

AHUJA, Captain P.C.	CHAKRAVARTY, Captain A.P.
ALEXANDER, Major A.P.M.	CHANDAN, Captain M.L.
ALEXANDER, Sqn Ldr I.P.	CHANDORKAR, Captain V.V.
ANAND, Plt Offr N.K. (Life)	CHARY, Captain V.R.K.
ANIL, Major C.I.	CHATHA, Captain A.S.
ANIL KUMAR, Captain	CHATTERJI, Captain S.N.(Life)
APTE, Captain R.V.	CHATURVEDI, Major V.S.
ARJUN RAI, Major	CHAUHAN, Captain L.R.
BAIGU, Major B.N.	CHHABRA, Captain G.K.
BAWA, Major A.K.	CHHIBBER, Captain D.V.
BHANOT, Major S.L.	CHIB, Major S.S.
BHARDWAJ, Captain T.C., SM	CHOUDHARY, Captain S.K.
BHATIA, Major P.K.	COMMAR, Flt Lt S.
BHATTACHARJEE, Major M.K.	DAHDA, Captain S.K.
BHULLAR, Major G.S.	DAHIYA, Major Z.S.
BISHNOI, Lieut D.R.	DALAL, Flt Lt J.S.
BOPARAI, Sqn Ldr H.S.	DALAL, Captain S.S.
BOPARAI, Captain I.D.S.	DE, Sqn Ldr D.
BOSE, Captain S.	DEB NATH, Captain
BRAICH, Sqn Ldr G.S.	DEEPAK RAJ, Captain, SM

DESHMUKH, Major G.
 DeSOUZA, Flt Lt C.
 DEWAN, Major C.P.S.
 DHAMEJA, Captain V.K.
 DHANOA, Sqn Ldr M.S.
 DHILLON, Captain S.P.S.
 DOGRA, Captain N.N.
 DOGRA, Major S.C.
 DULEEP NACHIA, Flt Lt
 DUTT, Flt Lt M.
 DUTT Captain MANOHAR
 DWARKANATH, Sqn Ldr K.R.
 GAJIT KUMAR, Plt Offr (Life)
 GANGADHARAN, Captain K.
 GANGULY, Captain S.
 GAUTAM DUTT, Captain
 GEORGE, Captain RAJU
 GERA, Sqn Ldr V.K.
 GHOSH, Captain A.P.
 GHUMMAN, Captain A.S.
 GILL, Captain B.S.
 GILL, Major K.V.S.
 GIRISH CHANDRA, Major
 GOGOI, Major D.D.
 GOPALAN, Major T.
 GOSAIN, 2/Lieut R.K.
 GOVINDAN, Captain N.K.
 GROVER, Captain D.R.
 GROVER, Sqn Ldr S.K.
 GUHA, 2/Lieut C.K.
 GULERIA, Captain R.S.
 GUPTA, Captain B.D.
 GUPTA, Major NARESH
 GUPTA, Captain RK, SM
 GURUNG, Captain C.B.
 GRUNG, Major K.S.
 HAMAL, Major H.S.
 HARI NARAYAN, Captain
 HOSMANI, Major M.
 HUNDEL, Captain A.S.
 IQBAL SINGH, Captain
 IYER, Sqn Ldr C.R.
 JOGINDER SINGH, Major
 JUDGE, Captain J.S.

KANJI LAL, Captain S.C.
 KANUNGO, Captain J.C.
 KARTAR SINGH, Captain
 KASHYAP, Captain G.S.
 KAUSHIK, Captain N.K.
 KAUSHIK, Major SUBHASH
 KHANDKA, Major A.S.
 KHANNA, Sqn Ldr J.K.
 KOHLI, Captain J.S.
 KOHATKAR, Sqn Ldr S.N.
 KRIRE, Captain R.L.
 KUMAR FULAYE, Captain
 KUMAR, Flt Lt R.V.
 KURIAN GEORGE, Captain
 LAMBA, Captain A.K.
 LOBO, Captain R.C.
 MAGLANI, Captain D.R.
 MAHESH, Sqn Ldr
 MALHAN, Captain N.
 MALHOTRA, Captain M. M.
 MALHOTRA, Captain P.S.
 MALHOTRA, Captain S.K.
 MAMGAIN, Captain ARUN
 MANN, Captain M.S.
 MARKENDY, Captain S.K.
 MASURKAR, Captain A.R.
 MAVI, Captain A.S.
 MEHTA, Major K.K.
 MEHTA, Sqn Ldr VINOD
 MENON, Major N.K.
 MISRA, Major B.K.
 MISRA, Major P.D.
 MISRA, Captain V.R.
 MITTER, Captain HARI
 MOHAN, Captain S.C.
 MOINUDDIN, Captain M.K.
 MUKERJEE, Major A.
 NAIR, Captain T.C.B.
 NAITHANI, Major K.K.
 NAITHANI, Major S.C.
 NAMBIAR, Major S.C. (Life)
 NARAYAN, Captain V.L.
 NATHAN, Major S.S.
 NEMA, Lt Cdr L.R. IN

OBEROI, Captain S.S.	SAHOTA, Captain M.S.
OM PRAKASH, Major	SAINI, Captain B.S.
PANDE, Captain R.C.	SALIVATI, Captain V.K.
PANDIT, Captain A.N.	SANDHU, Captain I.S.
PANT, Captain KAUSHAL	SANDHU, Captain J.S.
PARDEEP, CHANDRA, Major	SANDHU, Captain N.S.
PARWAR, Major D.M.	SAREEN, Captain S.K.
PATHANIA, Captain J.N.S.	SARKARIA, Captain J.S.
PRABHAKAR, Captain R.K.	SATHEESAN, Sqn Ldr M.P.
PRAWAL, Major K.C.	SHANKAR, Captain K.
PREM KUMAR, Captain	SHARDA, Sqn Ldr Y.P.
PREM PRAKASH, Major	SHARMA, Captain D.P.
PREM RAI, Major	SHARMA, Captain H.R.
RAGHAVA RAO, Captain K.S.V.S.	SHARMA, Major K.N.
RAGHAVAN, Captain J.	SHARMA, Major S.D.
RAGHUBIR KUMAR, Major	SHARMA, Major S.P.
RAGHUNATHAN, Captain R.	SHIV KUMAR, Captain
RAI, Captain K.C.	SIDHU, Major R.S.
RAINAM, Captain A.R.	SINGH, Sqn Ldr G.P.
RAJAN, Captain M.	SINGH, Major J.S.
RAKESH KUMAR, Captain	SINGH, Captain N.J.
RAM, Major P.H.	SINGH, Captain P.K.
RAMAKRISHNAN, Major S.	SINGH, Major P.P.
RAMAMURTHI, Captain S.N.	SINGH, Captain R.P.
RANA, Captain R.S.	SINGH, Captain S.N.
RANDHAWA, Major S.S.	SINGH, Captain S.P.
RANGANATHAN, Sqn Ldr R.	SINGH DEO, Flt Lt V.P.
RAO, Sqn Ldr A. APPA	SINGH DEO, Major Y.P.
RANGARAJAN, Major T.M.M.	SINGH, Major BACHITTAR
RATHAUR, Captain S.M.S.	SINGH, Flt Lt GURDIP
RATHEE, Captain S.K.	SINGH, Sqn Ldr DURMIT
RAWAT, Captain B.S.	SINGH, Captain HARCHARAN
RAWAT, Major J.S.	SINGH, Major HARJEINDER
RAWAT, Captain K.S. (Life)	SINGH, Major JAGDEV
RAVINDER NATH, Captain	SINGH, Captain JASBIR
RAY, Sqn Ldr R.	SINGH, Captain Joga
REDDY, Sqn Ldr M.J.	SINGH, Captain JORAWAR
REDDY, Captain M.N.	SINGH, Captain MANMOHAN
RINCHEN, Major CHHEWANG, MVC Bar SM	SINGH, Captain NARINDER
RGMEH CHANDER, Captain	SINGH, Sqn Ldr PREM
ROY, Captain M.	SINGH, Captain PREMENDRA
ROY, Sqn Ldr P.K.	SINGH, Major RAGHUNATH
	SINGH, Major RAJ (Life)

SINGH, Major RAJINDER	SUNDARESAN, Captain A.
SINGH, Captain RAJIVIR	SURENDRA BAHADUR, Captain
SINGH, Captain RAMESHWAR	TALWAR, Captain B.M.
SINGH, Flt Lt SHIVENDRA	TARE, Major P.M.
SINGH, Major SUKHDEV	THIND, Major H.S.
SINGH, Captain SUKHJINDER	THAPA, Major J.S.
SINGH, Captain SUKIPAL	TONDON, Captain R.L.
SINGH, Captain SURINDER	TONDON, Sqn Ldr U.S.
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