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Secretary and Editor
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NOTE

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Unity, Integrity and Harmony

Part II-Power of the People

BY MAJ GEN Y A MANDE

INTRODUCTION

IN the previous Article on unity, integrity and harmony we had concluded by saying that much depends on people; they have acquired power which they could not even dream in the earlier days. In Parliament, the speaker and members frequently assert that power belongs to the people; we represent their interests. The phrase that democracy is government of the people, by the people and for the people is often repeated in parrot like monotony. How much truth lies in such statements? Will Durant summarises views of many a philosopher that people are aggregate, most unorganised and diverse for any coordinated action and hence incapable of exercising their will. Even the sophomore of political science knows that democracy is a dictatorship of prime minister. It is a fact and rightly so that in all democratic governments, the policies are framed by the prime ministers/presidents with the help of few advisers. The respresentatives of the people and the ministers have little say; they are very scared of the whip and very mindful of the chair. And yet, the power of the people cannot be questioned; they can change the government.

The power of the people and its exercise is an intresting subject. We will examine it in the light of unity, integrity and harmony, as a sequel to the previous article.

PEOPLE

Bertrand Russell remarks that greatest achievement of mankind has been to multiply its numbers at the cost of others. It is an

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interesting story, which anthropologists tell, about the conquest of man over the vagaries of nature and wild beasts. The ancient and medieval history inform us about the sad plight of man, of millions of death due to famines, epidemics and wars; however history was written when the man had already emerged as conquerer. Today man is supreme; it is his world. The good and evil belong to him, future depends on who prevails; if Utopia is a dream, 'Pralay' is a possibility.

We will do well to begin with consideration of people. The first thing that strikes us is their diversity. People of our planet are at varrying stages of development; for convenience, we can divide them into the well known divisions of developed societies, developing societies and the tribal groups. Within each group there is a wide disparity in the intellectual and competence level of the people and here again purely for convenience sake we may divide them into two categories of masses and elite. The people, though their constitution is diverse and evey individual is unique, differnt from all others, are held together by common strains or interets such as religion, language or economic, defence, ideological interests etc.

The people taken together as a whole are backward, custom-bound and glued to the past. They are very proud of their heritage, customs, religions etc mainly because they are ignorant about others and outside developments. Their ability to change and adjust to the situation is limited. Whereas people as a whole change slowly, the individuals are capable of adjusting to new situations rather fast and many individuals change radically in their own life span. The social change is brought about by elite.

The word elite was used in the 17th Century to describe commodities of excellence and later its usage was extended to superior social groups, such as crack military units or the higher ranks of nobility. In the early 19th Century, the word elite was absorbed in the English language and as per Oxford Dictionary (1832) it was applied to social groups of eminence. It was, however, after Vilfred Pareto that the word assumed sociological significance and since then many studies have been done on their role, formation and circulation.

Pareto bases his definition of elite on a simple rationale; "let us assume that in every branch of human activity each individual is given an index which stands as a sign of his capacity, very much

the way grades are given in various subjects in the examinations of schools. We will thus get a class of people who have highest indices in their branch of activity; to this class we can give the name of elite, the lower stratum we may call as non-elite". The non-elite or the masses form the bulk in every society and they follow what the elite do. They follow elite in life-style, customs, dresses, food habits and all material manifestations. Masses do not have philosophy or vision and here they cannot follow elite because the bulk of elite themselves do not have any philosophy or vision.

Some of the elite may belong to the class of intellectuals having higher indices in that branch of activity, but one must remember that the elite cover all branches of activity and not necessarily intellectual. The elite are not genius nor great. Genius implies a very high potential from the birth which gradually unfolds and manifests itself in the later years. The elite class fade into insignificance before great men like Buddha, Christ, Mohammed, Gandhi, Newton and Einstein. "All good things are rare" said Spinoza. Indeed the nature is very frugal in producing great people; they are not born in every age and are not the property of any particular social group. Elite as a rule take advantage of and exploit sitution. The great men are those who change situations. The elite are profiteers, the great men are visionaries. As a rule people know what greatness is, but yet succumb to the temptations of life.

Pareto was of the view that there is a constant circulation of elite within the society. The condition of society at any time or the rise or fall of nations is attributable to the governing elite. He observed that aristocracies do not last, "it is an incontestible fact that after a certain length of time they pass away. They do not retain the virtues, the residues and the sentiments that go to make a ruling class". Pareto does give an impression that elite belong to the noble class. Apparently his views were based on his observations upto 1923, but since then the situation has changed. In modern days the elite who are concerned with political power come from all classes, representing cross section of the people.

CHANGE

Buddha had told us that life is a change. We can observe change all around us in every sphere of life—political, economic and social. In principle, things today are different than what they were yesterday and theoretically we may even assert that every

moment is different from the previous one. Theories apart, it is a fact that changes do take place but beneath the changes are cultural residues which are stable. Most of our present day problems are due to the fast rate of change since the independence days.

Life is a movement; if there is no movement we would not know what the life is. The changes take place all the time, but what strike us are those changes which are in the nature of movement. For sure, we know the movement for independence, the Muslim League movement for partition and the numerous post-independence fissiparous movements.

Societal changes occur due to changed situation. Since independence, the situation has changed drastically; universities, colleges and schools have prolifered, the country has become industrialised and the people have become conscious of their rights. There is money within the reach of people and that is causing havoc. That picture of Indian society where people were God fearing and content with their lot is no more.

Movements are created by transitory social situation. West too had faced such problems. There were upheavels when transition took place from monarchies to democracies and again at the time of industrialal revolution. But that was many years ago and since then the situation has stabilised. We are in the transition stage and hence the agitational movements. To a degree, life is cyclic, in that every renaissance is followed by restoration and reformation. After every breakthrough, we have to live in a long period of impasse. As on date we have in our planet the stabilised west and the turmoiling third world.

In this article we confine ourselves to political changes concerning unity, integrity and harmony. Earlier we had observed that most of the people take advantage of situation. Gone are the days when we produced Tilak, Gandhi, Nehru and numerous leaders who wanted to change the situation. We do not find leaders of that calibre in our times, partly because there are no challanges and partly because of the changed situation. Ours are the rotten days in which some elite-terrorist will plan killing of even Sant Longowal we say elite because terrorists also must be inspired by someone with superior index in that branch of activity. Where has situation gone wrong?

Independence created a political vacuum. The political cake became open for grabbing, which means both power and money. To start with, we had people of noble families heading political organisations but they could not last long since aristocracy must fade away. Today, we are in a situation where political parties have not yet stabilitised. For one, there is no national opposition and even Congress splinters. Power at any cost produces leaders of low calibre who exploit regional or communal sentiments somehow to grab the chair. They too do not last long because they lack intrinsic qualities of leadership, having no philosophy or vision. They do not understand that people who are subject to emotions have strong cultural residue. We need not press this point any further since even our films portray cheap leadership and public antipathy.

Our forefathers and constitution makers were aware that regional aspirations must be kept in mind while chalking out path of progress. Secularism, freedom and regional growth are the distinctive features of our policies and plans. It is in this context that one fails to understand reasons behind insurgency, terrorism and fissiparous movements. The regionlists must understand that they are strong only if India is strong. Small states left to themselves have no existence in the international power politics. None of them have oil or strategic materials to attract the attention of world powers. Their future lies in cooperation, with other states and working in harmony.

Since independence, we have seen fissiparous movements in the East, South, West and the North. Strangely as the old agitations get resolved the new ones errupt. The fact that agitations are not simultaneous in every part of the country proves that our national policies are sound and the regional agitations are only a struggle for political power. Whereas fissiparous movements are irritating, the way all parties unite for unity is encouraging. All these go to prove that our political system has not yet stablised and yet India is a stable democracy.

UNITY, INTEGRITY AND HARMONY

We now come to the closing part of our discussion. History is replete with examples where people integrate and disintegrate. People become allies to pursue their self interest and later become staunch enemies and strangely enough, unite again for economy or security interests. The religions do not bind people and ideology fails; if democratic nations fight, the communists do not hold together. In

our time we have the examples of the two Germany, Korea and Vietnam. And close at hand, we have the example of undivided India, Pakistan and Bangladesh.

What is our future? It is all upto the people. Earlier, we had noted that people can be divided into the categories of the great, elite and the masses. We examine their possible roles.

There may emerge a superman, greatest of the great, who would once for ever solve the problem of unity and integrity. The superman would have no place for communal divide, caste distinctions or colour and sex differences. He would rule ruthlessly and people would have no choice but to obey him. As it is, a large section of the people believe that we have sacrified national interest by the formation of linguistic states and there is too much of appeasement for castes, communities and religions.

The Superman concept is not new. Nietzsche was its greatest advocate. Indians have always believe in Avtars and Gurus. But how do we produce. superman? Even great men are rare, not born in every age. After Buddha we had to wait for several centuries to produce Shankaracharaya and then to Akbar, Nanak and Gandhi. However, if great men are rare, there will always be elite; after all in every examination some one will obtain superior grade. What can the elite do?

The trouble with the bulk of elite is that they neither have character, nor conscience nor vision, which are the hall-marks of the great. Their qualification is that they are better than others in their branch of activity. The present situation is ideal for rat racing and to be sure, the elite with their superior intelligence know how to do that. Their worth is only till such time that they are in chair and after that they are rightly ignored. Masses follow them to further their on self interest. The elite will do well if only they realise what other feel about them.

Is situation so grim, un-redeemable? Can elite do something for their country? Surely they can. Earlier, we had mentioned about Pareto's observations that the condition of any society at any given point of time and the rise and fall of nations is dependent upon the prevailing elite. What can elitte do? Let us think.

In multi-racial, multi-religious, multi-cultural and multi-lingual society like ours, ever elite has a responsibility of setting an example

and to improve his own group/community. The outsider are suspects? if a Hindu criticises Sikhs it will be taken amiss, if North Indian decry South Indians it will be resented but the South Indians may. Such are the facts of life and therefore it becomes incumbent on elite to improve their own community. Every community has good and weak points and elite if they feel responsible have enough work to set their own community in order. Hinduism is broad-minded and tolerant but very narrow when dealing with castes; Muslims are very devout but are slow in accepting modernisatian, not prepared to accept reason and scientific concepts; Sikhs are very hardworking but they suffer from phoebia of minority group complex that their religion is in danger. We need not elaborare as every community knows its own weak points. The requirement is to eliminate the weaknesses in every group which can be done best by elite of their own community.

Unfortunately, the elite exploit their own eommunity to acquire wealth and power. We have classic example of Jinnah who not only advocated separation for Muslims but also encouraged break up of India by every community and caste. He was not heard by others as he did not belong to their community and therefore a suspect. The problem of miguided elite persists; and even today after the signing of accord the trouble in Punjab lingers on because of certain leaders who want wealth and power.

Should the elite fail, the ultimate hope lies on the people. But what can people do? They are more emotional than rational, easily swayed by rhetoric and fiery speeches. They are very conscious of their past, religion and group sentiments. Each of their weakness is susceptible to exploitation. But the people are not fools. They are very good judges, at least of their self interests. Let me quote what Aristotle had said.

> "The people, though individually they may be worse than those who have special knowledge are collcetively as good. The many are more incorruptible than the few; they are like great quantity of water which is less easily spoilt than a little. The individual is liable to be overcome by anger or some other passion and then his judgement is necessarily perverted, but it is hardly to be supposed that a great number of persons would all get into passion and go wrong at the same moment".

It is this power of the people on which democracies rely. Things have changed since the days of Pāreto. It is not only elite, but people who feel responsible for their rise or fall, What Pareto never knew in

his life time, is emergence of a strong middle class. The middle class are nearer to the poor and more and more poor are joining their ranks. The people are alive to the following:—

(a) Politics has lost ideology and dedication of pre-independence days. The present day politics is only a competition for votes.

(b) Occasionally people are awayed by racial, communal or linguistic appeals and they vote certain leaders or parties to power. But the enthusiasm does not last long. Sooner or later, the rot sets in and the in-fighting begins. People remain where they were. All said and done, India is the same country, its people and problems are same. Development cannot be achieved by emotional appeals of race, religion or language.

(c) People want national power and say in the internationl world. This implies economic development, cooperation and unity. India does not have oil or strategic materials to invite foreign investments. People will have to look inwards, within themselves which inter-alia requires peaceful conditions conducive for economic growth.

(d) Peopele are aware of their achievements and confident of progress. They also realise that there are irritants in the path of progress which will be exploited by foreign powers to apply brakes.

Gigen the direction, people can stand up for the cause which is 'good' by ethical standards. Take the recent example of 'race against time'. People all over the world united for a cause which is nothing but good. It is hard to believe that people lack love, fellowship and compassion. It is true that in the people's world, the people must fight with each other and the aim of certain kind of leadership, is to make one set of people fight with the others. But, let us not be hopeless. The mankind despite all irritations is not heading towards doom. What complaints do we have before Condorcet ?

In the year 1793, Condorcet was hiding from the guillotine in a little pension on the outskirts of Paris. Condorcet was condemned to death as he had voted against the execution of king. There, in that lonely room, away from friends and books, Condorcet wrote the most optimistic book, the great classic in the literatue of progress. Having finished the book, he escaped to a distant inn. The gendarmes only found his dead body; apparently they never knew that the aristocrat always carried a phial of poison.

To read his book is to realise how sceptical we are. Here was a man who had lost everything; he had sacrificed privilege, position and wealth for the Revolution; in return he saw the barbarians of

Revolution turn against him and yet his pook represents the man's hopefulness for men. "Nature", he writes, "has indissolubly united the advancement of knowledge with the progress of liberty, virtue and respect for the natural rights of man". Prosperity will "dispose men to humanity, benevolence and justice". He continues—"no bounds have been fixed to the improvement of the human faculties; the perfectibility of man is absolutely indefinite; the progress of perfection has no other limit than the duration of the globe upon which the nature has placed us". Condorcet felt that the science will double or treble the span of human life; woman will be emanicipated from man, the worker from the employer, the subject from the king. Perhaps the mankind will unlearn the war and he ends:—

> "How admirably calculated is this view of the human race to console the philosopher lamenting the errors, the flagrant acts of injustice, the crimes with which the earth is still polluted ? It is the contemplation of this prospect that rewards him for all the efforts to assist the progress of reason and the establishment of liberty. He dares to regard these efforts as a part of the eternal chain of the destiny of mankind ; and in this persuation he finds the true delight of virtue, the pleasure of having performed a durable service which no vicissitude will ever destroy. This sentiment is the asylum into which he retires, and to which the memory of his persecutors cannot follow him ; he unites himself in imagination with man restored to his rights, delivered from oppression, and proceeding with rapid strides in the path of happiness ; he forgets his own misfortunes ; he lives no longer to adversity, calumny and malice, but becomes the associate of these wiser and more fortunate beings whose enviable condition he so earnestly contributed to produce".

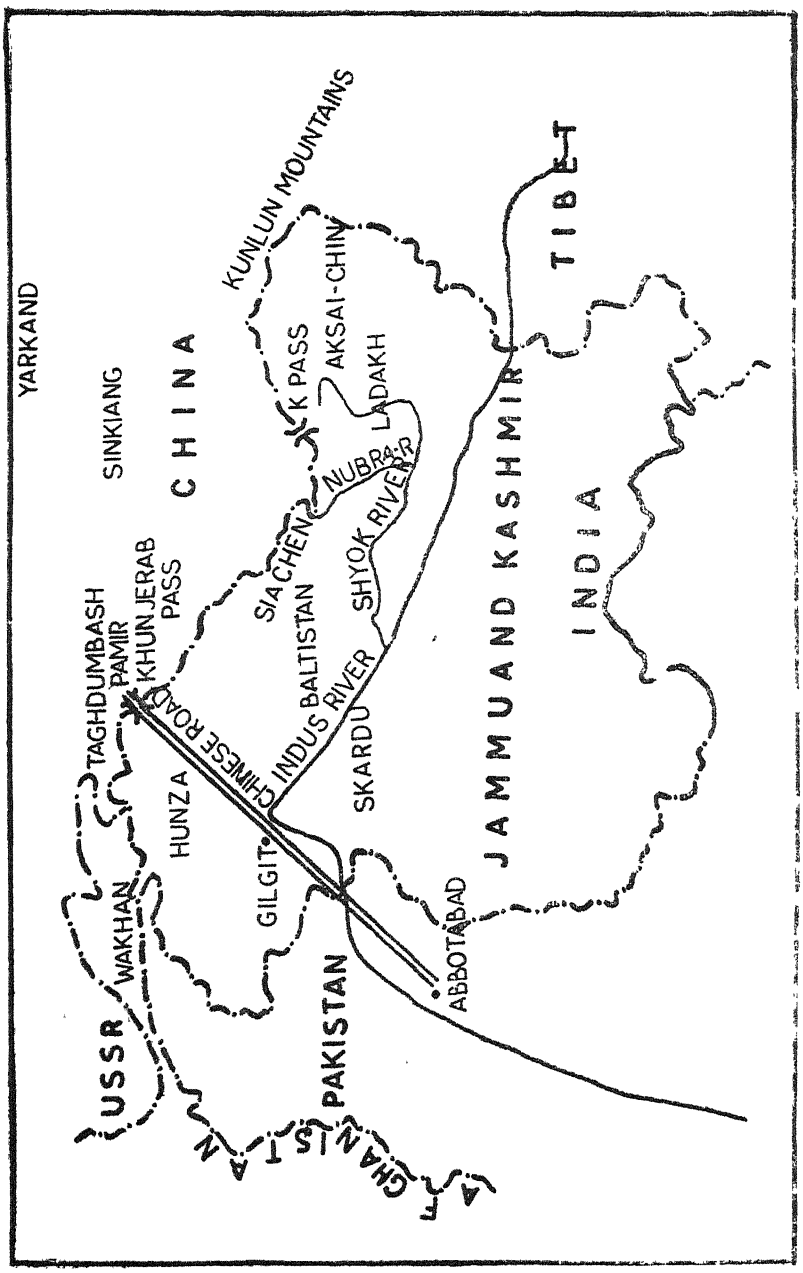
What more can one say to those who feel frustrated. The people must have faith. Hegel had told us that those who work for the future must ignore the present aberration, violence and absolute nonsense which is reflected in fissiparous movements.

One understands that the bulk of people, in their course of duty, have to compromise principles and bow to realities; but all is not lost, one can always revert to lofty idealism.

People can integrate and disintegrate. Choice is upto them, but they will still have to live in harmony. Harmony is a requirement before which differences in caste, religion, language etc fade into insignificance. Multi-racial, multi-religious and multi-lingual India is a mini-world. If harmony does not exist here, it cannot exist in the world.

The elite who exploit people for their own purpose are mistaken. They have not understood the significance of cultural residue. It is the culture which is stable; it adapts religions, languages and customs but nonetheless maintains its identity. The cultural residue in India remains unchanged though the people have acquired different religions, languages and customs. It is the Indians stock which has accepted various religions and languages from time to time; after all the invaders were very few. Even neighbouring states like Pakistan, Nepal and Bangladesh cannot claim to have a different culture. Our people, diverse, as they are, have a cultural unity. The impact of common culture on unity, integrity, harmony and development needs detailed examination which we will examine in the next article.

To be Continued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Sinkiang and Ladakh

SAHDEV VOHRA

INDIA recognised Tibet as a part of China in 1950. Similarly, the USSR had accepted China's occupation of Sinkiang a year earlier, and that provided a common frontier between India and China as Sinkiang borders on Ladakh. Thus the two countries most affected, India and the USSR, had made no protest against the occupation of Tibet and Sinkiang by China. India was as much affected by the Chinese occupation of Sinkiang as she was by the advance of China into Tibet. Claiming that the route from Sinkiang to Tibet lay through Aksai Chin in Ladakh, China built a road in the fiftees connecting Yarkand and Gartok trespassing through Ladakh. The Chinese boundary of Sinkiang had never extended South of the Kuen-Lun range. In order to understand the claims and interests of India in the region trespassed and later occupied by China, it will be necessary to trace the course of political rivalry between Russia and Britain in the latter half of the nineteenth century in Central Asia, as also the role of Sikh and Dogra rulers of Jammu and Kashmir who conquered Ladakh and the areas to the West of it, called by the common name of Dardistan and the area of Baltistan, in the 1830s and 1840s.

On March 9, 1846, the British signed a treaty with the Sikhs after the first Sikh War, one of the clauses of which related to Kashmir. It was as follows: "The Maharajah (Dhuleep Singh) hereby agrees to recognise the independent sovereignty of Rajah Gulab Singh in such territories and districts in the hills as may be made over to him by the British Government". Seven days later, Gulab Singh and the British signed the Treaty of Amritsar by which the British transferred to him "all the hilly or mountainous country eastward of the Indus and westward of the river Ravi". Thus the independent state of Jammu and Kashmir came once more into existence.

It was also provided in the treaty that the eastern boundary, that is, the boundary with Tibet was to be laid down by the Joint Commissioners to be appointed by the signatories. The British also invited the Chinese Government to send its representative to join in this task. Neither the Chinese nor the Maharaja of Kashmir, however, took part

in the survey of 1847 carried out by Strachey and Cunningham. As reported by Cunningham, the leader of the boundary Commissioners, "The boundary is well defined by piles of stones, which were set up after the last expulsion of the Sokpo or Mongol hordes in A.D. 1687, when the Ladakhis received considerable assistance from Kashmir"*. Lt. H. Strachey, the other British Commissioner followed the road to the Chang Chenmo Valley. "His Diary is a remarkable document, precise and detailed. It shows that the alignment made by Indians in 1960 was known and accepted nearly a century before"*. The Chinese Government had excused themselves from the Survey by stating that the frontiers were well known and there did not seem to be any need to define them.

Ladakh and Baltistan had been brought under Dogra rule by Zorawar Singh by 1840. To the north and northwest, the rulers of Hunza, Nagar, Gilgit, etc. had also been brought under Dogra rule during the 1830s. Their kingdoms were of great interest to the British in the quest for security of their empire against possible Russian advance across the Hindukush and the Pamirs. The British policy fluctuated between allowing Kashmir to control these quasi-independent rulers and dealing with them direct through subventions or by invading them. The Dogra rulers set up their Governor at Gilgit and continued to control this area till the 1930s when the British had taken over control of Gilgit under an agreement with the Maharaja for a limited period. In fact the question of handing it back to the Kashmir Govt arose in 1947 before Nehru who decided to postpone the decision** But soon after the British officers, of the Gilgit Scouts, at Gilgit handed over the area to Pakistan. The rulers of Hunza and Nagar paid tribute to and obtained subsidy from the Kashmir Darbar after the late sixties of the 19th contury. Further to the west the kingdom of Chitral was outside Kashmir's control. Chitral was in conflict with Afghanistan which regarded it as a tributary of the ruler of Badakhshan and thus a part of Afghanistan. Afghanistan had also claims on Kafiristan, Dir, Swat and Bajaur.

The British policy towards Afghanistan was aimed at securing a buffer zone north and South of the Hindukush passes. To this end they relied on the Raja of Kashmir to control Hunza and other Dard rulers. In the areas not under the control of Kashmir, the British had captured Swat and posted a resident in Kafiristan. They were paying heavy subsidies to the ruler of Chitral and helping him against

* Dorothy Woodman, "Himalayan Frontiers", Page 42.
**See—Selected works of Nehru, ed. S. Gopal Second Series (3).

the threat from Badakhshan. North of the Hindukush they were trying to strengthen the position of the Amir in Badakhshan while inducing the Amir to give up his trans-Oxus possessions. This was in accordance with an understanding that the British had reached with Russia in 1873 to let the Russians have a free hand in Bukhara and in the area north of the Oxus.

The British had also to secure Afghanistan from Russian advance in the area further to the west from where Afghanistan could be approached north of Herat. Russia took Merv in 1884 and in retaliation Afghanistan advanced to Panjdeh but Russia wrested it from the Afghans in 1885. It appeared for a time that the British and the Russians would come to a fight as the British Government considered that the road to Herat and thence to India would be at the mercy of Russia. Britain suffered from an attack of "Mervousness", as it was called at the time by the Liberals, but calmer counsels prevailed and they proposed the appointment of a Joint Commission to demarcate the boundary. This beginning started the two nations on a path which reconciled their ambitions, even though the Afghans had to be forced to accept a settlement which reduced their area. In 1887, the Afghan boundary from Hari Rud on the Iran border to Khwaja Saleh on the Oxus was successfully demarcated. East of Khwaja Saleh, the boundary of Afghanistan and Kashmir with Russia was similarly later, settled by a Joint Boundary Commission in 1895.

The frontier areas of Kashmir and the mountains to the north of them are a conglomeration of some of the highest peaks, plateaus and desert regions. The plateau of Ladakh is separated from the Tarim basin to the north by the Kuen-Lun and the Karakoram ranges. In between these mountains is the Raksam Valley in the west and the source region of Yarkand and Karakash rivers to the east. Further to the east are the Aksai Chin salt plains. The fertile Raksam Valley is about a hundred miles long and is bounded on the west by the Taghdumbash Pamirs. The Karakorams west, of the Karakoram pass are called the Muztagh range which curves west to merge into the Hindukush mountains. North of the Karakoram (Muztagh) and bounded on the east by the Sariqol range are the Pamirs. The Pamir regions are the top of this gigantic mountain system and comprise the Pamirs, the Little Pamirs and the Taghdumbash.

The Russians had begun to explore and occupy the Pamirs after the Agreement of 1885 fixing the border of Khwaja Saleh on the river Oxus. The upper reaches of the Oxus and the Pamirs upto the Sariqol range to the east was a vacuum in which the British while unable to

go themselves were keen that the Russians should not advance, for fear that the passes across the Hindukush and the Karakoram would become accessible to them. At first they tried to induce Afghanistan and China to occupy this area but they found that neither of them was in a position to resist the Russian advance, nor were they willing to oblige the British by taking on this responsibility. China was piqued by Britain having denied her claim to Hunza. Afghanistan was unhappy over Russia having been given a free hand in the trans-Oxus possessions of Afghanistan, and also because the British were tightening their hold over Swat, Dir and Bajaur, as well as Chitral which was claimed by Afghanistan as tributaries of Badakhshan.

The British had started exploration of the area on both sides of the Hindukush and the Karakoram ranges. In 1870, Hayward who was trying to explore the passes from the south into the Pamirs was murdered and the ruler of Yasin, who was a nephew of the ruler of Chitral, was involved. Another explorer, Gordon reported that Chitral lay on the route from the Pamirs across the Hindukush via the Barogil pass which was easy to negotiate. An official party under Colonel Lockhart was sent in 1884 to follow up this and other possible routes from the Pamirs. They explored the area and reported that the Barogil pass was no doubt easy to cross but no roads led from it to Chitral. They reported that instead the Dora pass needed watching as a potential route from across the Hindukush to Chitral. In 1888, however, a Russian explorer Grombchevsky crossed the Karakoram Range by Mintaka pass to Hunza and was received by the ruler of that state. The focus of interest thus shifted from Chitral to Hunza. Younghusband was sent to explore the routes coming from north of the Karakoram mountains. He started from Leh and followed the route to Sinkiang from Ladakh. When he reached the fort of Shahidulla after crossing the Karakoram range, he met the Kirghis living there. With their help he went west to the Yarkand valley and Raksam in the area north of the Karakoram ranges and there he came upon the Russian soldier Grombchevsky who was this time coming from across the Pamirs and was on his way to find a route into Ladakh. They met in the Teghdumbash Pamirs and the Russian continued east while Younghusband explored the passes leading south to Hunza, namely, the Khunjerab, the Shamshal, and the Mintaka passes across the Karakoram. In 1891, it became necessary for the British to send an expedition to Hunza. As mentioned earlier, its ruler Safdar Ali had received the Russian explorer Grombchevsky. He had also organised a confedration of Dard rulers against the British. Col. Durand led the expedition and defeated the rulers of Hunza and Nagar. His prompt action proved decisive and the revolt subsided.

Younghusband was sent once again to explore the possibility of Russia advancing into the Pamirs from Sinkiang. In 1891, he was exploring the Pamirs and ran into the Russian party under Ianov at a place called Bozai Gumbaz. He was arrested by Ianov and was allowed to go provided he did not further tress-pass "Russian" territory. He managed to return through Afghanistan. The British lodged a protest at Younghusband's arrest and an apology was forced from the Russians. and the latter had to admit that Younghusband had not been arrested on Russian territory. The territory was not Russian but then it was not British either. The gap between the Afghan and Chinese territory lay wide open down to the passes across the Hindukush and Karakoram ranges and the conclusion was obvious that a frontier line needed to be fixed. This was the best safeguard that the British could possibly extract in the face of the unwillingness of the Chinese and the Afghans to take on the Russians in the Pamirs.

A settlement with the Russians had become urgent. But the Amir of Afghanistan had first to be placated. Since his wishes could not be met in the area across the Oxus, he had to be compensated otherwise. The Foreign Secretary to the Government of India, Henry Durand went to Kabul and negotiated a broad-ranging settlement in 1893. He agreed to give up any claim to Kafirstan but retained Swat, Dir and Bajaur. Asmir, which was claimed by Chitral was also given to Afghanistan. South of the Kabul river a line of demarcation was agreed to be drawn up between Afghanistan and India. The Amir was given a written assurance by the British that they would come to his aid in case of aggression and his annual subsidy was raised from Rs 12 lakhs to Rs 18 lakhs.

Thus armed with the freedom to abandon Afghan claims north of the Oxus, the British could now confirm the same to the Russians* to induce them to settle the boundary of the Pamirs east of Lake Victoria. The Pamir Boundary Commission set up by the two powers completed its work in 1895 and Russia was allowed to annex the Pamirs with the exception of Taghdumbash. Afghanistan agreed to hold Wakhan as a small wedge inserted between the two empires to preclude their borders touching each other. "It is not an imposing buffer this long attenuated arm of Afghanistan reaching out to touch China with

* According to the agreement of 1873.

the tip of its fingers. It is only eight miles wide at one point"*. But this was enough to lay at rest the spectre of Russian advance on India.

East of the Pamirs, Sinkiang consisted of the great depression of the Tarim basin with the Tien-Shan mountains bounding it on the north. North of the Tien-Shan was the Ili region abutting on Russian Turkistan. Just as Afghanistan had to pass under the British sphere of influence before the potential threat of a Russo-British collision could be averted, Sinkiang was seen as a possible area of conflict between the two powers. China was not strong enough to withstand pressure from either of them to maintain the independence of Sinkiang, without having to lean to the side of one or the other or playing the two against each other.

Sinkiang was incorporated into the Chinese empire in 1758 by the emperor Chien Ling. As Skrine who had been Council General at Kashgar records, China had occupied the country five times and lost it four times. Its Turki population was largely the Uighars of the oases and the valleys, and a small population of the Kirghis who were a nomadic and pastoral people moving about in the upland areas. The local Muslim rulers ousted by the Chinese had shifted to Khokand (Ferghana) in western (now Russian) Turkistan and attempted from time to time to regain their kingdom. In 1867, a protege of these ex-rulers, one Yakub Beg established his rule in Yarkand and other areas south of the Tien-Shan and called it Kashgaria. Yakub Beg turned towards the British in India for help and support. Professing interest only in trade between Sinkiang and Kashmir, the British sent a mission to Yarkand under Forsyth in 1870. But the Russians forestalled them. In 1871, having taken Kuldja in north Sinkiang, which was a key to the kingdom of Kashgaria from the north, they signed a commercial agreement with Yakub Beg in 1872 giving them a special favoured treatment in respect of taxes on Russian imports.

The British were exploring the various routes leading from Ladakh to Sinkiang Apart from the route over the Karakoram Pass, the Chang-Chenmo route via the Salt Plains of Aksai Chin in north-east Ladakh was known to be used by caravans from Yarkand even in the depth of winter whereas the route through the Karakoram pass was quite impassable for half the year. The British therefore signed in 1870 a treaty with Kashmir on trade with Central Asia and to

* Sir Thomas Holdich, "The Indian Border Land" 1903.

explore the route through the Chang Chenmo Valley. Article 1 of this treaty reads, "With the consent of the Maharaja, officers of the British Government will be appointed to survey the trade routes through the Maharaja's territories from the British frontier of Lahoal to the territories of the Ruler of Yarkand, including the road via the Chang Chenmo Valley". This would show that the Lingzi-Tang plains and Aksai Chin were part of Kashmir (Ladakh) since the British entered into an agreement with the State for the right to explore a route through the area to Sinkiang. The British agent at Leh, Dr. Caylay had in 1867 explored along the Chang Chenmo Valley and across the Lingzi Tang plain as far as the Karakash river. In 1868, Hayward homeward bound from Kashgar had used this route and Forsyth had used it in 1870 on his mission to Kashgar. Another exploratory mission through the area was the one led by G. Henderson who was leading the advance party of the Forsyth Mission to Yakub Beg. It describes the journey through Lingzi-Tang to Karakoram*. The party crossed the Salt Plain of Aksai Chin and reached the upper Karakash, passed the Shahidulla outpost built by Kashmir and reached another fort built by the Yarkandis about twenty miles further away. This route was followed by the main Forsyth mission also. Forsyth concluded a trade agreement with Yakub Beg in 1874. This included an article regarding the posting of a permanent British representative at Kashgar. Yakub Beg was however unwilling to implement it lest he may have to accept a similar request from Russia. When Forsyth sent Robert Shaw from Leh to take over as Counsel, Yakub Beg hurriedly sent him back. The trade treaty with the British remained a dead letter and Yakub Beg died suddenly in 1877.

China now suddenly showed unexpected energy and organising ability and sent a strong force to re-establish her hold over Sinkiang in 1878. It was now that the area was named Sinkiang.** By the treaty of St. Petersburg, Russia agreed to give back Kuldja and this was added to Sinkiang. The first Russian Counsul at Kashgar, Petrovsky, arrived in November 1882 and set about his task in a masterful way. He felt that he was fully competent to intervene in the affairs of the local Chinese representatives, and effectively safeguarded and promoted Russian interests. The British on the other hand were not able to secure permission to send a representative and had to resort to the device of unilaterally posting an official at Kashgar for the "transaction of Indian official matters". Macartnay took over this post in 1890

* G. Henderson and A.D. Hume, "Lahore to Yarkand," 1873.
** Meaning "New Dominions".

but the Chinese never recognised his presence till the Anglo-Russian agreement of 1907 when for the first time they recognised him as Consul.

II

As stated already, the area between the Karakoram and the Kuen-Lun ranges comprises, from west to east, of the Taghdumbash Pamir and Raksam Valley, the source region of Yarkand river and Karakash river and lastly Aksai Chin further east. The Aksai Chin area provided the Ladakhis with salt and with rather unappetising pastures for their goats, sheeps and yaks. The British were disappointed at their meagre success in Sinkiang and at the poor prospects of trade between Sinkiang and India. The Russians were able to gain an upper hand in Sinkiang and to maintain their dominant position. All that remained for the British was to secure their border or rather that of Jammu and Kashmir against any possible encroachment from across the Kuen-Lun mountains which formed the southern boundary of Sinkiang. For this purpose Younghusband had, on his way to Hunza from the north, earlier visited Shahidulla in 1889 in the trans-Karakoram area. The few Kirghis who lived near Shahidulla had petitioned to the British agent at Leh for protection against the Kanjutis, i.e. the inhabitants of Hunza. This fort had been built by the Kashmir Government in 1863 to protect the trade caravans from Kashmir to Turkistan. Younghusband found that after their return to Sinkiang in 1878, the Chinese claimed their boundary to extend upto the Kuen-Lun passes of Kilian, Kugyar and Sarju. Earlier, Ney Elias the British agent at Leh had during the years 1879-80 visited Sinkiang and he was also told by the Chinese that "They considered their line of 'Chatze' (posts) as their frontier-Kugiar, Kilian, Sarju, Kiria." In 1885 Elias again visited the trans-Karakoram area unofficially and had recommended that the Chinese be induced to occupy the country between the Karakoram and the Kuen-Lun ranges. The Viceroy, Lansdowne, had accordingly written to the U.K. Government in October 1889 as follows : "The country between the Karakoram and Kuen-Lun ranges is, I understand, of no value, very inaccessible and not likely to be coveted by Russia. We might, I should think, encourge the Chinese to take it, if they showed any inclination to do so."* Younghusband, while submitting his report on his 1889 visit to Shahidulla recommended regarding his mission to Shahidulla and Hunza**, that the area east of Shahidulla should not be offered to

* Quoted by G.N. Rao, "The India China Border" pp. 48-49.

**"The Northern Frontier of Kashmir", F.E. Younghusband, p. 101, Republished in 1973 by Orient Publishers, Delhi.

the Chinese as was proposed to be done with regard to the area west of it.

On a second trip, Younghusband met the amban of Yarkand on his way to the Pamirs, on 5 September 1890, and told him "He (the Viceroy of India) had been led to believe that the Chinese considered their frontier extending only as far as the Kilian pass and that the intervening territory was a tract of 'no man's land'... He had since, however, learned that the Chinese were undertaking the protection of the trade route..."* By such means China was encouraged by the British to extend her boundaries south of the Kuen-Lun.

III

The Russians had been exploring the area of the Pamirs and south of the Kuen-Lun mountains. In 1887, Grum Gjrimailo explored the upper reaches of the Yarkand river south of the Kuen-Lun mountains. In 1888, Grombchevsky on his return from Hunza had visited the upper reaches of the Karakash river and reached Shahidulla. As a countermeasure to the Russian moves the British now succeeded in persuading the Chinese to make forward moves into the trans-Kuen-Lun areas. In 1892, the Chinese entered Shahidulla and set up a 'pillar' on the Karakoram pass. The British prevented the Raja of Kashmir, Amar Singh, from taking any action against the Chinese. They also connived at the Chinese claims over the Taghdumbash Pamir in the Kashmir territory beyond the Karakoram range. These claims came about as follows :—

In 1847, the ruler of Hunza had helped the Chinese authorities in Yarkand to put down a rebellion in Sinkiang. For this he had received for his people the right to graze cattle in Raksam Valley and the Taghdumbach Pamir. The Chinese had on this basis claimed the vassalage of Hunza. The claim of the Chinese had been rejected by the British in 1889 in respect of Hunza but encouraged the Chinese to move into the Taghdumbash area by stating "If Chinese will hold the Taghdumbash Pamir effectively, the Government of India will certainly not be disposed under the present conditions to press that claim (namely, of Hunza) against her"**. They had also told the British agent in Hunza to restrain the ruler of Hunza from taking any action over this transgression. By 1895, information was received that the Chinese had started patrolling the Taghdumbash area.

* Quoted in "Indian Foreign Policy and the Border Dispute with China" W.F. Van Eekelen, p. 161.

**Quoted in G.N. Rao's "The India-China Border". p. 35

In 1896, Macartnay presented an Atlas "Johnson's Atlas" of 1894 containing maps of the region and published by the Government of India, to the Chinese *Tao Tai.* This atlas was seen by the Russian Consul General Petrovsky at whose instance the *Tao Tai* was led to protest to Macartnay that Aksai Chin should be shown as part of Tibet. The *Tao Tai* did not, at any rate, regard it as part of Sinkiang as China was to claim later after 1950.

As far as can be ascertained from Chinese sources, the areas south of the Kuen-Lun mountains were never claimed as part of Sinkiang. In the maps published during the reign of emperor Chien Lung (1735-96), who encouraged historical and geographical research, and of emperor Tao Kuang in 1821 and 1824 the Kuen-Lun continued to be the boundary. As late as 1890, when the Chinese Minister Hung Ta-Chin had furnished a map to Macartnay at Kashgar both Aksai Chin and Lingzi Tang had been shown south of the boundaries of the 'New Dominions'. The Chinese claimed in 1960 during the negotiations of Indian and Chinese officials that they sent Russian surveyors to the area in 1940-41 but the Indian side pointed out that these surveys infact pertained not to this area but rather to the Sino-Russian boundry. Infact there was no attempt on the part of the Chinese to send any surveyor or official to this area till the 1950s, when the Chinese invaded Tibet and when they claim to have sent a force along a route from Yarkand to Gartok via Aksai Chin.

US Intelligence Machinery

DR SD PRADHAN

IN this paper, an effort is made to present a complete picture of the US intelligence agencies, their infrastructure and inter-relationship. To limit its size, the detailed functions of sub-divisions of various agencies have not been included. This is a subject about which neither much material nor authentic information about the present trends are available. However, with the publication of some US Govt. documents, minutes of various committees which examined the role of various agencies and books by ex-intelligence officials, now it is possible by doing painstaking research to make an educated guess about the present trends of the various agencies. The intelligence agencies keep on changing their mode of functioning very rapidly. Therefore, it is possible that some major changes might have been made recently also. However, an attempt is made in this paper to collect information from various published sources which are available at present to understand the functioning of US intelligence agencies.

The vast structure of US intelligence community in the last four decades, though has undergone certain changes, yet broadly speaking, has been relatively stable. The basic concepts have remained the same. The changes were only in the relationship between the different agencies and their relative importance in the policy-making. The agencies can be broadly divided into two groups—Central Coordination and Management agencies and the Intelligence Collecting and Producing agencies.[1] The former type of agencies help the policy-makers to know the present conditions, trends, capabilities and intentions of foreign countries by properly evaluating the reports from various intelligence agencies and thus help in choosing right options. The second category of agencies collect information and produce the finished intelligence. The relationship between the various agencies of USA is fairly complex. Their conflicting jurisdiction and functions often lead to competition amongst themselves rather than cooperation.

1. *The Washington Papers/105, The US Intelligence,* edited by M.M. Lowenthal, New York, 1984, p. 82. (This is an edited volume of US Government documents on foreign intelligence agencies. Hereinafter referred The Washington Papers/105).

To get a fair idea of their functioning, it is desirable to have a look at the important components of the US Intelligence machinery. The following are the important US intelligence agencies.

CENTRAL COORDINATING AND MANAGEMENT AGENCIES

1. *Director of Central Intelligence (DCI)*—The Director of the Central Intelligence came into existence in 1947 through the National Security Act. However, actually it was created one year earlier by President Truman and the Act gave it the final sanction.[2] The DCI is the head of the entire US intelligence community. He is often called the 'Titular Chief' of the entire US intelligence community. This is because of the fact that the community, which DCI is supposedly heading, is made up of fiercely independent bureaucratic entities with little desire for outside supervision. The DCI is also the head of the Central Intelligence Agency (CIA).

The appointment of the DCI is subject to the Senate's approval and for the past sometime is appointed by each President in the beginning of his term. Though in theory, he heads the entire US intelligence community; yet in practice, he is overshadowed by the Secretary of Defence and President's Assistant for National Security Affairs. The Act of 1947 had not clearly defined the duties of the DCI which were indeed to carry out his central role of managing and coordinating national foreign intelligence. Therefore, President Ford in 1976 and President Carter in 1978 explicitly spelled out his authority in the areas of budget, tasking, intelligence review, coordination and dissemination and foreign liaison.[3] President Reagan in 1981 designated him "as the primary adviser to the President and the NSC (National Security Council) on national foreign intelligence".[4] Now, his duties include implementation of special activities (covert actions); liaison with foreign intelligence and counter-intelligence; protection of intelligence sources, methods, and analytical procedures; full responsiblity for production and dissemination of the national foreign intelligence including authority to give tasks to other intelligence organizations; authority to decide all conflicts in functioning development of National Foreign Intelligence Program (NFIP) and its implementation and evaluation; and to maintain liaison with the Congress.[5]

2. William M. Leary (ed), *The Central Intelligence Agency : History and Documents*, Alabama, 1984, pp. 21-22.

3. See Executive Order No. 12063. *Ibid*, p. 157.

4. See Executive Order No. 12333. *Ibid*, p. 171.

5. *Ibid*, pp. 171-173.

There are many important components which assist the DCI in his role as head of the US intelligence community. One of them is a small group of senior analysts drawn from the CIA and the other agencies which prepares the "blue books" of National Intelligence Estimates and such subjects as Soviet Strategic Defence Capabilities, China's Longrange Missiles Development, etc. These senior analysts are called National Intelligence Officers (NIOs). This group of officers has replaced the Office of National Estimates (ONE) which was a large and more formalised body of senior officers who oversaw the preparation of the National Estimates. The replacement of ONE by the NIO system in 1973 was an attempt to do several things. The DCI wanted a group of high-level advisers on particular areas. These are generalists in term of covering all intelligence functions—collection, analysis, operations and relations with policy makers—for their particular areas rather than generalists on world affairs. Thus the NIOs are responsible for advising the DCI on collection needs and proposed covert operations, as well as supervising the production of National Intelligence Estimates. The NIOs seldom draft the National Intelligence Estimates (NIEs), but assign that task to specialists on the particular topic elsewhere in CIA or the intelligence community.[6] The main advantage of this system is that as the NIOs are in closer touch with the policy-makers, they are more responsive to the consumer needs. And this makes it possible to give the NIEs a sharper focus on the issues under consideration. However, some of the critics of this system point out that quality of intelligence and objectivity are sacrificed. The other important components which assist the DCI are Intelligence Community Staff, National Foreign Intelligence Board and National Foreign Intelligence Council. The details of these are given separately.

The DCI works in dual capacity—the head of entire US intelligence community and the head of CIA[7]. There is no division of time to be spent for these two roles and it is largely upto each DCI. Often it is pointed out that the dual capacity comes in his way of efficient functioning and therefore the DCI be separated from CIA. However, those who oppose this view, point out that such a measure would deny the DCI a strong institutional base.

6. *The Intelligence Community*, Public Document Series, edited by Tyrus G. Fain, Katharine Plant and Ross Milloy, New York, 1977, pp. 89-90. (This is also an edited volume of US Government documents on foreign intelligence agencies. Hereinafter referred The Intelligence Community.)

7. *Ibid*, p. 62.

The DCI has a deputy who is called Deputy DCI (DDCI). The DDCI has full authority to act for the DCI in his absence, or to assist the DCI in carrying out his duties, which are vested in him by law. In practice, the exact division of functions varies with each pair of officers. According to the information available, the following was the arrangement between the DCI, William E. Casey and the DDCI, Bobby Imman. The DDCI concentrated on Intelligence Community Affairs, Congressional Actions, Resources Allocation and Technical issues while the DCI concentrated on Covert Actions and Clandestine Collection[8].

2. *Intelligence Community Staff (ICS)* - The Intelligence Community Staff came into existence in 1972 to provide management and evaluation support to the DCI. It is headed by an active duty military officer at the three-star level and is a composite of individuals drawn from CIA, NSA, DIA, active military officers from all Services and representatives of private industry[9]. It is a management body and has seven major divisions—Assessment and Evaluation; Community Coordination; Humint (Human Intelligence) Collection; Planning; Programme Coordination; Imagery Collection and Exploitation; and Sigint (Signal Intelligence) Collection.

The main function of the ICS is to assist the DCI in carrying out his intelligence community role. It reviews assets resources and tasks of the various intelligence units. It is also responsible for framing the Key Intelligence Questions (KIQs). However, it is upto the DCI to accept or reject the recommendation of the ICS.

3. *National Foreign Intelligence Board (NFIB)* - The NFIB is another agency created to assist the DCI in carrying out his intelligence community role. It advises the DCI on intelligence production, review and coordination, the intelligence budget and other such matters. It was initially created in 1978 and was restructured by the Reagan administration. It was divided into two—the NFIB and the National Foreign Intelligence Council (NFIC). The NFIB still serves to advise the DCI on the collection, processing, production, review and coordination of intelligence; on protection of sources and methods; on foreign liaison; and on matters of common concern. In short, the NFIB deals with analytical and substantive intelligence issues. The

8. For further details see *The Washington Papers/105*. The present arrangements between William Casey, DCI and his new DDCI Robert Gates are not known. The previous DDCI John McMahon recently resigned on the issue of clandestine operations against communist regimes. *The Hindustan Times*, 22 March, 1986.

9. William M. Leary (ed.), *op. cit*, pp. 96-97.

DCI heads the NFIB. Other members of the NFIB are the DDCI (in dual capacity) as Vice Chairman and CIA representative; the Director of Defense Intelligence Agency, the National Security Agency, the Bureau of Intelligence and Research of the State Department; the Assistant Director of the FBI (Intelligence Division); the Assistant Secretary for Defense Programs; Energy Department; and the Special Assistant to the Secretary of the Treasury (national security). The representatives of intelligence units of the military Services of the Department of Defense and the its specialised intelligence officers attend its meetings as observers[10].

4. *National Foreign Intelligence Council (NFIC)* - As mentioned earlier, the NFIC was carved out of the NFIB in the Reagan administration. It deals with priorities and budgets, concentrating more on management than on analytical issues. It is also chaired by the DCI. The membership of NFIC is the same as with the NFIB but it includes the military services, Defence Department's specialized reconnaissance services and senior representatives of the Secretary of Defense, the Attorney General, the Secretary of Commerce and the Assistant to the President for National Security Affairs.[11]

5. *National Security Council (NSC)* - The NSC is the old organisation which was created by the National Security Act of 1947. The main function of the NSC is to advise the President with respect to the integration of domestic, foreign and military policies regarding the national security, and to enhance inter-departmental cooperation in the national security area. The DCI serves under the NSC as does the CIA, although the DCI is not a statutory member of the council. Its statutory members are the President, the Vice President and the Secretaries of States and Defense. The DCI attends the meetings of NSC as its Intelligence Adviser. The Chairman of the Joint Chief of the Staff advises the NSC on military matters. The NSC includes the Intelligence Oversight Board to monitor the conduct of intelligence components.

The role of NSC in 1977 was scaled down but in 1978, again it was put as the most important body of the US intelligence community.[12] President Reagan's order has also confirmed it. It controls all covert operations through the Operations Advisory Group which replaced "40" Committee, It has now 52 full-time and 2 part-time

10. For further details see *The Washington Papers/105.*
11. *Ibid.*
12. See Executive Order No. 12036. Roy Godson (ed), *Intelligence Requirement for the 1980s : Elements of Intelligence,* Washington, 1982, pp. 1-3.

employees. In addition, officials from other agencies are called to assist NSC in its work.[13]

6. *Office of Management and Budget (OMB)* - The budget for Intelligence is dealt by the Office of Management and Budget's Intelligence Branch of the National Security Division. As with all other budget requests, the Intelligence Branch receives the requests of the Intelligence agencies as the National Foreign Intelligence Program budget prepared by the DCI who is assisted by NFIC. The OMB then reviews and evaluates the requests and makes final recommendation to the President. The budget of the military Services' intelligence units is handled by the Comptrollers of Defense as part of the larger military budgets[14]. The Intelligence Branch of the Office of Management and Budget is very small. In 1983, it was reported to have only six persons.[15]

INTELLIGENCE COLLECTING AND PRODUCING AGENCIES

1. *Bureau of Intelligence and Research (INR)* - The Bureau of Intelligence and Research works under the State Department. It is one of the oldest organizations which maintains liaison with other intelligence agencies. However, it is the only agency which has no collection capability of its own. It is completely dependent on the State Department's Diplomatic cables and the sources of other intelligence agencies. It is headed by the Director who is of the rank of an Assistant Secretary of the State. It has three main sub-divisions—Intelligence Liaison, Intelligence Coordination and Intelligence Resources. The INR deals with long-range assessments and research including economic and politico-military analysis. Since the mid-seventies the INR has gained importance as an important component in the complex process of policy-making. For this, the main credit goes to Dr. Henry A. Kissinger. The important functions of the INR are to produce daily a collection of analyses on current events for the Secretary of the State and his principal subordinates; a series of regional and functional summaries such as Arab Israeli developments, African trends, and politico-military analysis; and longer substantive reports on individual issues. There are three major types of the longer reports: current analyses, analysing recent or ongoing events and pointing out their implications in the next six months; assessment and research,

13. *The Washington Papers/105,*

14. See testimony of James Lym, Director, OMB before the Pike Select Committee in *Intelligence Community,* pp. 177-199.

15. *The Washington Papers/105.*

assessing past trends or projecting the course of events more than six months in the future; and policy assessments, analysing the context or results of past policies or assessing comparative policies or policy options. The INR also contributes to the National Intelligenee Estimates and other intelligence community products. In short, it provides policy guidance for intelligence operations conducted by other agencies It is reported in the published sources that besides its own staff, it associates specialists for research and analyses.[16]

2. *Central Intelligence Agency (CIA)* - The National Security Act of 1947 established the CIA under the National Security Council. The act pointing out its main tasks, stated that it would coordinate the intelligence activities of the several departments and agencies in the interest of the national security. Originally, the CIA was conceived to provide high quality intelligence to senior policy makers. It was to act as a central management unit. However, since 1947, the CIA—its structure, its place within the government and its functions—has undergone a dramatic change and expansion. With the passage of time it has become a producer of intelligence and an operational unit[17]. Its original function of coordinating different intelligence agencies has been taken over by other intelligence agencies.

There are four major divisions of the CIA: the Directorate of Administration, the Directorate of Intelligence, the Directorate of Operations and the Directorate of Science and Technology.[18] Each of them is headed by a Deputy Director. The Directorate of Administration is responsible for administration and management functions including personnel, finance, security, training, medical services, overseas logistical support and communications. It also has an office of Joint Computer Support.[19]

The Directorate of Intelligence is one of the largest of the CIA's directorates. It is regarded as the best analytical organisation for the production of finished intelligence within the CIA. It was created in 1952 and is responsible for both the production of finished intelligence and for covert collection. The most important products of this directorate are the daily intelligence publications, designed "to alert the foreign affairs community to significant developments abroad and to analyse specific problems of broadly-based trends in the interna-

16. *Ibid.*
17. William M. Leary (ed), *op. cit*, pp. 103-104.
18. *Ibid*, p. 114.
19. *The Intelligence Community*, pp. 215-293

tional arena". These consist of the *President's Daily Brief*, the *National Intelligence Daily* prepared for Cabinet and sub-Cabinet level consumers, and the *National Intelligence Bulletin* distributed more broadly to the defence and foreign affairs communities. The DDI issues a large number of weekly periodicals on specialised subjects prepared in the research offices of the directorate. It also produces in-depth and analytic studies on a periodic or one time basis. These are monographs on particular problems; some are DDI-initiated, others respond to specific requests of the policy-makers or their staffs. The Directorate of Intelligence also performs a variety of coordinating and analytical services in providing intelligence support to policy makers[20].

The Deputy Director for Intelligence (DDI) has four specific functional staffs under him: Planning and Management; Arms Control Intelligence; Collection Requirements and Evaluation; and Product Evaluation. There are five regional offices: Africa and Latin America, East Asia, Europe, North East/South Asia, and Soviet; and five subject offices: Global Issues, Imagery Analysis, Scientific and Weapon Research, Central Reference and Current Production, and Analytical Support. A relatively new body known as the Intelligence Producers Council (IPC) reports to the DDI on the quality of intelligence. This body is made up only of intelligence producers[21].

The Directorate for Operations is the most important operational branch of the CIA that deals with clandestine collection of intelligence. It deals with all kinds of covert operations. According to the recently published Washington Papers, it has comparatively small share of budget and personnel.[22] However, according to two ex-CIA Officers, this is the largest of the four directorates of the CIA.[23] It appears that the ex-CIA officers have taken into account the large number of informants and agents who work for this directorate. As regards budget, the official information appears to be incorrect. This directorate has more careerists than analysts. Approximately, 45% of this directorate's personnel are stationed overseas, using official cover of the representatives of the State or Defense Department. The costs of operations often rises as much as half of the total amount spent on spying and counter-spying. This directorate consists of 15 separate

20. *Ibid.*, pp. 247-252.
21. *The Washington Papers/105*, p. 90.
22. *Ibid.*, p. 91.
23. Victor Marchetti and John D. Marks, *The CIA and the Cult of Intelligence*, London, 1975, p. 71.

components. However, their actual operating pattern do not follow the neat lines of their organisational chart. Some of the important components are as follows:—Foreign Intelligence (Espionage) Staff, Counter-Intelligence Staff, Covert Action Staff, Technical Services Division, Operation Services Division, Missions and Programs Staff, Area Divisions including domestic operations and special operations sections, and Field Stations and Bases. The CIA stations and bases around the world serve as a principal headquarters of covert activity in the country in which they are located. The 'station' is usually housed in the US Embassy in the capital city while 'bases' are in other major cities and sometimes in American or foreign (friendly) military bases.[24]

The Directorate of Science and Technology carries out functions such as basic research and development, the operation of space satellites and intelligence analysis in highly technical fields. In addition, it also handles the CIA's electronic data processing work. This directorate keeps abreast with all research work in wide variety of scientific fields. Specially, it works on developing technical espionage system. It is reported that this directorate uses both CIA and Pentagon funds. A few of its activities are regarded improper or questionable. This directorate was responsible for testing the influence of drugs like LSD etc. on human beings. This directorate is also reported to have been given the task of recording clandestinely conversation between Americans. It is also reported that the task of this directorate includes the manufacture of alias credentials for use by CIA employees and agents. Alias credentials are given to facilitate the CIA employees to carry out their clandestine operations.[25]

The above mentioned are the important divisions of the CIA. It has both intelligence operational and analysis wings. Its many failures had come to light in 1970s and that is why in the intelligence community, it had lost its important position. However, under Reagan, the CIA has regained much of the prestige and anonimity that it had prior to the exposure in 1970s[26].

3. *Defense Intelligence Agencies (DIA)* - The Defense Intelligence Agency was established in 1961 when Defense Department was reorganised by the Secretary of Defense, Robert McNamara. Its object is to provide the defence establishment with accurate and timely information on the military capabilities or political intents of foreign

24. *Ibid.*
25. William M. Leary (ed), *op. cit*, pp. 89-94.
26. Richard Buston, "CIA on the Offensive", *The Hindustan Times*, 22 March 1986.

states and likely threat to the national security. For this purpose, this agency is responsible for providing military intelligence for National Foreign Intelligence Products, coordinating Defense Department's intelligence collection requirements, managing and operating the defence attache system and foreign intelligence and counter-intelligence staff and support to Joint Chiefs of Staff[27]. As it is a joint military agency, its headship is rotated amongst the services and is headed by a military officer of three-star rank.

There are several important consumers of defence intelligence. National security policy-makers are interested in three areas of national importance: crisis management, which calls for not only advance warning of possible military, economic or political disruption, but also continued, detailed tracing of developments once they are underway; long-range trends in foreign military, economic, and scientific capabilities, and political attitudes which might warrant a major US response; and the monitoring or verification of specific international agreements. The US defence planners, responsible for designing the structure of military forces constitute a second important group of defence intelligence consumers. Although their interests are less far-ranging than those of the policy makers, their demands for insights into the capabilities of opposing military forces are generally phrased in broader terms than other defence intelligence consumers, if only because the macroscopic analysis which supports major force structure decisions is seldom sensitive to detailed intelligence inputs. In contrast to the estimative character of the intelligence products, most required by policy makers and defence planners, two other consumer groups—the developers of weapon systems and the operating field forces—have greater interest in detailed, factual information.

To meet the above mentioned requirements, the DIA has a large number of components. Its major components are as follows: the Office of General Defence Intelligence Programs which carries out the DIA's general defence intelligence resource management role; the Office of Systems' Simulation which evaluates the structure and resource implications of current and proposed National Foreign Intelligence Program and Defense Intelligence Systems : the Directorate for Management and Operations which handles the priorities and evaluation of all intelligence functions. It is also responsible for running the Defense Intelligence School. The Directorate for Foreign Intelligence is the most important intelligence production unit in DIA. It has many components. There are eight intelligence officers who act as

27. *The Intelligence Community*, pp. 324-345.

advisors on eight areas of responsibility (European and Soviet Political/Military Affairs, General Purpose Forces and Mutual and Balanced Force Reduction, Middle East and South Asia, East Asia and the Pacific, Africa, Strategic Programs/Research and Development, Defense Intelligence Commentary, and At Large). They can be regarded as counter-parts of NIOs with the CIA. The Directorate for Estimates produces all defence intelligence estimates There are three regional divisions of this directorate (Soviet/East Europe, China/Far East, and Western and Third World). It also has a Directorate for Research which maintains data of a wide range of military-related areas like strategy, training, forces structure, etc. Its Directorate for Production Management looks after the production of foreign military intelligence and also looks after the managerial functions relating to defence intelligence production. Its Directorate for Scientific and Technological Intelligence maintains the data of the scientific and technical intelligence. The Directorate for Joint Chiefs of the Staff Support has intelligence responsibilities as part of Joint Staff It has many sub-sections. Its Directorate for Current Intelligence produces Defense Intelligence, Notices, Warning Reports and Intelligence Appraisals. It also contributes to National Intelligence Daily and supports DIA Alert Center. The Directorate for Indication and Warning oversees the National Military Intelligence Center Indications System and the Defense Department Indications and Warning System. Its Directiorate for Intelligence and External Affairs looks after the DIA's external relations including foreign liaison, public affairs and ongoing international arms negotiations.[28]

The DIA's Directorate for Resources and Systems is responsible for acquisition, management and control of resources. It also has a Directorate for Security Services. It is responsible for the Security of DIA and for the production of counter-intelligence and counter-terrorist analyses.[29]

In addition to the Defense Intelligence Agency, there are a few divisions in the Department of Defense which are assigned special defence intelligence tasks. These divisions do the surveillance job by satellites including photographic signal and electronic intelligence. The most important among them is the National Reconnaissance Office (NRO) which is the part of Air Force Intelligence. It was formed in 1961 and is reported to have worked with intrusive surveillance

28. *The Washington Papers/105.*
29. *Ibid.*

aircraft like U-2. As these divisions perform very sensitive jobs, precise information of them is not available.

Each military Services has its own intelligence unit assigned a specific intelligence task. These intelligence units fall within the ordinary military chain of command, and report to the Chief of Staff for each Service. The Service intelligence units are primarily oriented to supporting the tactical missions of the Services, but they also collect information used by DIA in producing the finished intelligence.

The Air Force Intelligence has two main directorates—the Directorate of Estimates and the Directorate of Intelligence Plans and Systems. The first one has four divisions—Weapons; Space and Technology; Strategic Threats; Regional Estimates; and General Purpose Threat. The second deals with the resource management, planning and force deployment. It also oversees *sigint* (signal intelligence), *humint* (human intelligence), imagery and technical collections. The Army Intelligence has six main directorates; Intelligence Resources Management; Foreign Liaison, Counter-Intelligence; Intelligence Systems comprised of Long-Range Planning, *Sigint*, *Humint*, Imagery, and Intelligence Systems Integration, Intelligence Automation Management, and Foreign Intelligence. The Foreign Intelligence Directorate has a 'Red Team' which is a field operating agency providing the staff support for war games and studies. The naval Intelligence has five major divisions: Military Information, Intelligence Research and Development; Intelligence Policy and Estimates; Special Projects and Plans, Programs and Systems Architecture. All these divisions work under the Naval Intelligence Secretariat. This Secretariat also deals with Soviet Strategy and Doctrine, Foreign Liaison, Inter-Agency Coordination and Management duties. These Services intelligence units are represented on National Foreign Intelligence Council.[30]

4. *National Security Agency (NSA)*—The National Security Agency is the intelligence community's cryptological and communications intercept agency. It was established in 1952 and is responsible for the making and breaking of the codes, the interception of messages of foreign governments, the development of techniques for clandestine transmission of information, and the use of electronics for all forms of communications related to intelligence. It is a service agency for the entire intelligence community. The NSA is responsible only for the collection of intelligence and it does not produce finished intelligence. Its budget is estimated at almost double that of the CIA.

30. *Ibid.*

This superagency is relativeiy unknown to the public and is seldom scrutinized. It is headed by a three-star military officer. The NSA comes under the general direction of the Secretary of State, but it is not a part of joint defence apparatus as is the DIA. The structure of NSA is as follows.[31] Its office of Signals Intelligence Operations has the responsibility for the operational as, ects of signals intelligence, including crypt analysis and traffic analysis. Its office of Communications Security has the responsibility of the protection of all US classified communications. The responsibilities of the office of Plans and Policy are self-evident.

5. *Federal Bureau of Investigation (FBI)* – The Federal Bureau of Investigation was established in 1908. It is the main investigative branch of the Department of Justice and is responsible for gathering data, locating witnesses and collecting evidence in affairs of particular interest to the federal government. The FBI is not a major contributor to the production of foreign intelligence, but its counter-intelligence activities in the USA are significant. The primary responsibility of the FBI in national security affairs is the investigation of espionage, treason, sabotage and other aspects of internal security.[32] It has four broad divisions. One division deals with the administration, the other deals with investigation, the third deals with planning and evaluation and the fourth deals with the inspection tasks. This also shares responsibilities in combating foreign terrorist activities which is mainly dealt by the Investigation Division. The FBI also coordinates all counter-intelligence activities of other agencies conducted within the USA. Outside USA, the counter-intelligence activities are coordinated by the CIA.[33] It is reported that in recent years, the FBI has taken significant steps to update its counter-espionage efforts. It tries to discover hostile foreign intelligence operations and destroy their effectiveness. It also protects the US government against infiltration by foreign agencies as well as the control and manipulation of enemy intelligence operations, and the threat posed by foreign intelligence agencies. The FBI has developed very sophisticated investigative techniques to obtain information about foreign intelligence services and to protect US intelligence agencies. For this purpose, the FBI tries to penetrate into its enemies' intelligence services. Methods of penetration take several forms. Usually, the most effective method is the recruitment of an agent in place. He is already in the employment of enemy's intelligence services. Thus the FBI converts the enemy

31. James Bamford, *The Puzzle Palace*, Boston, 1982, pp. 89-117.
32. See Executive Order No. 12036. Roy Godson (ed), *op. cit.*, p. 17.
33. *The Intelligence Community*, pp. 376-427.

intelligence officials into double agents. Often it also adopts different techniques of deception, it give the enemy a false impression about something, causing him to take action contrary to his own interests. It also adopts various techniques of surreptitious surveillance (for instance, audio, mail and physical). It also uses techniques to provoke those people who know about enemy in telling about the details of enemy intelligence services, and operations. It also indulges in decoding clandestine radio transmission and letters with messages written in secret ink between the visible lines, trailing suspected agents, observing 'dead drops' and photographing individuals entering in foreign embassies or other suspected places. Recently, it has been reported that it has intensified efforts to locate 'illegals' in USA. Efforts have also been made to bring better coordination between the FBI and other counter-intelligence agencies.

6 *Departments of Energy and Treasury*—In addition, there are two other important departments which have limited responsibilities for intelligence. They are Department of Energy and Department of Treasury. The Department of Energy is represented on NFIB and NFIC. It has responsibilities for the overt collection of information with respect to foreign energy matters in collaboration with the State Department. It is also responsible for producing and disseminating foreign intelligence within its area and contributing to collection and analysis where its special capabilities are required. The Department of Treasury is also represented on the NFIB and NFIC. It is responsible for the collection of general, financial and monetary information and participation with the State Department in the overt collection of general foreign economic information. It also produces and disseminates foreign intelligence relating to US economic policy.[34]

CONCLUSION

Such a vast intelligence machinery is certainly impressive and efficient, yet it has certain drawbacks. Its performance and organization has been scrutinized by a number of committees. They have pointed out its following main shortcomings. It was found that the whole US intelligence system was heavily focussed on military considerations and on discovering and evaluating potential military threats. Actually, the evaluation of the US intel igence system from the World War II's OSS model and influence on it of the cold war that followed led to an emphasis on intelligence involving politico-

34. See Executive Order No. 12036. Roy Godson (ed), *op. cit.*, pp. 12-16.

military matters. However, changing conditions in the world point out that for a balanced finished intelligence, economic aspect of intelligence is as important as political and military aspects.

Another defect that came to light, as a result of the examination by different committees, was that several tasks were performed in an inadequate manner. Certain agencies have steadily tended to reach further and further out from their primary tasks. In part, they have been encouraged to do so by officials with policy responsibilities who welcome staff studies from a source with demonstrated capability for objective study. More important, however, have been the impulses within the intelligence organizations, to move out towards the recognised needs. They have frequently gone into new areas. As they lack expertise, it results in the production of faulty finished intelligence.

In addition, it was also found that collection of relevant information was not sound. This was partly due to the failure of high-level policy-makers to keep the intelligence community informed about their requirements. Therefore, the US intelligence machinery tried to remove this defect through a system known as 'Key Intelligence Questions' (KIQs). It was instituted by Director of Central Intelligence, William E. Colby. By framing a limited number of KIQs the attention on collectors and producers of intelligence focused on the needs of policy-makers. These questions are formulated by Intelligence Community Staff and then issued by DCI. The National Intelligence Officers then examine these KIQs and develop a strategy to answer the individual KIQs. After surveying what information is currently available to answer the KIQs, the various agencies make commitments to collect and produce intelligence reports keeping in mind the KIQs.[35]

The indicators are that the US Intelligence system is likely to be reorganised to remove the defects pointed out by the various committees. The US intelligence machinery is now likely to focus with greater intensity on economic and technological problems. In addition, coordination between the various agencies is also likely to be improved for optimum use of intelligence agencies. It is likely that the agencies would be cautioned not to overburden themselves with tasks lying outside their primary role. There are indications that the National Security Council would provide substantive guidance and

35. *The Intelligence Community*, pp. 200-201.

evaluation to the intelligence community in future.[36] And there appears to be a growing realisation in the US intelligence community of the importance of electronic intelligence (*Elint*). The elevation of the National Security Agency in the US intelligence system is a pointer in this direction.[37] Moreover, innovations in the mode of information transmission between the desk officers and intelligence analysts are also likely to be introduced with a view to reduce the time in transmission.[38]

It has been reported recently in the press that the present CIA Director William Casey has finalised a draft outlining CIA's proposed strategy and priorities for the next ten years. In this, top priority is given to assessing Soviet capabilities. Great importance is placed as well on counter-terrorist and counter-intelligence activities and on attempts to figure out trends in the Third World.[39] If this is a pointer, then it can be presumed that alongwith the assessment of Soviet capabilities and trends in the Third World, the US intelligence machinery would be geared to deal with the growing menace of international terrorism.

In the end, it is important to note that the US intelligence machinery is built on the principle of competing agencies. The large number of agencies and branches compete with each other and this results is improved collection and analysis. Sometimes, it is noted that what one agency analyses, the other agency tries to verify it. Therefore, it is not surprising that often the US intelligence tries to know those facts which are already known to it. It probably believes in the theory that for every bit of information there should be two or more agencies. This aspect should be of great interest to the developing countries where the intelligence collection system is just beginning to catch up. In these countries the principle of competing agencies is ignored normally in the name of economy. It has more advantages than disavantages. It is essential for accurate information and analysis.

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36. The present US President's Assistant for National Security Affairs, Vice Admiral John Poindexter has upgraded the NSC staff, presumably to enhance their functions and responsibilities, *Newsweek*, 24 February, 1986.
37. James Bamford, *op. cit.*
38. *The Intelligence Community*, pp. 146-153.
39. *Time*, 3 March 1986.

The Strategy of Terror

(A Pakistani Perception)

COL RR PALSOKAR

INTRODUCTION

THE first definitive study of the Pakistan Army has been written by Professor Stephen P Cohen[1]. The army in Pakistan is of interest to us for a variety of reasons. The foremost being that it is the belligerent that we have fought thrice since independence. It is the threat we face constantly and with whom an uneasy peace exists, if not some form of hostilities. Last year saw fighting on the Siachen glacier and there are innumerable exchanges of fire in Jammu and Kashmir from time to time. With this background it is not surprising that every facet of the Pakistan Army should be of vital concern to us. Professor Cohen's book provides a wealth of information and looks at that army from its inception to the present date. There are many points of interest, but the one chosen for analysis in this article is the current strategic thought in that country.

STRATEGIC DOCTRINE

Pakistan's essential strategic dilemma has been described as, "...it is big enough state to play the game, but not big enough to win...". The strategic doctrine (or 'style' as Cohen calls it) can be summarised as follows[2].

(a) Doctrine of offensive defence, which means that Pakistan has not hesitated to be the first to employ force in order to gain advantage as in 1965 or 1971.

(b) Pakistan has usually regarded war as an opportunity to bring longstanding conflicts to the attention of the international community and mobilise support of its friends.

(c) Deterrence of an Indian attack. "The posture that we have decided to adopt is a policy of 'strategic defence' ...We think that we have a threat from India...To meet that, what we must have is a minimum force which would be a deterrent".

(d) Last, is the nuclear option. Pakistan presume that India possess several nuclear weapons or at least have the capacity to

go nuclear quickly and that the Indian nuclear programme is directed basically against Pakistan and not China. As a result, there is a great impetus for acquiring a nuclear capability.

The nuclear option has many possibilities of employment of such weapons, in a continuum ranging from purely tactical targets, that is against forces in the field, to weapons of terror against urban conurbations. This debating choice is available to all countries who without having a nuclear capability train for its employment. It provides a good theoretical problem for strategic planners, budding strategists and military students. What acquires an added cutting edge in the Pakistani context is that their strategists consider the use of nuclear weapons as terror weapons *par excellence*.

Terror as a Weapon

It is this concept of the use of terror as a weapon which will now be discussed. In an earlier chapter[3] of his book, Cohen discusses how Pakistan's internal Islamic character could shape its strategic doctrine. A movement has begun in that country to develop a synthesis of Islamic and Western theories, and to interpret the Quran so as to develop an Islamic doctrine of war and strategy. There has been some discussion on the concept of *Jehad*[4] and the Quranic injunction to keep war limited. But for many authors, the concept of terror is central to the Islamic conduct of modern war:

> "Terror struck into the hearts of the enemies is not only a means, it is the end in itself. Once a condition of terror into the opponent's heart is obtained, hardly anything is left to be achieved. It is the point where the means and the end meet and merge. Terror is not a means of imposing a decision upon the enemy; it is 'the decision' we wish to impose upon him".[5]

The above conclusion is drawn by its author from a number of Quranic passages which use the word 'terror'.

> "Remember the Lord inspired the angels (with the message), 'I am with you: give firmness to the Believers: I will instill terror into the hearts of Unbelievers."[6]

The aim of this article is not to start a theological debate on the rights and wrongs of a scriptural injunction. As a matter of fact, similar quotations can equally be found in the Old Testament of the Bible or in the Bhagvad Gita. What is of interest is the modern interpretation and proposed application, howsoever contrived. It has been suggested that this use of terror is applicable to nuclear as

well as conventional warfare. It is this aspect that is proposed to be analysed.

THE CONCEPT OF TERROR

At this stage a question might well be asked. What are we, those against whom this terrifying concept is to be used, to make of this? There are two ways of tackling this question. One is the emotive reaction and the other is the analytical one. We shall examine both. Let us take an example of how terror might be employed in practice in a conventional war. A division attacks over a period of two or three nights and captures a brigade position. The defenders were brave and fought heroically. The bulk of the brigade is captured and hundreds of prisoners, many of them wounded, are taken. The ultimate aim is to strike terror into the hearts of the enemy. So all prisoners are lined up, the able bodied ones made to dig a communal grave and then one by one, they are shot at the edge of the pit. Ultimately the grave is closed. Shades of Babi Yar. The Red Cross is not allowed anywhere near the scene and only compliant mediamen are given a doctored story, to strike terror into the hearts of the remaining enemy force.

Hopefully most readers will accept the above as a nonsensical interpretation. However, it is a fact that war and fighting have always been ugly and terror as a weapon has been used in history. Changez Khan and his Mongol hordes used massacres freely to impose their rule and break the will of their opponents. In our own country, Timur the Lame looted and put the inhabitants of Delhi to the sword. But times have changed. In more recent times, it was Machiavelli who first wrote of the all out war. Machiavelli has been considered as the founder of modern strategy and is thought to have initiated the concept of war as it is practised today. His age (late 15th and early 16th centuries) saw the invention of gunpowder and the advent of firearms and artillery. Warfare till then was feudal in character, where the fate of a battle was decided with very few casualties. A battle frequently developed into individual combat by a few knights and the outcome decided the victors and the vanquished. It has been stated that, 'there was a strong inclination to conduct war and battles according to fixed rules and a settled code'. Without going into further details, it suffices to say that it was Machiavelli who first wrote, "Complete destruction of the enemy state must be the chief aim in war; real war is fight for existence and in such struggle everything is permitted". His *Art of War* achieved fame and

following. Marshal de Saxe borrowed from him when he wrote *Reveries Upon the Art of War* and later even Clausewitz accepted the soundness of his judgement in military matters[7]. The advent of industrialisation, capitalist economy and the age of colonisation brought about a changed environment. In such an age Machiavelli was relevant and his thoughts had an impact on the manner in which war was practised. Yet feudalism was not completely overthrown till Napoleon arrived on the scene with his concept of the nation in arms.

Napoleon strode the world as a military Colossus to leave his imprint on warfare for all times to come. He introduced modern war in practice. "It is upon the field of battle that the fate of fortresses and empires is decided", he said. In our Indian study of warfare, we do not take notice of the Napoleonic influence on the method of waging war. This is due to the fact that British assimilation of these influences were handed down to us as accepted lessons. However, in the immediate post-Napoleon era, the world looked to Napoleon and France for military inspiration. An eminent historian has written that, "In battle, Napoleon compressed a strategy of annhilation into an overwhelming thunderclap of combat, combining the imposition of huge physical casualties with the dramatic seizure of psychological ascendancy over the enemy...in the military event which became his hallmark, the mighty climactic battle".[8] This is possibly a more correct interpretation of the use of terror as a weapon. Make the price of fighting so heavy, that ordinarily people would submit rather than resist. The French methods were popularised by the writings of two major interpreters of Napoleon, Jomini and Clausewitz.

However, just maximising casualties to overcome the opponent does not always work, because two can play the same game. During the First World War, the belligerents bled themselves white in seeking 'the mighty climactic battle' to no avail. In the Second World War, the air weapon was sought to be used as a weapon of terror. The responsibility for the search for a battle to finish the war, without regard to casualties, is laid at the door of Clausewitz. Unlike Machiavelli, Clausewitz needs no introduction to the modern military student. In a seminal work on Clausewitz it was written that he was considered the proponent of the 'battlemania' of the nineteenth century. It was his insistence, in *On War,* on the fact that enemy's field forces were the primary objective and battles the primary means of warfare, which led to the costly battles of the First World War. In a major criticism of Clausewitz it was said that insistence on

'absolute war, the fight to a finish', that caused his disciple to accept such horrifying casualties. 'Clausewitz looked only to the end of war, not beyond war to the subsequent peace'.[9]

The critic in this case was another famous student of strategy, Captain B H Liddell Hart, who advocated an indirect approach. 'Strategy has to reduce the fighting to the slenderest possible proportons'. This was in direct contrast to the head-on battles of France and Flanders. By the time Liddell Hart was writing, a new weapon of mobility had arrived on the battlefield, the tank. The story of early German successes in the Second World War are too well known to bear repetition. But the accent was not on casualties or terror to defeat, the aim was to paralyse the opponent. On the other hand, one of the aims of Allied strategic bombing of Germany was to break the morale of the civilian population. This weapon of 'terror' was ineffective in breaking the will of the people. The usefulness of this strategy is good enough to raise heated controversy even today.[10] Now we have on the scene, nuclear weapons with mutual assured destruction. These are considered weapons of terror, but have never been used since they were used to end the Second World War. Assured destruction would leave no winners, but only losers.

CAN TERROR BE THE DECISION

We have so far seen how terror has been used to try and achieve a decision and the drawbacks of trying to do so. Simply put, terror can be used but it cannot provide a decision. Witness the strategic bombing of Germany, it did not achieve a decision till ground forces occupied the opponent's territory. The bombing aided ground operations, but not more than that. It can be quoted that the use of atom bombs on Hiroshima and Nagasaki achieved a decision. True. However, that was when there was nuclear monopoly. Today such conditions do not exist even under circumstances of nuclear asymmetry. The other question then is, whether terror can be *the decision.* The answer appears to be in the negative.

The insistence of some Pakistani strategists on the use of terror both as a means and an end, appears to be based on unacceptable premises. First, we have seen that in conventional warfare terror cannot be used with any major effect. In a multi-polar world and given the modern information and communication systems, it is unlikely that terror can be employed without inviting international opprobrium. Today there can be no moral sanction for the use of terror. This emphasis on terror can however be seen as a means of

preparing the ground for acquisition of a nuclear capability. This author's assessment is that the search for theological, political and practical sanction for a strategic doctrine based on terror is really paving the way for the legitimacy of a future nuclear capability of Pakistan. If that be so, and it is acknowledged that this assessment is open to different interpretations, then India has to sit up and take notice.

It is well known that both India and Pakistan can afford only a limited nuclear capability. Either of the countries cannot afford a *force de dissuasion* of the type that France or Britain has. It is questionable as to what sort of delivery capability a Pakistani or Indian nuclear force can be based on. It can be ground or air delivered with the present force structure. The submarine launch capability, the third leg of the commonly accepted triad will take some time before it is either acquired or indigenously built up. The acquisition of a nuclear capability, however limited, would usher in a totally different environment on the subcontinent and the status quo would be maintained by a form of deterrence. Deterrence depends upon its credibility and effectiveness on not only military preparedness and owning of weapons but also on steadfast leadership. While intentions are liable to change, capability is difficult to acquire but once acquired, cannot be wished away. The next point that arises is the sort of deterrence climate that can exist between India and Pakistan.

Deterrence capability can be offensive or defensive in nature. An offensive deterrence has to be along the lines of massive retaliation based on a second strike capability. This capability is unlikely to exist in the sub-continent. This leaves the defensive capability. The certainty of unacceptable damage that can be caused in an unfavourable military situation, can achieve a deterrent effect. Another aspect of defensive deterrence may be termed as nuclear terrorism, that is threat of strikes against select cities or targets. But such a capability by itself cannot, in the given context, deter a counter-strike. Thus deterrance through a limited capability is essentially a defensive option.

Pakistan makes much of the fact that its position *vis a vis* India is 'weak against the strong'. While one may not agree with this statement, a defensive deterrence capability would fit in with such a strategic perception. Unless of course there is nuclear asymmetry and Pakistan develops its nuclear capability without a matching response

on theIndiand sie. Then even a few nuclear weapons would become weapons of terror *par excellence*. However, it will be a very insensitive Indian government that will allow itself to be driven into such a corner. Thus it can be seen that a limited nuclear capability can be used to achieve a posture of 'national sanctuary', but, and this is an important point, it cannot be an offensive posture.

CONCLUSION

War is a continuation of policy by other means and ultimately the aim of any war is to control rather than destroy. In such a scenario, terror both as a means and an end, has limited use. The inferences to be drawn from the discussion can be summarised as follows. The Pakistani pre-occupation with terror as a weapon and as the decision is untenable in conventional war. Possibly this thought process is preparing the ground for the acquisition of a nuclear capability by Pakistan. If this were to occur, India is unlikely to accept a position of asymmetry. In any case, both India and Pakistan can afford a limited nuclear capability in the foreseeable future. While this would change the strategic scene on the sub-continent, the limited capability can only be a defensive shield to establish a national sanctuary in the bilateral context. Its offensive uses would be extremely limited. It is to be remembered that in war reciprocity is a key word. Let all proponents of terror reflect that two can adopt the same strategy. Finally, that master of strategy, Clausewitz, pertinently pointed out, 'In war, the result is never final'. Terror can indeed be a double edged weapon. For Indians, against whom Pakistanis propose to use terror, the writing is on the wall of a forthcoming nuclear capability. Even a threat in being will change the strategic scene. We cannot say that we were not warned.

Notes

1. Stephen P. Cohen, *The Pakistan Army* (New Delhi: Himalayan Books, 1984).
2. Ibid., p. 145.
3. Ibid., p. 99.
4. Ibid., p. 100. *Jehad* is said to be misrepresented as a religious duty to wage war upon Unbelievers. *Jehad* is supposed to be a struggle against evil and is said to have many forms. The use of violence is the most extreme form. Many Pakistani scholars suggest that the Quran does not promote a doctrine of total war. Yet it is interesting how force is proposed to be used as given in the discussion that follows.

5. Ibid., p. 102.
6. Ibid., p. 102.
7. Edward Mead Earle, ed., *Makers of Modern Strategy* (New Jersey: Princeton University Press, 1971), p. 19.
8. Russel F. Weigley, *The American Way of War* (London: Collier Macmillan Publishers. 1973), p. 78.
9. Carl von Clausewitz, *On War*, eds. Michael Howard and Peter (New Jersey : Princeton University Press, 1976).
10. The publication of the official biography of Marshal of the Royal Air Force, Sir Arthur Harris, has led to three review articles in the RUSI Journal of June 1985, (pp 62-70). These show how much the controversy still rages.

Civil Defence for a Nuclear Age—Indian Context

MAJ KG RAMANI

INTRODUCTION

WE have been complacent thus for, being slightly removed from the scene of danger as it were and have hoped that our statement, on the peaceful use of nuclear energy would be heard and heeded somewhere; we can now no longer afford to ignore the danger from next door. With Pakistan bent on arming herself with an ostensible 'Islamic Bomb' and with China with proven nuclear capability, we'd be the proverbial stork burying our necks into sands of insensibility, if we failed to perceive the threat staring us in the face. Let us as a leading non-aligned nation take a cue from the neutral Switzerland. The Swiss have very pragmatically come to the conclusion that in the event of a nuclear war despite their neutrality they are likely to be attacked, and what is worse, the friendly side may even fail to respond—does non-alignment guarantee us any better?

What our strategic response to such a threat should be is not material to this article, suffice to say it will have to follow the familiar pattern as followed by the NATO and Warsaw Pact countries. What is material to this article, however, is the fact that no nation can forego to have a second strike capability as not having such a capablity would tantamount to surrender.

Any nation professing a second strike capability (a measure which we may well have to adopt sooner or later) would have to make adequate arrangement for reasonable protection of it's target population. Unless this measure was undertaken the nuclear strategy of the nation would be hollow and lacking in credibility as seen by it's adversaries.

AIM

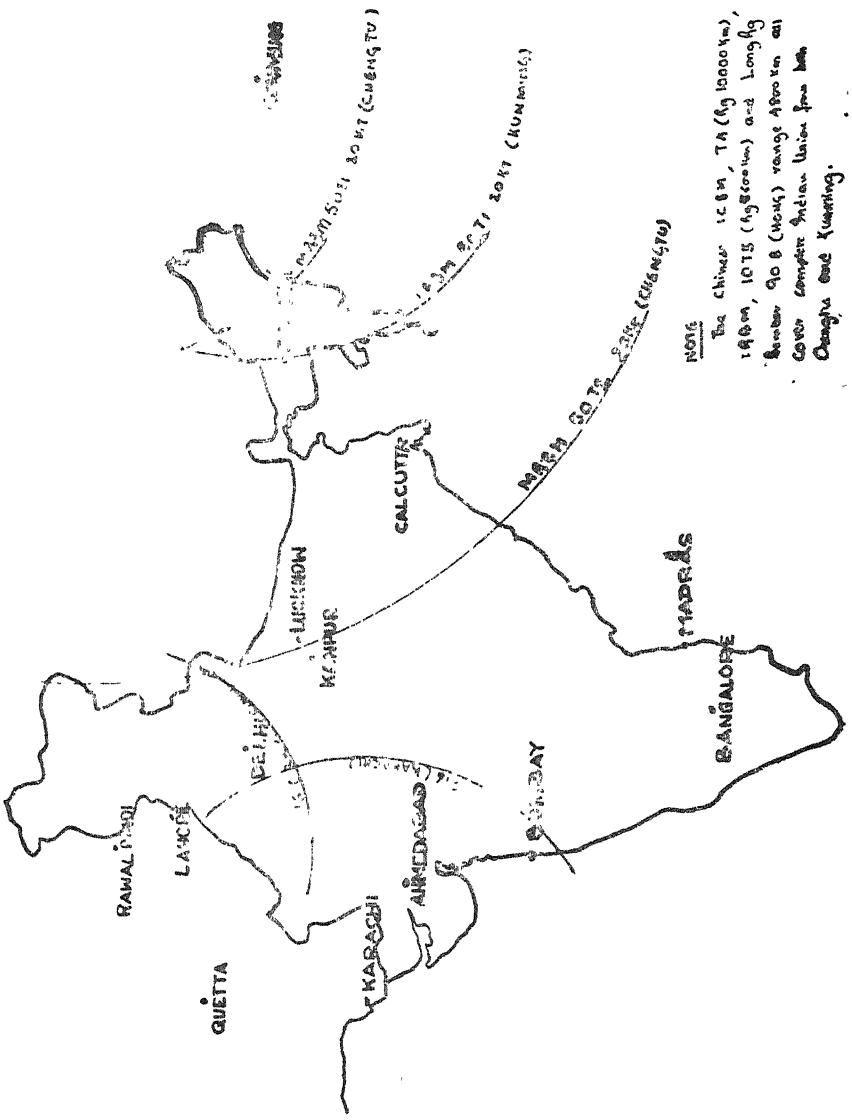
The aim of this article is to acquaint the readers with the awesome responsibility our Civil Defence Organisation may be called upon to face in nuclear environment and then to judge for themselves whether our present organisation (Civil Defence) is capable of it.

SCOPE

At the advent of the nuclear era, the super powers calculated on a warning of at least 20-25 days being available before a nuclear strike. To this also was added the degree of actual notice that would be available because these weapons were then delivered by strategic bombers. Now, with the two world super powers almost balanced on the razor's edge and the availability of a nuclear tipped missile system capable of delivering within meters of the ground zero both the warning period and degree of notice has dangerously come plummeting down. It is this that has prompted these powers to experiment with and develop laser guided missile killers, anti-missile et al. With a detection and reporting system not as sophisticated as was available to the superpowers even in the precold war days, we may today be precisely in the same spot as the superpowers find themselves in now.

The sense of complacence in our country has all along been because our adversaries do not yet have the potential for the delivery of such a weapon system. But, for how long? With a China having completed her IRBM programme quite successfully and the possibility of Pakistan being able to undertake suicidal mission would the delivery of such a weapon still be impossible? Calculated even on both their known present dispositions of air fields and the ranges of present air crafts capable of delivering such a weapon system, they can reach out into India as shown in the diagram (page 161).

While our general public is blissfully unaware of the danger soon likely to be, the same sense of apathy seems to have affected even our civil defence planners. Any civil defence measure for such a holocaust—and a holocaust it will be—will take a long time to build. What we at the moment have but do not realise that we have is—time. Soon in a period of another couple of years we may sorely lack this very essential element. An important aspect is that the planning for civil defence is not the prerogative of the government alone, but all thinking public.


RAWALPINDI
LAHORE
QUETTA
KARACHI
AHMEDABAD
BOMBAY
BANGALORE
MADRAS
CALCUTTA
LUCKNOW
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NOTE

NATURE OF DAMAGE

What devastation a nuclear strike get in it's wake? What ever information is available has been collected from the effects of the nuclear bomb on Hiroshima and Nagasaki and more recently on the other umpteen number of tests conducted near uninhabited atolls.

To summarise very briefly the effect of a nuclear strike is as follows:—

(a) *Flash.* An intense flash, brighter than ten suns is caused by the extremely high temperatures. It surges up instantaneously and then gradually dies off. In the case of a 20 KT explosion it is quite possible to look directly at the flash after two seconds. Medically it has no effects except to those unfortunate few who happen to be looking at the explosion.

(b) *Heat.* The intense temperature at burst produces thermal radiation travelling at the speed of light but with very limited penetrative powers. Personnels in open are extremely vulnerable and succeptible to varying degree of burns depending upon the distance/shielding. (Anything incendiary like paper, cloth, etc. is immediately engulfed in flame called the 'Primary Fire'). The thermal effect of an airburst is far more severe than that by a ground burst.

(c) *Blast.* By far this produces the maximum immediate destruction. A 20 KT bomb (the type that was used in Japan) if dropped above India Gate in Delhi would raze everything to a rubble till Rashtrapathi Bhavan, Central secretariet, Connought Place, UPSC Building, Vigyan Bhavan, and the Air Headquarters *i.e.* a radius of approximately 2 KM. This is not all to this also add the effect of 'after pressure' *i.e.* likely jolt of a powerful air brake on the remaining few buildings or structures that may still be left standing. The blasts are also responsible for causing of 'secondary fires' *i.e.* fire due to collapse of power lines, upset stoves. Blasts by themselves do not produce primary casualities to persons, as a human body can take over pressures—but the flying debris from the damaged structures around produce the maximum casualities.

(d) *Nuclear Radiations.* These are of two types, *i.e.* the initial nuclear radiation and residual radiation. The initial radiation are those that are produced immediately on nuclear explosion and exist to a maximum of one minute; these are essentially rays and are highly penetrative. The nuclear radiations after a period of the initial minute is called residual radiation and is manifest either as induced contamination (*i.e.* for a certain radius around ground zero) or as fall out. Fall out consists largely of very fine particles (ingrained both in the atmosphere and sucked up dust

particles) and persists for a long time in which period this contaminates a large area. Fall out patterns are difficult to predict as these depend on wind structures.

(e) *EMP.* Production of electro magnetic pulse was predicted and studied during even the Manhattan Project. In a test in August 1958, Johnston islands, the nuclear EMP blacked out the street lighting in Hawaii (a distance of 1000 km). This effect is produced because of ionisation of the atmosphere and it has been found that the effect persists for sometime—the level of damage in medium wave being low—any radio connected to it's aerial outside is succeptible to damage.

What Needs to be Done

Educate the Public. This is the paramount need. The people should be educated about the effect of a nuclear attack so that the enormous responsibility of Civil Defence that they'd need to take in a post strike environment can be understood by them. Most of the civil defence measures and it's ancillary support measures as medical service, fire service, etc., may well collapse in a nuclear strike. In Hiroshima with a single low yield weapon almost half the population became immediate casulties (1,40,000). The target population then should know how to look after itself despite the lack of most of these systems. The rural public should be taught to care for their farm produce and livestock in a post nuclear strike environment as also make room for influx of almost 20—30% of urban population. The population should be taught first aid measures—to be effective enough in a nuclear environment; this could be done as a regular feature on TV and as a compulsory subject for all at schools. The importance of first aid education would not only be in rendering assistance to the injured but more importantly in identifying as to who should be allowed to live and therefore who should merit the likely meagre medical assistance. In our country in particular the people need to be educated to be able to subsist for a long time from canned and preserved food—though this has to a measure been already achieved in the urban population by the fast food industries. A greater sense of civic hygiene needs to be inculcated in our population—this more than the nuclear strike may be the bigger killer if our present attitude of civic indifference is allowed to be carried forward into a post nuclear strike environment; where besides knowing how to dispose off waste with human and otherwise a greater need to dispose off the innumerable corpses would exist. Each community should be prepared to last it out alone; as in times of other calamities as floods, earthquake, the other communities may

not be able to come to help. In such a confined community likely also have suffered a large psychological set back, the need for law and order would be more profound; there is therefore a need to now identify possible selfless leaders and incorporate their services into the civil defence organisation. The civil defence personnel and other selected responsible personnel should also be taught to operate a trans-reciever, for this may well be the only source of contact with other communities. The long and short of all this is that the population should be taught that—it is possible to survive even a nuclear strike.

Identify the Likely Target Areas. No nation would squander it's nuclear arsenal over all targets, therefore there would be a certain amount of selectivity about these targets. These targets would have to be those that can cripple the industrial might of a nation and also decimate a sizeable segment of the population, to be able to force surrender on the rest of the population. Therefore the most effective nuclear targets would be large industrial cities/towns capable of getting about decapacitation of both the population and the industry. These need to be identified now so that the target population can prepare accordingly.

Monitoring System. A nuclear threat is likely to be delivered only from the air by either an air craft or missile. A need therefore exists for monitoring and warning the public (by radio or TV) of the danger and also to be able to monitor nuclear blasts and drift of it's associated radio active fall out.

Short Term Measures. These are those measures which must be taken immediately from the time of nuclear strike till it is reasonably safe to emerge outside, which would be approximately a period of two weeks. This is precisely the period of maximum destruction (other than by fall out) and associated shock; therefore to prevent panic and ensure the survival of our nation, it's culture, it is also the period which warrants maximum attention—now. The following should be planned for immediately to fulfill these measures:—

(a) *Shelter.* It should be made mandatory in all our future town planning that nuclear shelters are provided for. In an individual house a cellar or a basement is ideal. For the flat owners, the only answer lies in lining his walls with thick books (sand bags being ideal) and hoping for the best that the block is not blown down. While planning for a nuclear shelter in each individual house, it has been presumed that the family will be together, this may not be so. Therefore in all our shelter planning we should

plan for the 'floater' population *e.g.* office goers, students, working women, etc. The ideal for this would be underground railways, or even underground car parks, which should be mandatory in all offices. Whatever be the type of shelter it should be able to admit only 1/100th of the radiation outside. If nothing, a normal slit trench, as in Hiroshima, will prove a better shelter if provided with 18" of earth on top. For the rural areas underground silos for foodgrains and trench type silos for animals may be the only answer.

(b) *Related Preperations.* Any shelter be it individual or community type should be adequately stocked for lasting at least two weeks. All shelters should have the following minimum requisite:—

(i) *Canned Food.* These should be of such a variety that requires hardly and cooking over fire; as open fire within such a confined place may produce toxic fumes. Needless to say these foods should provide for the normal average calorific value. A heartening news is that chicken seems to be reasonably resistive to radioactivity—and they may therefore still be had.

(ii) *Water.* Adequate water should be stored at the scale of at least 12 litres per person per day for both drinking and ablution purposes. Additional water will be required to treat the innumerable burn victims; as also for washing decontamination necesstiated by having picked up some immediate radioactive particles before evacuation into the shelter.

(iii) *First Aid Kit and Clothings.* Each shelter should have an adequate first aid kit designed to treat fractures and burns. A certain amount of pain killers as self injecting morphine may also be required. A change of clothing for two weeks will be also required. All shelters should have a radiation proof suit, even a normal overall would do. A pick, shovel and crow-bar will be useful tools to have about.

(iv) *Radio.* Every shelter soould have an EMP protected trans receiver and a person trained to operate it. A Geiger Counter is another useful tool.

(v) *Disposal of Waste.* The waste within the shelter will need to be disposed. For solid waste a plastic lined air tight container may be the best, for which adequate containers will be required. For liquid waste, a sump well removed from the shelter may be the best answer.

Medium Term Measures. These are those measures that need to be taken on emerging from the shelters after two weeks. The civil

defence leadership may have to continue for sometime till a regional government can be established. As the effect of nuclear strike will not be evenly distributed the regional governments may take corresponding time in being set up. The primary effort of the civil defence leaders and the regional government as it is set up will be to rehabilitate it's surviving population; in effect it will to a large extent be a continuation of the short term measures. The following will engage the attention of the leadership then, and so if possible should be provided for now to an extent possible:—

(a) *Casualties.* In a dramatic reversal of our pre strike beliefs in chivalry and other codes of conduct, we may have to help the least affected live and not help the truly stricken—if anything we should help them die. This difficult choice of playing 'doctor' may then befall a first aid worker as, as with Hiroshima of 300 doctors and 2,400 trained nurses 260 and 1800 respectively were killed or affected.

(b) *Disposal of Corpses.* Notwithstanding the present religious practices burning may be the only hygeinic method of disposal—this is the measure being advocated even in the West.

(c) *Sustenance*

(i) *Food.* It is quite likely that the present system of distribution will collapse. The local authorities will now have to plan and stock to be able to feed at least one third of the population on an emergency basis for quite sometime. This is besides the individual stocks by individuals. The FCI should plan an underground silos in places adjoining major cities.

(ii) *Water.* The water supply system is also likely to collapse. The primary source of water however is not likely to be affected. In this respect we should encourage the digging of wells.

(iii) *Controllers.* A team of civil defence personnel should act as controllers and after it is safe to emerge from the shelters go about taking stock of both food and water available and centralise it's distribution for larger benefit.

(d) *Homes.* The next thing after food and water likely to engage the attention of civil defence planners is providing for habitation after strike. The civil defence controllers should carry out a reconnaisance of habitable places and plan to shift the population confined in community shelters.

Long Term Measures. These are those measures by which we would re-establish as a people. It is quite difficult at this time to

identify what these measures should be but the most important step now that should be taken is to provide for the continuation of the government. In a post strike environment agriculture is likely to be the basic occupation coupled with some amount of basic engineering requirements. In our rural population today (provided it is not affected by the strike) it is difficult to come by adequate number of persons having the requisite basic skills in engineering; a serious thought now therefore needs to be given whether we should introduce this as compulsory subject in rural schools. The other system likely to fail is the present monetary system, which will again go back to the days of barter—this system again will need to be regenerated as any other.

CONCLUSION

In 1945 there was no need for the USA to have used the nuclear weapon when other conventional means were available; yet it was used. The same logic of 'using it because you have it' may seize our potential adversaries. Mathematical programming has shown that it is quite possible for as much as 30 million people to be unaffected if proper precautions are taken in time.

In conclusion, the very continued existence of our culture depends on our being able to weather even a nuclear strike. While diplomatically we would continue to oppose the proliferation of the nuclear arsenal and militarily we may even oppose by our own nuclear weapon, our credibility as a people, depends on being able to protect ourselves against the threat of a nuclear strike. We have herein considered only the effect of a single strike by a low yield weapon; luckily for us the effects do not multiply (though increase they do!) proportionately as per the yield or the number of strikes. It is therefore quite possible that what may weather a single storm can whether a bigger and a number of such storms—so let us prepare. Finally in L. Finkelstein's words "Nuclear War is not inevitable, but given a neglect of defence including civil defence, nuclear blackmail is."

Lasers For Combat

MAJOR NS BRAR

'A solution in search of a problem'

INTRODUCTION

ONE of the most exotic phenomena put to use in recent times is a beam of light. It can be made so powerful that it can burn holes through thick metal, but can also be so benign that a beam directed at this paper can cause the ink to vaporise without scorching the paper. Although the theory governing this phenomena was propounded in the twenties in concert with early findings of atomic physics, its translation into practical form commenced only in the early fifties. By the mid sixties it appeared to be a solution in search of a problem. However under the stimulus of space and military programmes it is today on the threshold of converting the death rays of science fiction into reality.

Just as the aircraft, radar and atomic weapons changed the face of war, Lasers (Light Amplification by Stimulated Emission of Radiation) hold the same potential today.

Laser by its very nature offers application in the military field where extreme accuracy and high concentration of energy in the smallest possible area are desired. It is the intense, coherent, monochromatic and low divergent property of a laser that makes it attractive for application over other forms of beam energy. Unlike electromagnetic waves it is also immune to Electronic Counter Measures (ECM). Being a means of achieving very high kill probabilities in guided weapons, extreme accuracy in distance measurement, very large communication traffic handling media and as a potential energy weapon itself, laser technology is a contributory factor towards revolutionary changes in warfare. Its increasing importance in the forseeable future warrants an appreciation of its capability and potential.

LASERS

As the name Light Amplification by Stimulated Emission of Radiation implies, laser is a generator of light—a special kind of light that does not occur in nature without man's help. It is emitted in one frequency and all the light waves are coherent i.e. wave crests and troughs occur at the same place. Single frequency of wavelength is referred to as monochromatic (single colour) light. The way in which this unnatural light occurs is based on discoveries in atomic physics during the twenties. It was found that, on a very small scale, matter could absorb or radiate energy in certain allowed amounts. Energy in light waves depends only on the frequency of the light waves, therefore only allowed frequencies (or wavelength) can be absorbed or radiated by atoms. This is why light coming from lasers is radiated at such a constant frequency. Coherent light being the product of all waves being 'in step' with each other is therefore capable of being transmitted over great distance. This coherent light is produced by the 'stimulated emission' part of the laser process. One light ray passing through the excited lasing material is the stimulant and the light rays emitted by other excited atoms are generated in step (coherently) because of the stimulus.

Three things are basic in a laser—a medimum (solid, liquid or gas) that is excited and then gives up its excitation in the form of light, a source that causes the excitation and a resonator, usually in the shape of a tube with highly polished mirrors at each end. The working material or media is put into an excited condition just prior to the onset of laser action by a process referred to as 'pumping'. Pumping methods include flashlamp light, electrical discharge, chemical reaction etc. Pumping adds energy to the lasing material to put it into an excited condition, also referred as a condition of 'inverted population'. A random electron falling from the excited to the stable state can start lasing. Stimulated emission or lasing commences for the other excited electrons as the light wave from this emission passes by. As more light waves are emitted the lasing process (stimulated emission) is accelerated. Mirrors put on each end of the lasing material can further accelerate the process as light waves are shuttled between them. One mirror is partially transparent so that light can escape and become the laser output. The spacing between the mirrors is critical to the coherent property. An exact number of wavelengths must fit between the mirrors to retain coherence in the output beam.

The requirements of power and retention of exact spacing of mirrors under field conditions were inhibiting factors for military use of laser equipment. These, however, have been overcome and rugged miniature laser equipment is now available.

Output from a laser could be continuous as above or pulsed depending on the design. Pulses are emitted with what is called 'Q Switching'. A shutter called as Q switch is placed between the amplifying medium and the partially transparent mirror. As long as it is closed it can prevent lasing action. On being suddenly opened the shutter releases stored energy in the form of a giant pulse. In this way a large power output is released for a fraction of a second. This method is useful in military lasers when a pulse has to be 'fired' for applications like range measurement, coded pulse transmissions for communications etc.

WEAPON GUIDANCE

Air to Surface Weapon Guidance

American air losses in Vietnam in attacking heavily defended ground targets and the inability to pick out strategic targets without collateral civilian damage spurred development of precision guided or 'smart' weapons. Following initial experiments with TV and electro-optical command guidance the unique characteristics of monochromaticity, coherence and intensity of laser suggested its use for weapon guidance. This resulted in the adaptation of a laser guided package as a strap on modification for standard low drag bombs. This was the initial 'Paveway' programme. In response to a full scale invasion of South Vietnam in the spring of 1972, Operation Linebacker (intensive air strikes) was launched. Using the 'Paveway' guided bombs the US Air Force caused more damage in two months of bombing than it had in the four years of the last air campaign. At the start of the Paveway programme in Vietnam, the Circular Error of Probability for air delivered weapons stood at 750 feet. After experience and practice it was brought down to 250 feet. With the employment of a ground designator it narrowed down to 12 feet and today it is nearly zero. Modern air defence makes the traditional close air support mission a hazardous task. Further the fluid mechanised battle gives rise to chances of erroneous engagement of friendly forces. Precision guidance of air delivered weapons form a stand off distance overcomes these problems.

The system for air to surface weapon guidance consists of a laser marker or designator which can be on the bombing aircraft, companion aircraft or with a ground observer and a complementary laser seeker in the bombing aircraft. The low beam divergence of laser forms the basis of very accurate target designation and homing at very shallow sight line grazing angles found in low level attack. Being an optical device laser is more easily and accurately harmonised than radar especially with additional sensors. The target is designated by impinging a laser beam on it with the designator. The scattered energy from the designated target is detected by the laser seeker in the aircraft. The seeker could be an integral equipment in the aircraft like the British Laser Rangefinder and Marked Target Seeker (LRMTS) fitted onto the Jaguar and Harrier or a strap on pod like the US Pavepenny or Pavespike. This seeker causes the 'Head Up Display' (HUD) symbology to be deflected and lie on the target in elevation and azimuth. The pilot simply follows his display and at the appropriate time releases the laser seeking weapon. The weapon's seeker disceens the course correction towards the source of maximum reflected laser energy and converts it into commands for the flight control surface thus providing terminal guidance to the weapon. The laser guided weapon could be missiles like the Hellfire (Heli Launched Fire and Forget) or conventianal low drag bombs fitted with a guidance kit to convert them into guided bombs. The guidance kit consists of a laser seeker, mini computer and fins for flight control and is fitted onto the nose of a conventional bomb. Alternatively the pilot could use his seeker system and HUD symbology to home onto a designated target from upto 15 km and thereafter use unguided rockets or cannons to engage the target. This makes for much easier and faster engagement of targets even with conventional unguided close support weapons. The problems of target acquisition by the pilot and directing the aircraft to the target by a Forward Air Controller is solved to a large extent. Helicopters, like the YAH 64 carrying upto 16 Hellfire missiles, hidden behind trees, hills, buildings etc. can lob laser guided missiles into the target area while themselves remaining virtually 'ungettable'.

Surface to Surface Weapon Guidance

The overwhelming Warsaw Pact superiority in armoured forces spurred guided anti-tank weapon development in the West. Although air delivered guided weapons gave the flexibility of their employment over a large front, the prohibitive cost of employing aircraft for anti-armour tasks focussed attention towards long

range, ground based anti-tank guided weapons. The logical result was the introduction of the 'Cannon Launched Guided Projectile' (CLGP) called 'Copperhead'. This resulted in converting an artillery piece from a low hit probability area weapon to one capable of achieving consistent first round hits on moving tank targets at ranges upto 16 km. It was a major feat in hardening the delicate guidance component to withstand more than 9000g force at the time of discharge of shell.

The CLGP system consists of a conventional artillery projectile, usually of 155 mm calibre, with a HEAT (High Explosive Anti Tank) warhead fitted with a laser seeker in the nose. Along with it the projectile has the associated electronics, four control fins in the tail and canard wings at the mid section to provide lift. The wings and fins are folded into the body of the projectile and open out once the projectile leaves the muzzle of the gun on firing. In operation after a call for anti-tank or precision target fire from a forward observer is received a CLGP is selected and the seeker is set to the wavelength and code of the forward observer's laser designator. The target is now designated with a laser beam by the forward observer using a laser target designator. The projectile is fired into the general area of the target. On entering the 'acquisition basket' the seeker picks up the laser energy reflected off the designated target. On acquisition the CLGP ceases to fly a ballistic trajectory. The seeker through the control unit actuates the fins which steer the projectile to intercept the target. The wing surface provide a 'fly under/fly out' capability to improve manoevrebality against armour operating below low clouds. Typical impact 'footprint' is about one km radius from the nominal point of aim at firing. The target designator could be the same as that used for air launched guided weapons. A similar weapon is the German 'Bussard' which uses a laser seeker derived from the 'Copperhead' for guiding a 120 mm mortar bomb.

The CLGP cannot but fail to effect land warfare. The single shot kill capability of an indirect fire gun will make it much less desirable to concentrate a great deal of military value in one place or vehicle. It would once again question the role of an expensive modern battle tank. Fortified positions, the nemesis of a foot soldier, will be neutralised with surgical precision. Infantry staying power against armour will be vastly increased and ammunition requirements even with enhanced firepower will be greatly reduced. Infantry and artillery could defeat or at least contain enemy armour freeing own armour for their ideal offensive role. In the words of Colonel Frank

Rajaro, Project Manager US Army CLGP, 'Probably, no development has promised to revolutionise the concept of field artillery employment as has the Cannon Launched Guided Projectile'.

Surface to Air Weapon Guidance

Low level surface to air guided weapons either seek the target with their sensors based on the aircraft signature e.g. infra red homing or are guided to the target by riding a radar beam or guide themselves onto the target with their own radar. While heat seeking missiles can only be employed in the receding mode to chase the aircraft's exhaust and are susceptible to infra red decoys the radar guided ones are prone to ECM and are ineffective at very low levels due to ground clutter. These disadvantages are overcome by using laser for guidance. The first operational laser guided low level surface to air missile system is the Swedish RBS 70. The RBS 70 unit is manned by a single operator and all that the operator is required to guide the missile is to keep the sight (and therefore the laser beam) on the target. The missile is capable of engaging head on or receding targets and is virtually immune to decoys/ECM.

LASER RANGING

An accurate measurement of range to targets of military significance has always been an important criteria for best employment of weapons. Earlier method of 'judging distance' was replaced by the use of optical rangefinders which gave a range estimation when 'parallex' was removed by the operator by coinciding the two images of the object in the eyepiece. Another method employed was to put to use the knowledge of the object's substension at a given range. Thus by fitting the object in a co-related skadia gap the range could be found. Both these methods depended largely on the skill and judgement of the operator. Radar too suffers from the disadvantage of its bulk, electronic emission and relative inaccuracy. The advent of the laser rangefinder ravolutionised the means and accuracy levels of range finding. Laser rangefinding, perhaps, is the most significant and practical use of laser technology.

Laser Rangefinder

The laser rangefinder operates on the principle of echo timing. To obtain a range readout the rangefinder is 'fired' at the object whose range is required. On firing, a short invisible light pulse of high intensity is transmitted by the instrument. A small portion of

the pulse is fed into the electro-optical receiver which generates a short pulse to the range counter. On hitting the target some portion of the transmitted energy is reflected back to the instrument and activates the receiver which generates a pulse stop for the range counter. Knowing the speed of light the distance to the target is obtained from the time interval calculated by the range counter. Drawback of visibility is overcome by using a Night Observation Device but the range limit is determined by the visible range of the device. Perhaps the world's smallest laser rangefinder is the US LRR 104 which weighs only 1.2 lbs and is the size of a cigarette pack. It gives an accuracy of $\pm$ 3 meters at four km. A laser range-finder could also be combined with a target designator thus utilizing the same beam for designation and range finding. Conventional lasers tend to range onto smoke, dust and mist partially obscuring the target. Modern technology provides the solution with a laser that has a very narrow beam and the capability of discriminating between battle field dust etc and the visible target. By incorporating the means to set the range 'bracket' within which the target lies the instrument eliminates echos from objects outside the bracket thus narrowing down the scope for false echos.

The advantages of laser range finder are that being an optical device its beam is easier to harmonise with sight line and is extremely accurate. By eliminating bulk optical or radar equipment a very light and compact rangefinder can be devised. It provides the ability to measure range at small grazing angles because of very small beam divergence which results in very sharply defined landing edge for the measuring beam. It is independent of operator proficiency as compared to optical or stadiametric measurements.

Laser Ranging in Air Weapon Delivery

Accurate ballistic weapon delivery from an aircraft depends on the knowledge of aircraft motion in relation to the target, knowledge of target position in relation to the aircraft and release of weapon when its bellistics are consistant with the first two criteria. While speed, dive angle, attitude and angle between the aircraft and the target can be accurately obtained, the error in range estimation or measurement is the largest potential contributor to weapon delivery error. This is overcome with a laser ranger. Use of such an accurate, fast acting range sensor enables first pass attack on targets acquired flate. There is no need for an artificial constraint on flight profile to avour delivery accuracy. A laser ranger combined with a seeker

acquiring and tracking an 'illuminated' target enhances acquisition and strike probability. This combined with an inertial navigation system makes it possible to provide navigation/attacks systems which are much smaller, less expensive, more accurate and reliable than anything before. Modern ground attack aircraft like the Harrier, Jaguar and Fairchild A 10 are equipped with such systems.

Laser Ranging in Tank Fire Control Systems

A critical factor which determines the effectiveness of individual tank gunnery is the estimation of range to the target. Unacceptable errors occuring out of range estimation by the commander were overcome by firing two more rounds, one each at a range plus and minus of the estimated range, thereby straddling the target and compensating for range inaccuracies. This was further sought to be improved with optical range finding devices. These again were cumbersome and difficult to operate accurately in the heat of battle. Another method was the ranging machine gun which was fired onto the target and the range obtained was ballistically matched with that to be set on the main gun. The requirement therefore was for an accurate and instantaneous range finding device. Laser with its simple theoratical principle provided a practical solution to this problem. By incorporating a laser rangefinder in an armoured fighting vehical an instantaneous and accurate range can be obtained. This range data is best displayed to the gunner as a single reading in his sighting eyepiece. The range data can also be fed into a ballistic computer and by taking into account all other variables like wind, temperature etc. a 'corrected' range can be obtained for final application on the gun sight. The first round hit probability of a fire control system originally based on stadiametric or optical range finding can be typically improved by 70 per cent with the addition of a laser rangefinder. With the main armament hit capability so greatly enhanced the crew can confidently engage difficult targets that previously would have been rejected. Also the effective firing distance is nearly doubled. Laser ranging being simple these improved perfromances result in faster reaction times with an actual reduction in crew workload. Modern battle tanks like the T 72, Leopard, Chieftain and XMI incorporate a laser range finder integrated with the ballistic computer as part of their fire control systems. Tanks originally not fitted with a laser range finder can be retro fitted.

LASER RANGING FOR ARTILLERY PURPOSES

Delivery of indirect artillery fire is based on an accurate determination of the location of the guns and the target. While the gun position can be 'fixed' by survey processes, the location of the targets has always been a problem especially when immediate suppressive fire is required and time does not permit obtaining location of target by traditional means. Normally the target location is obtained by the Forward Observation Officer knowing his own location, obtaining the bearing to the target and estimating the range to the target. With the bearing and range obtained the location of the target is arrived at by 'transforming' the coordinates of own position. Alternatively the location of the target is 'spotted' on the map. This obviously is not accurate and 'ranging' has to be resorted to correct for inaccuracies. The laser rangefinder, which may form part of a target designator, is an obvious solution to the problem. The Forward Observation Officer can thus carry out the task of artillery fire direction and air delivered weapon designation.

Accurate laser ranging eliminates the need for 'guesstimation' in obtaining range to the target and thereby helps obtain accurate target location. A rangefinder with a built in azimuth scale can provide the basic inputs of bearing and range to target. This in turn can be linked to a fire control computer whereby these inputs are transmitted to the computer at the battery position. The computer now provides ballistic gun data display on the gun making it possible to fire the first rounds onto the target without any ranging. The request for fire support can thus be executed in a matter of seconds.

Other artillery processes like survey of gun position to bring them on a common grid, fixation of sound ranging bases and locating radars and fixation of targets for future predicted fire, all rely on some form of trignometric triangulation where knowledge of angles and length of sides of triangles help solve fixation problems. Use of laser rangefinders provide faster and more accurate ranger and eliminates the present slow and inaccurate means of obtaining ranges by 'subtension' methods. Laser rangefinder thus contributes towards more accurate and faster fire response with decreased calculations.

LASERS FOR COMMUNICATIONS

The feasibility and utility of laser communications has been

discussed since laser was first introduced in the 1960s. In 1980 the US Air Force demonstrated a laser communication system capable of handling one gigabit (1,000,000,000 bits per second) and proved conclusively that lasers are now technically feasible for high data rate communicatiohs. Because of compactness of beam the laser information transmitting beam can be made narrower than radio frequency systems, thereby concentrating the signal at the terminal for more effective utilization. Theoratically one laser beam can carry 80 million TV channels and handle 100 billion telephone calls. Another feature of laser communications is that the extremely narrow laser pulses are practically jam resistant. For example to jam a high speed receiver a jammer would need to be within a cone only three km. across at 40,000 km. from the receiver. One of the most promising field of laser communication application is for maintaining communications with submerged strategic submarines. Also lasers are being increasingly used in fibre optic communications.

Strategic Laser Communications for Submarines

The ballistic missile submarines operating at depth are essentially invulnerable. However, existing communication system require submarines to maintain a receiving antenna at or near the ocean surface, restricting manoeuverability and providing an area of potential vulnerability. Ideal submarine communications should allow receipt of messages without restricting submarine operations in any way. Lasers have aroused keen interest as they offer a potential means of fulfilling this requirement.

Visible light penetrates sea water better than any electromagnetic frequency above 100 Hertz. For this reason it is possible to use light to transmit messages to an underwater receiver at significant depth than just below the surface. The optimum wavelength for this transmission is in the blue-green region of the spectrum. This has prompted effort in utilislng blue-green laser for submarine communications. The basic idea in the Stragtegic Laser Communication with Submarines Concept is that blue-green light from a satellite in orbit can be placed in spots on the ocean surface with sufficient intensity to reach a submarine's receiver while the submarine is at operating depth. With the light fixed on a particular spot, a message of the requisite length is sent. The spot is then moved to another area of the ocean and the message repeated. This is continued till the entire operating area is covered. It is important

that the transmitter be in space because from that vantage point it is possible to provide the required coverage without a large number of communicating stations. The information required to be transmitted can be broadcast via radio links to the satellite and the satellite can re-transmit via laser or the transmission to the satellite is via laser and the satellite merely reflects it with mirrors.

LASER SIGNALLING AND FIBRE OPTICS

Light has traditionally been used for signalling information from point to point using the Morse code. However, due to the spread of light and the slow speed of transmission this has limited application. Lasers on the other hand are capable of producing a thin pencil of light and being controlled electronically are therefore eminently suited for information transmission. For sending a signal along a laser beam an electro-optical crystal converts the electromagnetic signal into a light signal with an intensity varying with the signal. A light detector at the other end picks up the variations in beam intensity and converts them into electromagnetic signals. As a laser beam can handle much more information than a corresponding radio or micro beam, use of lasers for transmitting information between large data handling terminals is likely to replace the existing radio/ microwave links. A possible application could be the terminals in an area grid system of communications. However, the present drawback of degradation of performance due to dust, smoke, rain etc. has to be overcome.

Another method of using lasers is to replace metal wires for electromagnetic signal carriage with glass fibre carrying light signals. A light guiding optical fibre consists of a dense core material of pure glass surrounded by cladding material. The light ray is made to suffer total internal reflections till extracted at the other end of the fibre. The fibre can therefore be twisted or turned in any desired manner. Each fibre can carry a large number of laser signals suitably modulated. A signle fibre is so small that it is difficult to see and handle easily. A large number of fibres can therefore be contained in a plastic tubing and provide signal traffic channels many times more than a corresponding wire carrying electromagnetic signals, Further, a fibre does not induce any magnetic field around it and thus does not interfere with the functioning of other systems. Fibre optics are finding increasing use in aircrafts, missiles and space shuttle for internal circuitry to reduce weight and provide interference

of free mode signal transmission. They will also replace existing cables for telephone links.

OTHER MILITARY USES OF LASERS

Modern inertial navigation/attack systems use gyroscopes to keep track of the aircraft/missile in any plane and thus constantly co-relate the aircraft/missile position with respect to the destination/target. Conventional gyroscopes are based on gimballed, high velocity, rotating mass. These are now being replaced by laser gyroscopes Using 'massless' light as the sensing media, sensitivity to gravity and 'g' forces incurred during high speed turns and 'pop up' or jinking manoeuvres is no longer a problem.

Point defence againt missiles is presently attempted to be achieved by 'sheets of fire' provided by automatic operating Vulcan type of guns and hope to get the 10—20 foot missile broadside. But a head on missile target only 12—19 inches wide can, probabily, best be tackled by a needle point of laser at temperatures of several million degrees and at the speed of light.

High intensity light can by itself seriously damage the eye. Laser by providing a concentrated beam of light increases this hazard by a quantum jump. Compared with viewing a tank searchlight at 100 metres in front of the tank the laser would appear 100 million times brighter. Considering that a hazard to the retina would exist from looking directly into the searchlight it appears obvious that the potential for catastrophic laser induced eye injury exists. For example the XM 1 tank laser rangefinder can damage the eye at four km. A hand held laser rifle could, therefore, neutralise a large number of the enemy by quickly and silently blinding them. Besides, at close range it could touch off explosives and set fire to wood or clothing.

The prevailing visibility and cloud base at an airfield are important factors for safe flying operations. To obtain accurate information on these a pulsed laser is used. By measuring the extent of diffusion caused to the laser beam pulse the cloud base can be obtained.

Realism of actual combat in bottlefield training has always been lacking due to risks of casualties with live ammunition and subjective judgment of umpires when using blank ammunition. One system employing laser technology to overcome this is the US Multiple Integrated Laser Engagement System (MILES). It consists of a small

battery operated laser transmitter designed for easy attachment to conventional weapons. The weapons are loaded with blank ammunition to simulate aural and visual firing effects. When the weapon is fired the MILES transmitter sends out a coded laser beam. The laser pulse is received by detectors attached with a harness to the participating troops or vehicles. In a vehicle system an onboard microprocesser analyses the coded signal to determine if that weapon could inflict damage (a rifle for example cannot disable a tank), whether the received signal was accurate enough to cause a hit or whether it was a near miss. The body worn detector also contains circuitary to determine a hit or a near miss. A similar system is the German Talissi (Tactical Light Shot Simulator) used on armoured fighting vehicles which takes into account the gunners aim, accuracy of range setting and right choice of ammunition before declaring the target tank a casualty. To make the equipment eye safe a low power laser smaller than the head of a pin is used.

SPACE LASER WEAPONS

The elixir of weaponry—the death ray is no longer a theme from sciencc fictions like 'Star Wars', but is considered within 'the current technical horizon'. Just as the nuclear weapons in the 1960s and advanced computer technology in the 1970s significantly altered the military structure, new strategic weapons are on the horizon of 1980s in the form of direct energy space based laser weapons. In the hard vacuum of space laser beams do not have to contend with degradation caused by the atmosphere. Space can therefore be considered as the natural envionment for operational laser weapons. High energy lasers have the capability to deliver destructive energy at the velocity of light. This offers a fundamentally new way of intercepting platforms carrying nuclear weapons. The essential problem of missile defence is to find sufficint time to destroy the incoming warhead after it has penetrated the atmosphere where it can be more easily detected and distinguished from accompanying decoys as in the case of MIRVs. Laser weapons offer overwhelming advantages over conventional interception methods because laser energy travels 50,000 times faster than rocket motors can travel with laser no valuable time is lost in accelerating as with rocket powered interceptors. A hypersonic missile travelling at Mach 6 will travel only a little less than an inch in the time it takes a laser beam to travel upto it. The beam would not explode the warhead but would just burn a hole in the skin of the missile which would imbalance it. Precise speed of light delivery of destructive energy would provide

little opportunity for evasive manoeuvre by the target, permit multi-shot and retargetting capability rapidly thus providing effective defence against large scale attacks and minimise collateral damage. The long reach of space based laser weapons could make present strategic weapons (ICBMs, SLBMs, and strategic aircraft) vulnerable to attack from space.

One concept envisions a constellation of laser battle stations in space with a potential for credible air and ballistic missile defence by engaging missiles in the boost phase when the nuclear armed missiles are most vulnerable and before re-entry vehicles can be deployed. in this concept 24 battle stations are placed in orbit in three polar rings of eight weapons each at an altitude of 1,200 km. The battle stations would be used to engage ballistic missiles in the first four minutes of flight before the engines burn out. Optical equipment would be used for simultaneous acquisition, pointing and tracking. Long range high altitude aircraft would also be vulnerable to laser weapons. These battle stations would be shielded heavily against nuclear blast and radiation and would use the laser weapons to defend themselves. These could be deployed and retrieved by space shuttles.

Space based laser weapons could affect policy and help bring about long term solution enabling transition from offence based nuclear weapon deterrence to defencine dominance. Like the drama of another era—Pax Britannia—was played out on the oceans of the world, the new drama of our times will be played out in three dimensions in space.

CONCLUSION

Laser—a product of stimulated emission of light from a lasing material—being an intense, monochromatic, coherent and low divergent form of light is ideally suited for applications where other forms of energy do not possess these qualities. It's immunity to ECM is an added asset. One of the earliest military applications of lasers was for weapon guidance wherein a target was designated with a laser beam and the projectile homed onto the reflected laser energy. Being a very narrow beam this enabled extreme precision in weapon guidance. By timing the return echo from a laser impinged object the range is measured with extreme accuracy. This facilitates weapon delivery from the air, tank gunnery and artillery processes where accurate range is an important ingradient in increasing weapon efficiency. In fact range finding has been the most effective use to

which lasers have been put. As a means of transmitting information as a carrier through space or through glass fibre it is finding increasing use. Perhaps the most exciting possibility is the use of the laser beam as a weapon itself. It is considered within the present technological horizon to produce the elixir of weaponry—the death ray. Present research aims at its use in space in anti-ballistic missile and anti-satellite roles. Scenes from 'Star Wars' may soon become reality. Just as the aircraft, radar and atomic weapons changed the face of war in their times, lasers are on the verge of doing the same today.

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A Climate For Moral Courage

BRIG SS CHANDEL SC VSM

INTRODUCTION

EXAMPLE 1

"Gentleman, the time honoured method of attacking across a minefield is in good old extended line. As the GOC said— "everyman to his own death".

— A senior officer in a summing up of an exercise on say 13 May 80 with the DivisionalCommander listening. The Divisional Commander obviously favours assault in extended line.

"Gentleman, the only sensible way to assault the deadly minefields of the modern day battlefield as the Corps Commander has explained many a time is in file formation".

— The same senior officer on say 10 June 80. The Divisional Commander is away on leave. The Corps Commander insists of file formation as the formation for assault.

EXAMPLE 2

"The COAS on his visit to your picket will be served pakoda, and tea in an enamelled mug. He insists and very rightly so on austerity".

— Another senior officer instructing Company Commander on say 10 Apr. 81.

"The Corps Commander believes in not making himself uncomfortable unnecessarily. Only fools do so. Serve him an excellent breakfast; ham, bacon, marmlade and all".

— The same senior officer one week later to the same Company Commander.

The above two examples are true. Only the dates are fictitious. And such examples are known to each one of us by dozens. This is how the canker of moral cowardice is eroding the credibility of leadership. The man below observes, registers and comes to a fateful decision—his own life and limb are not for these gentlemen to help them in their game of one-up-manship. It may be emphasized here that such instances are not rare and the officers who act on the above model are normal, well meaning and socially well adjusted people. But somehow over the years such volte faced behaviour has begun to pass muster by such nomenclatures as 'Tact', 'Adaptability', Flexibility etc. It's insidiously harmful effects are ignored in an ostrich like manner. For the time being moral courage is a casualty and a severely wounded one too.

The Importance of Moral Courage

"Courage", wrote Slim in his celebrated lecture on leadership, "is not *a* quality. It is *the* quality". Then he went on to compare physical and moral courage and gave the latter a higher rating. The reasons are not metaphysical but eminently practical. By displaying moral courage *i e.* by saying and asserting what one sincerly feels, one is helping to illuminate, atleast some of the myriad aspects of an issue which can now be examined and rectified. Instead if one quietly and timely endorses the view of a superior or a crowd, one may only be helping to speed up the momentum for a grand crash.

Recently, I asked a senior Civilian Staff Officer in the Army Headquarters who has put in over 40 years of service in that place that since he had worked both with the British and the Indian officers of various vintages, what were his important observations with regard to the competence of the two groups. His observation was that, the Indian officers are more hard working and more intelligent compared to their British predecessors. However, the policy decisions and directions given by the British were essentially more sound because everyman in the chain thought for himself and said so in writing. If his superiors wanted to overrule him, they had to do so by refuting and rebutting the points made by the subordinates and by supplying more cogent reasons for his own course of action. Today, minuting is largely to amplify the thinking of the superior officer. Therefore, a number of unpleasant issues remain unnoticed by design and unremedied, resulting in unsound decision which cannot stand up to reality. The multifaceted faculties and expertise of various members of the organisation remain unutilised and gradually get

atrophied. Thus analysing Field Marshal Haig's style of decision making in the First World War when hundreds of thousands of men went to their slaughter in the fearful battles of Passchendaele, Ypress and Neuve Chappalle due to flawed decisions, Liddel Hart says, "The attitude of mind that tends to be developed by the military system, with its strong emphasis on the hierarchical order and discipline, is one of the heaviest handicaps upon the supply of full and good information. A clear example on the highest level is to be found in the attitude prevalent in Haig's staff. His resistance combined with his inability to argue tended to discourage all but the most resolute staff from pressing contrary opinions and physical courage is a far more common virtue than moral courage among soldiers long apprenticed to the profession of arms. Because of Haig' manner, more than his character, the very subordination which military discipline induces, tended to become its own prison".

Any number of examples can be found in every branch where any idea emanating from a superior is relentlessly rammed down, even when the officers in the chain do not entirely believe in it's validity, relevance or cost effectiveness. But it is considered always more pragmatic to tow the line rather than express reservations. This state of affairs would have been imprudent and wasteful if only resources were involved. But when at stake are thousands of lives and the security and honour of the nation, then one need to reconsider the weightage to be given to this variety of courage and find causes which blight the crop of moral courage.

The Causes

The causes of this none too edifying a behaviour lie in the animal nature of man, which encourages survival and growth at any cost if necessary. Dissent imposes a treble burden. Firstly it antagonises a likely benefactor. Secondly it impose the burden of rebutting the points made by the established authority. Thirdly it demands producing a more than workable alternative. Most of the concerned personages are neither intellectually so gifted nor feel the immediacy of doom likely to be wrought by the existing proposed plan. Hence they find it always safer to wait and watch, and be guided along by the force of inertia. In other words the choice lies in being safe and therefore pliant or voice dissent and risk displeasure and possible damage to career.

The latter is the path of strenuous life of which the great American President Theodore Roosevelt was a great votary. Now, if

nothing more than well being of individual officers was the question, then, it would be relatively of lesser interest to the nation or the Army as a whole. But since the whole nation's security, honour and way of life are involved, it will deserve every thinking man's attention. The society as a whole must provide the climate for moral courage like for instance the Israeli society does.

CLIMATE FOR MORAL COURAGE

Creation of a climate will need four ingredients.

(a) Elimination of fear of damaging the individual career due to voicing of dissent.

(b) An open forum for communicatian where even if considered odd by the establishment, the individual is allowed to say his piece to the relevant audience.

(c) Promotion of open minded and competent leadership who are not afraid of debating issues.

(d) Opening National Security matters for public scrutiny and debate.

Protecting Career. It is impractical to believe that a large number of people will voluntarily jeopardise their careers (meaning livelihood, security, status and a sense of well being) for a dubious martyrhood. Therefore the system should ensure that risks for expressing dissent are minimal. Since the annual confidential reports is the most potent instrument for effecting such injury, it is obvious that the form for ACR be restructured to deemphasise certain trait- and underscore some others. For instance traits like ADAPTABILITY, TACT, LOYALTY, INTEGRITY, MORAL COURAGE should be deleted. Instead traits like CREATIVITY AND ORIGINALITY should be inserted to bring out whether the officer has shown any independence of thinking and expressed it.

It may also be worthwhile to allot space to the officer to give out as to what he has achieved or contributed in the year under review. Central services like IAS have already got this system.

Although merit should without question be a criterion for promotion, it should not become a motivator for cut throat competition towards one-up-manship. Beyond a particular point the difference in competence is fractional and is a matter of opinion. Many countries with great military traditions are already following

such a system. Whereby after a certain rank, an officer's position and future is guaranteed so that he may not hedge his true opinion and conviction to merely suit his superiors. For example the East German Army promotes its Colonels to the rank of Major General, who then serve upto an age of 65 years thereby getting a sense of freedom from being penalised for expressing contrary professional opinions.

Lateral movement to the equivalent civilian job is also a well established practice in some East European countries to compensate for the trauma of supression by system which cannot help being subjunctive sometimes or the other.

With all these measures the system would permit the man to say his piece without the threat of unacceptable loss.

Open Forum. Generally, the only way available to an officer to express his dissent is by challenging it in a discussion like on a sand model where the accepted themes and norms are presented and where most of the time, yielding to a new thought would amount to a loss of face which is unacceptable in a military ethos. Therefore it is important that a forum be provided where varied views can be aired with impunity. This will give everyone a chance to express his ideas without anyone having to concede a point. It can be a restricted magazine or a paper with weekly or monthly frequency of publication. MI may have to be persuaded to loosen their QR for publications, but it will be well worth.

Competent Leadership. Gandhi or Kennedy could debate issues with anyone and had therefore no hesitation to face contrary opinions so could Wavell and Slim. In fact a competent leader will revel at the opportunity to expateate on his views, which are being challenged. Israeli leadership does not avoid even such ticklish issues as the reprehensible behaviour of it's officers and men in Lebanon or the desirability of having fixed defence like Bar Lev Line. Therefore, the best panacea for an open military society may well be a competent leadership which will enjoy intellectual duals like lawyers do. Opponents in the court, friends and colleagues outside. When the rank is worn as a mark of one's ability and competence it has the innate strength to hold its own against callow youth and also appreciate promise of a budding genius.

National Security—The Public Trust. It is felt that everything will fall into place, if like in a true democracy that we are, we begin to

believe that the defence of the country is not the charge of solely the men in uniform but of every man and woman. And that have both right to contribute and to know as much as is possible. Excessively stringent security measures are counter productive in that, they try to conceal more than they possibly can and hence became impractical. In fact a certain risk of loss of security may well be outweighted by the motivation generated by meaningful knowledge of the affairs of national security. It will also bring about wide participation from a well informed and skilled citizenry. One may do well to remember that civilians of various denominations have made remarkable contributions to the development of strategy, tactics and technology of war. Their variegated knowledge will help to resolve issues for which only restricted education and expertise is available within the army.

CONCLUSION

Moral courage is presently considered a spiritual quality which may be noble but which is barely of any use. Such a thought is seldom articulated publicly but privately all the well wishers and worldly wise friends advise their friends in this vein. It is perhaps a measure of the depth to which self deception is carried in our society of which Army is but a segment. But like Gandhi proved that living morally and with courage is not only possible but also rewarding and exhilarating. But we need to create a climate where this currently fragile acorn can grow into a mighty oak.

Making Red Tape Green

COMMANDER AP BHATTACHARYA VSM

Most professional service officers be it in the Army, Navy or Air Force are happiest doing professional jobs in their own service environment with little or no contact with the 'goings on' outside. This feeling reflects most deeply in our Junior officers who would rather be out on the field with a section of tanks, or out at sea on the bridge of a guided missile destroyer or flying high in the cockpit of a Jaguar. For such professional military men a posting to Service Headquarters for the first time however, begins with great enthusiam. A young officer views the Service HQ with some awe and respect and he consider it a career posting "that is where all big decisions are made" and he feels proud to be chosen as a part of those big decisons to follow : On arrival though it is a kind of a cultural shock when he is faced to tackle the monolith of bureaucracy. At first it begins with a feeling of dejection, "what am I doing here loitering around, dirty offices trying to explain something to someone which he does not seem to understand, "or" why does my boss send me out to deal with such pepole ?" are some other sentiments echoed. This dejection turns to frustration when his boss pulls him up for not 'delivering the goods' and he feels "I wood rather be back in the field where I belong and where I did well." After all, he thinks what can he do to go past the red tape of bureaucracy : This paper is meant to give heart to all officers that they can, if they try.

Officers posted to Service HQ for the first time may take some consolation from the fact that it is not only the civilian organisations which are bureaucratic. Large military organisations too in their own way are highly bureaucratic. In fact there may be cases when they are more bureaucratic, characterised by a rigid hierarhy of command and control, differentiation in terms of roles, operating within water-tight compartments and very much influenced by traditions. Officers have at one time or the other before posting to Service HQ have experienced the red tape within the military bureaucracy. This experience no doubt differs from what one faces with

the Ministry because it appears easier to get around big military organisations e.g. Corp HQ or Command HQ. as one is likely to find a friend or course-mate to help get what one wants. But in the Ministry silimar friends are apparently missing. If to make a success of your job you have to deal with the Ministry, alternatives must be found.

All of us who have to deal with large Government organisations in our working lives have one expereince in common. We have faced the red tape of bureaucracy. Some of us have felt frustrated as though up against a blank wall, yet there are some who have managed to get around this 'wall' and have with their persistent efforts got what they wanted for the organisations they represent or for themselves. It is the second group which have literally helped turn red tape green. Let us see how? To do that it is first essential to understand that all organisations big and small are manned by people. Most organisations work for the society for a social purpose and are social systems. They are also influenced by the environment in which they operate and when the environment changes, the organisations change. We now have four variables which need to be studied i. e. the organisation, the people who man it, the society it serves and the environment it operates in. To these add a fifth variable, you yourself. Find the best interactive process between you on one side and the four variables on the other, and you develop that magic touch to make red tape green.

Since it is you who have the most important role to play it is only fair that you study your self first. You are the master of your own destiny, after you have developed the insight into yourself in relation to what you want to be. This insight into ones own self is important because everything one does, believes feels, is influenced by how one perceives himself to be. This admittedly is not simple. There are many conflicts involved. For instance there are always gaps between how you see yourself and how others see you, or who you are, and who you think you are? These gaps it not closed completely should be narrowed to the extent they cease to bother you, and others begin to see you nearly the way you would like them to. Some reach this level of maturity fairly early in life and there are others who take longer and yet there are some who seldom do. It is the latter who find themselves in problems with their superiors and with others whom they deal with and generally end up feeling frustrated to cope with the challenges of life. The whys and wherefores of this is a subject of detailed study and is outside the

scope of this paper, but suffice to say that you must begin to understand yourself first before you venture to attempt understanding others.

Now that you know who you are, let us examine what the next variable, organisations is. The one you are part of and the one you have to deal with. Organisat ions are an arrangement of people and the work they do. These people have relatively fixed relationships based on which decisions are made to achieve certain explicit aims. At first you have to see what is your own organisation like, what contribution does it make towards the overall success of the Directorate to which you belong. How does your own contribution help in this process, and how do you feel about it ? These are questions which you ask yourself and find answers. No matter how small you think, your contribution is, it may be very important to your boss and for your organisation. If one feels he is doing something worthwhile he does it well no matter what it is. He feels committed to do it and puts in all his energies. Clear all obstacles and others think he is motivated.

Having identified the areas of your contribution towards the success of your organisation you have to see and study the organisations to whom you have to depend upon for achieving positive results. These may be other Directorates in Service HQ or particular departments or sections of the Ministry of Defence, or some other Ministry. In the Defence Services we form part of and manage an onging organisation with our work generally cut out for us. As mentioned earlier this system follows very well in our own environs, but when we have to deal with other organisations and people of different work culture, the cultural shock has to be absorbed gradually, logically. It is here that the study of organisations gains more attention and importance. One has to study to develop an insight into the intricate mechanism that make organisations dynamic and productive. An officer in order to apply himself effectively should be able to analyse the various activities for which he is responsible and relate them to his work. Officers who have the skill to understand their own organisations and also those they deal with, would be able to adopt measures to eliminate or overcome all obstacles in their path including the red tape of bureaucracy.

Since we are part of and have to deal with Govt. organisations it is essential to understand that in the context of external environment, all defence and other Govt. organisations should be considered

as units of public administration. They serve and exist for the society from which they draw their resources. In the case of service HQ they may be viewed as sub-systems of the National Security System. National Security in the words of Jawahar Lal Nehru"……constitute freedom from economic, political and military threat ….." National Security therefore, as opposed to Military Security is essentially a political system at the national level of which the military is a sub-system. Hence it is no small wonder that all major defence decisions get influenced by political considerations.

Another noteworthy fact about Govt. organisations which appears paradoxical is that those who control the flow of resources exercise more power than those who utilise such resources to achieve the national objectives. The exalted position of departments who control two of these key resources i.e. Funds and Personal, be they in Service HQ or in Ministries, explains this. Power is concentrated in Ministries and Service HQ rather than in the field where performance is to be achieved.

An officer who finds himself perplexed by certain course of events as mentioned above which may appear contrary to his own line of thinking should try and analyse the difference and their reasons, keeping in mind the above factors or others that come to light as result of his study of the organisations. This gives an insight into the working mechanisms of the organisations, their delicate interlinks, the 'power centres' where big decisions are made and also the 'fulcrum centres' which influences such decisions or provide access to the 'power centres'. Such studies help you to understand and appreciate your working environment better, and applied with human skill makes your performace more effective and gets you the results you want.

Since in dealing with organisations you have to deal with people who man them it is essential to develop human skills. Human skills is the ability to work effectively in interpersonal and inter group level. A person who has a clear self concept generally develops human skills of a high order. He is aware of his own attitudes and beliefs about other individuals and groups. He is also able to see the usefulness and limitations of these feelings. By accepting the existence of view points, perceptions and beliefs which are different from his own he is skilled in understanding what others really mean by their words and behaviour. He is equally skilful in communicating to others in their own contexts what he means by his behaviour.

A Govt. organisation due to its special features as discussed earlier tends to become bureaucratic. Though bureaucratic organisations are impersonal, if you view the Govt. Departments from close range they are not large impersonal machines. In fact personal and inter-personal variables do play a very important role in the decision making process. We have often observed that with similar rules and procedures, different individuals are able to produce entirely different results. In fact the system provides for an exception to every rule and tremendous opportunities to provide for exercise of discretion particularly at higher levels. Here interpersonal skills become critical and if fulcrum centres are indentified correctly and tackled suitably, your ideas have a fair chance of access to the power centre. In other words "friend must be found amongst people you deal with, who have the ability to influence the maker of the decisions you seek, for your organisation". Since friends must be made on a human level, you cannot expect results by pushing files or sending out notes. You have to go out and interact on a personal level, just like a salesman who goes out to the market or knocks your door to sell his product. No salesman has ever made sales by writing letters.

In your case, you are an officer in Service HQ, the Ministry is the market and the product you sell are the decisions you seek. One may argue against this approach giving a variety of reasons. Most will say "I am not a salesman I am a professional mililary officer, the system is bad, we should change it" some will say "what does the civilian in the Ministry know about military matters, he can be a fooled, why should I go to him? etc. The fact is rightly or wrongly the system exists for what it is worth and it is beyond your power to change it. But till such time it is changed, to you selling your product must still remain paramount despite the market conditions. So instead of trying to break your head against a stone wall why not try climb the wall or get around it ? You may or may not succeed the first time but believe me, you will surely meet with success if you keep trying.

It may also be interesting to note that those who criticize the civiiian bureaucrats the most, are themselves likely to be the biggest military bureaucrats armed with authority of their staff desks. They are the arm chair cxecutives of the military who like papers to come to them and appear uneasy when faced with the man behind the paper. They do not like to move out of their seats to deal with others on a human level and would rather push files. Their attitudes are reflected in the papers they initiate and they seldom achieve effective

results for their organisations. They are inwardly pleased when people come to them and yet feel uncomfortable with the prospect of meeting people from the other side of the desk. No doubt most of these are well meaning persons, who put in a lot of hard work studying files, preparing briefs and originating papers but that human touch is missing which gives tremendous success to others, and makes their own performance poor in comparison.

The important variables as earlier mentioned are the human resources. You yourself and the people you deal with. Having studied your own organisation and the organisations you deal with, and their system and, being aware of your own abilities and limitations study the persons you have to interact with, (barring differences in work culture) you will find them essentially to be persons very much like yourself. They too faces life's problem like you. They too are answerable to their bosses just the way you are to yours. They too work hard and have resource limitations like you. They too work for the same Govt. as you, though admittedly perceptions of the goal may differ, and most important of all, a Ministry officer realises his lack of field knowledge and experience of military matters which you have, but he very much wants to understand, and depends on you to make him understand. At this stage some get, tempted to fool him, or manipulate things, but believe me, such tactics helps no one in the long run. That man you are dealing with, whatever his level also has vast administrative experience in his own field where he has faced public dealing more than an average military officer. He will instinctively see through a person trying to fool him. Nothing is likely to impress the civilian official in the Ministry more than your sincerity and dedication. It is up to you to put it across in a language he understands.

When so many things are common, the answer lies in making that little extra effort to have the magic touch that turns red tape into green. It is not feasible for the author to quantify what that little extra effort is. One has to, in the circumstances find his own best way to get under the other man's skin in order to sell his 'products', be that his ideas or his organisations cases that require Governmental approval or the decisions he seeks. And that little extra effort pales to insignificance in front of the pay offs you get in return for you and your organisation.

Mein Theek Hoon Yaar

(Penned in the Kashmir Valley, Circa 1952)

The tireless tourists of Army H.Q.,
They come and they go! How they come
and they go !!

ALONG with their fixed, mechnical smiles,
They travel for miles and for miles and for miles,
Of tour programmes always a few days ahead!
(for jolly air travel there's much to be said!).

A limonsine pulls up with undue ado,
You look at your BM and he looks at you !
Till out pops a brief-case as fat, as can be,
You wonder "It must be the old JAG" !

"But Sir, he's got boots on", Brigade Major cries,
"Then he can't be from Army HQ." You surmise.
But by God you're wrong! It's the D.W.E.
"These boots'. Oh, just testing a sample, you see.!"

The tireless tourists of Army HQ,
They come and they go ! How they come and they go !!
But sometimes you do get their programme in time
And the head—sweeper pulls out his sackful of lime !
"Go gentle with eye wash, my boy" you advise,
"First let's see who's coming ! it may not be wise",
You then scan the programme. It's always the same !
You catch yourself murmuring, "what's in a name".
They come before lunch and depart after tea
And wish to "see all forward picquets", You see !
You gently explain "That would take Seven days".
"Oh really ?" they say, in a bit of a daze.
"The boys, are they well ?" "Yes very". "That's fine".
The dialogue follows the time—honoured line.
"But do stay the night." "Oh no, no ! No, no, no !
Next visit perhaps. Now I simply must go."

The tireless tourists of Army HQ.,
They come and they go! "How they come and they go!!
"You must be observant," the D.M.I. says
"And watchfully study the enemy's ways."
One thing, I soon noticed, was common to all,
To haughty and humble, to great and to small,
That whether the tourists were A, Q or G,
Their brief-cases always bulged ominously !
I wondered what secrets lay hidden therein
But thought asking may be a terrible sin.
They wouldn't part with them, they clutched 'em, so tight
And never would lett hem be out of their sight.
At long last one stumbled when mounting his jeep
And as he lay helpless, I took a quick peep.
It dawned on me then, as a summer's day fine,
Why *we* never got any Vat 69 !
The tireless tourists of Army HQ.,
They come and they go! How they come and they go!!

JAI¡HIND !
(i.e. I'm alright, Jack!)

RBC.

Whatever Happened to the Flemish Settlement of Bankibazar on the Hooghly ?

S L Menezes

CHRONOLOGICALLY, apart from the Portuguese, we also have read of the English, French Dutch and Danish East India Companies, and of their "factories" in Bengal. But few of us have heard of the Ostend East India Company, or later of the Imperial Trieste Company.

As soon as the Spanish Netherlands were yielded to the Emperor of Austria by the Treaty of Rastatt, the Flemish merchants of Ostend, Antwerp and other towns in Flanders (modern Belgium), sought the patronage and protection of their new master for the extension of their commerce in the East Indies. Their first attempts were, however, made without letters patent or any other authority, and promptly attracted the hostility of the Dutch, who on 19 December 1718 seized an Ostender ship sailing off the coast of Africa, in spite of the Imperial Austrian passport with which it was provided. The Austrian Emperor demanded satisfaction, but the Dutch replied by the capture of another ship. The Ostend merchants therefore fitted out privateers and retaliated by taking a Dutch ship. This was followed by the despatch from Ostend of five ships in 1720, and in 1721 of six ships. The next event was the seizure by English pirates in the "seas off Madagascar" of a homeward bound Ostender. The Emperor of Austria now in 1722 granted letters patent to trade for thirty years in "all the ports and rivers where other nations had any freedom of trade" One factory was on the Coromandal Cost, 20 miles south of Madras. From 1722 to 1733 a foot hold was also obtained at Bankibazar (the settlement was raised around two uillages, Bankibazar itself and Hydsiapore), where the Austrian flag was flown on the Hoogly, opposite Bhadreshwar, between French at Chandernagore, and the Danes at Serampore. Bankibazar become the principal Ostender "factory", with a sub-factory near Cassimbazar.

To the original hostility of the Dutch was now conjoined that of the English, as also separately that of Spain, the earlier occupiers of Flanders. As a result of diplomatic pressure, the Emperor of Austria agreed by the Treaty of Paris on 20 May 1727 in a sort of barter deal to suspend the charter for seven years. The Flemings however continued to trade privately and in 1729 and subsequent years, took secret shares in the country trade enterprises of the French factory at Chandernagore, which yielded them profits. The Flemings maintained amiable, though unofficial and therefore secret, relations with the French during the whole existence of Bankibazar. According to Lue Boeva of the State University of Ghent, Belgium, in "Bengal Past and Present" Volume MCIX, the Governors of the Ostend factory at Bankipore were Alexander Hume (1716-1730) and Francois de Schonamile (1730-1744). At its peak in 1733, Bankibazar accommodated 9600 inhabitants, local and European, as opposed to the 50,000 envisaged at the start in 1722. In January 1734 the banned Ostend Company trasferred its authority over the factory at Bankibazar to the Austro-Hungarian Emperor, who promised to make the settlement prosperous once more. This assurance seduced many inhabitants, both European and Indian, not to leave. No renewal of trade came. Boeva mentions that a Swedish ship was the only one to moor at Bankibazar for the next ten years. The Mughal Faujdar instead ransacked Bankibazar in 1744. Governor Schonamille fled with a small group to Pegu in Burma where they were murdered.

An interesting personality of the Ostend Company was one Colonel James Milles, who came out to Bengal a subaltern in the Ostend Company's service, but finding on his arrival in Bengal that the English and Dutch having paid the Mughals to do so, the Company was on the verg of ruin by the sub-factory near Cassimbazar having been raided by the Mughals in 1729, and by the Mughal Faujdar of Hugli's siege of Bankibazar in 1730, became a soldier of fortune. (Bankibazar had 130 soldiers. With these the officials in Europe had given permission to wage war with the 'Moors'). He enlisted a small band of similarly chagrined Europeans, and for some years used to escort salt boats to Assam, where he dabbled in the local politics on behalf of various princes. According to the "Dictionary of National Biography" he is said to have contemplated to achieve in 1744 with 1500 Europeans, seeking the auspices of the Austrians, what Clive by circumstance achieved in 1757 at Plassey. He "devised a project for the conquest of India, and appears to have submitted it in 1744 to Francis, Duke of Lorraine

the husband of Maria Theresa of Austria", but the English East India Company "damped it" and prevented its execution. History last records James Milles at Florence in 1758, where he was now a general in the service of the Grand Duke, Clive having fortuitously achieved at Plassey in 1757 what Milles had envisaged in 1744.

The next recorded English reference to Bankibazar is contained in the Court of Directors' letter from London of 23 January 1754 to the English Council at Calcutta, when a vessel under the protection now of a Prussian company floated in 1753 was ready to proceed from Emden to Bankibazar, "You may be well on your guard to prevent any encroachment upon our Rights and Privileges, and that the Agents of the said Company may not meet with encouragement from any persons whatsoever under our protection. You are to give positive orders to all our Pylots not to take charge of the said ship...and you are to endeavour to induce the Agents of the French and Dutch Companies to do the same; and you are likewise to use your endeavours in concert with the French and Dutch Agents to prevent the Prussians getting possession of the late Ostend Factory on the Hughly or making any other settlement in Bengal." In reply the English Council in Calcutta informed the Court of Directors in London on 6 September 1754 that they had obeyed their orders punctiliously, that the French and Dutch had given favourable answers that "nothing shall be wanting" on their part "to put every obstacle" they "can devise in their way".

We now come to 1776, when a further attempt at trade was made by one william Bolts, who persuaded the Empress Maria Theresa to send him out to India in a discarded Indiaman which he rechristened the "Joseph and Theresa". Bolts had been granted the exclusive privilege of trade for ten years. Due to English opposition plans by Bolts to revive Bankibazar could not be carried out. Three "factories" were established on the Malabar Coast, and one on the Nicobar Islands, the Imperial Trieste Company being the new commercial designation. In 1784 five ships returned to Ostend safety but the seizure of a sixth at Cadiz by creditors caused a panic among the shareholders. The Company had a run on it, and failed, thus finally extinguishing the Imperial Trieste Company, which had sought to carry the torch lit from the embers of the shortlived Ostend East India Company.

The present day Ordnance Factories at Ichapore are on the site of the old Ostend 'factory'. The name "Bankibazar" has today disappeared from the map of Bengal, unlike in chronological sequence, the Portuguese Ugolim (today's Hugli), the English Calcutta, French Chandannagar, Dutch Chinsurah and Baranagar, and Danish Serampore which locations are all very much still on the map.

Book Reviews

A U. S. FOREIGN POLICY FOR ASIA—THE 1980s AND BEYOND. Edited by Ramon H, Myers.
Hoover Institution Press, Stanford University, 1982, pp xxvi+ 144 price $ 10.95

MYER'S A US Foreign Policy for Asia forms the substance of a seminar convened at the Hoover Institution Stanford in 1981. In seven essays, the specialists have studied problems pertaining to US Foreign Policy for Asia; South and South West Asia; The Indian Factor; South East Asia—A Maritime Emphasis; Japan and North East Asia; The relevance of Australia and New Zealand; and East and South East Asia. In the introduction the editor has provided a synoptic view of the contributors of this volume and has outlined in a nutshell the essential of the foreign policy. The authors have studied the contemporary events of the Asian sub-region of their speciality. They analyse the major conflicts and international tensions in Asia during the late 1970s and early 1980s that could militarise the region and destabilise. The current foreign policy of US Administration is examined critically and the proposed policy aims to strike a balance between the complex issues of Asian military security, the economic and diplomatic difficulties between the Asian States with border problems.

The US Foreign Policy has focussed on NATO and the security of Western Europe since World War II. In the past few years, it focussed on People's Republic of China as a power to help to check the Soviet Union and to rearm Japan as a new power to help maintain the security of the Pacific. The authors raise serious doubts about the effectiveness of current US Foreign Policy. It has not been able to contain Soviet influence in the region. Further, America's involvement in three Asian Wars produced a profound sense of frustration and failure in United States. It is alleged that the current policy runs the grave risk of perpetuating current conflicts and international tension.

Presently there are four types of conflicts that could tip the balance of power and endanger peace and security in the region:

(a) voilent military political struggle within a state or between the states; (b) acute tension between the borders of a number of Asian nations; (c) a state of internal wars in a number of countries; and (d) conflicts between the states in their search for oil under the sea. To maintain a balance of power between the states in the key geopolitical regions of Asia is the main question. The policy must be built on existing strengths, not on political weakness and uncertainty. For the alternate foreign policy towards Asia, the suggestions centre around four points : (i) to recognise that events in Asia are going to effect America's National Security as much as events in Bonn, Paris or Rome; (ii) develop multiple country by country linkages with the Asian Pacific basin countries; (iii) elevate India's importance to a level equivalent to China in America's Asian Policy; and (iv) maintaining a strong American naval and airforce presence in the Indian and Pacific oceans and enlist our Asian allies to cooperate and support efforts to deploy and effectively use that military power to guarantee freedom of the seas.

The contributors point out the need for paying more attention towards Asia. In this context Donald C. Hellmann remarks that America must become sensitive to Asia's strategic importance as it is to Europe's have to be taken seriously by policy makers. The Asian pacific basin countries viz. Japan, South Korea and Taiwan may leap from their current stage into the post-industrial society. It is asserted that by improving bilateral and multilateral ties with these states, will enable the United States to encourage greater foreign trade and increase the flow of American capital into the region.

It is recognised that India is a major economic and military power in South Asia. It has considerable influence with Third World Countries through its leadership role in the Non-aligned movement (NAM). India's support is needed for maintaining the US navel presence in the Indian Ocean. It is hoped that India is likely to become a formidable economic and military power by the end of the century. It is suggested that India's importance may be elevated to that of China in America's Asian Policy. Especially, Washington should strive to accomplish an improvement in Indo-Pakistani relations. This tactics would gradually diminish Soviet influence in both countries. Recently, a congressional research service report has found that the U. S. is in a dilemma over its relations with India and Pakistan. This is to prove its reliability to Pakistan and at the same time to tell India that the arms supplied to Pakistan

are no thereat to India's security (The Times of India, May 5,1986). It is argued that the Asian security system will depend upon the American naval strength. The U.S. naval is stretched to the limit, operating in the Pacific, Indian and Atlantic Oceans and Mediterranian sea. A plea is made for increase in U.S. navy with a variety of surface ships for both attack and self support to ensure freedom of maritime commerce. Secondly, to ensure access to Persian Gulf for oil and to keep the sea lanes open.

It is emphasised that bilateral relations of ANZUS, Australia, New Zealand and United States ought to serve as model for how such cooperation could be established between the United States and the Asian Pacific basin countries. Though there has been some constraints, and disappointments. United States has to exercise care and composure in dealing with them. Australia and New Zealand have cooperated with the ASEAN, and have good relations with China and India.

The authors caution that United States refrain from participating in any East Asian alliance system and develop closer multilateral ties with those non-communist nations that form an arc extending from Japan and South Korea to India and Pakistan. For Japan, it is suggested that it builds up its defence only to the extent that Japanese see a need to do so. These forces are an essential supplement to the United State Forces. Japan may be encouraged to make more substantial contribution to common economic needs and to develop a diversity of relationship with Soviet Union, China, Vietnam, both Koreas and ASEAN countries. Regarding China, a cautious approach is suggested and economic aid is emphasised. For South East region it is suggested that United State establishes relations with Vietnam, caution is exercised in providing military aid to Thailand and military facilities are availed by United State in the Philipines.

In brief, the agenda of security concerns for the United State in Asia in the years to come is to contain Soviet military expansion and influence, resolve the conflicts in Afganistan and Kampuchia and ease tension between states with long standing border problems. Another matter of concern is Iran-Iraq conflict. According to a recent indication the talks between Pakistan and Afganistan under U.N. auspicious are in a decisive stage. (The Times of India, May 5, 1986). Finding solutions to these problems may well restore and maintain the balance of power in Asia's geopolitical regions. The

authors concur that U.S. Asian policy must display more consistency and be conducted as a part of the coherent global strategy.

In sum, this book will be of interest to students and teachers of foreign affairs, legislatures, and other readers who are interested to know about their neighbouring countries. It is hoped that U.S. Administration will get the suggestion exmined and implement them wherever feasible. The Asian countries in particular and other countries in general will find the book of interest specially to know about the U.S. thinking on Asian Foreign Policy. The editor and contributor have done a good job and deserve the gratitude of the reader. The book is likely to be well received.

—PCB

VIETNAM WAR AND AMERICAN STRATEGY

COLONEL HARRY J. SUMMER, JR. (RETD.), *On Strategy: Critical Analysis of the Vietnam War*; Presido Press, (1984)

General Bruce Palmer Jr. (Retd.), *The 25-Year War America's Military Role in Vietnam* (The University Press of Kentucy, 1984), pp. 236.

THE Vietnam War, the longest war of the 20th century, is quite decidely the most bewitching, confounding and exceptional war in human history. The most exceptional feature of the Vietnam war, of course, is that a military might was able to quite decisidgely deny victory to a Super power. The belief that the United States did not try to win the war in Vietnam, fostered by some American limited war theorists, is flawed. The fact is that the US tried to win the war as hard as it possibly could within, and sometimes beyond, the frame work of its political and military institutions. In Vietnam, in pursuit of victory, it used every single weapon in its enormous arsenal other than nuclear weapons. If directed, for instance, six times more explosive at its adversaries in North and South Vietnam, than was used by all parties, in the most deadly and destructive conflict in human history, the Second World War. Notwithstanding this prodiguous expenditure of ammunition (equal to 1000 Hiroshima bombs), money ($ 200 billion, *i. e.*, vastly more than what we have spent on our defence since independence), and blood (over 4 million Vietnamese deaths *i.e.*, more than what Japan lost during World War II or the US has suffered in all its wars in its over 200 years history), it did not win. Why? This is a question that has tormented

Americans, inspired Third World revolutionaries, and baffled modern day military professionals.

Two recent books on United States Army Officers attempt to find why the US failed so 'miserably' in Vietnam, and how that could have been avoided are: *On Strategy: A Critical Analysis of the Vietnam War* by Colonel Harry J. Summer Jr., and *The 25 Year War: America's Military Role in Vietnam* by General Bruce Palmer Jr. Both these books by military professionals who had served in Vietnam in different capacities, although very different in their style, content and approaches are in agreement on the fundamental issues of what went wrong and what ought to have been done to secure victory.

Summer's "On Strategy", first published in 1981, is by far the more important book out of the two. Its importance is on account of its origin and its phenomenal influence. 'On Strategy' is the first officially approved (six full Generals, five Lieutenant Generals and whole lot of lesser brass went through it) account of what was wrong with American military efforts in Vietnam, and what ought to have been done. It is certainly destined to be the most influential book for the US military in its assessment of the Vietnam War, as also in its impact on how American will wage 'Vietnam type wars' in the future. Nothing highlights the current and future impact of 'On Strategy' more than the fact that shortly after publication it become prescribed text in such prestigious American professional institutions as the War College, the Army Command and General Staff College, the Marine Corps Amphbious Warfare School, the National Defence University and the Air and Naval War College.

Its influence, however, is not restricted to closed military circles, but widespread amongst those responsible for framing and executing American foreign and defence policy. For instance, the famous 'Six Major Tests' for 'Use of US Combat forces Abroad' which the present US Defence Secretary, Caspar W. Weinberger announced a year after the Grenada invasion, on closer reading one finds owe their formulations to the prescriptions contained in 'On Strategy'.

The purpose of 'On Strategy' is clearly prescriptive. It is, as Major General Merritt, Commandant, US Army War College, the institution that sponsored the book, candidly notes in the foreward "to prepare todays senior Army officers to meet the challenge (of Vietnam type interventions) that wili face our country in the future."

The basic thesis of "On Strategy" is that American military victory in Vietnam was attainable. In essence it refutes the widespread and humbling belief that the Vietnam war was 'unwinnable' and the connected political wisdom of 'no more Vietnams'. The premise around which this revisionist thesis is built is that the American military 'system' worked, the Army won all its battles, and that from the Army's point of view 'as far as logistics and tactics were concerned' the success was complete. Armed with this conclusion (debateable to say the least) Summer ask the question: How could we have succeeded so well and failed so miserably?'' 'On Strategy' is devoted to finding an answer to this question.

The causes for the 'miserable' failure Summer's asserts are to be found in the failure of American policy makers (politicians and the civilian strategist who guided them), and the weilders of the military instrument to follow the prescriptions in Clausewitz's classic 'On War', the violation of the principles of war, and the inability to perceive and apply the correct lessons of the Korean War, which the author says the Americans won. Summer's critical analyses and the prescriptions that flow from them are at two levels : war policy and the operational level. But the present or future importance or influence of the book is not dependent on its clever Clausewitzian criticism (Clausewitz is cited on every third page of the book) but on what Summer's recommends for the future. His recommendations are that:

(a) American war effort in Vietnam type wars should be total. That is, war should be declared, enemy clearly identified, people passions roused to white heat, army reserves mobilised, JCS consulted closely and those who commit treason (object to the war) thrown into jail.

(b) America should not take 'consel of its fears' (China, Soviet Union and Nuclear War). It should extend the war (Escalation dominance) if strategy so demands, and that it fight it's wars the American way, *i.e.*, conventionally. The 'People war' part of the war should be left to 'indegenous forces'.

(c) Civilian strategists and bureaucrats, although bright, and full of plausible rational ideas, on how to wage war should be restrained from taking over the conduct of war, as their uuderstanding of war does not extend beyond the first half of the equation of war, *i.e.*, preparation for war.

(d) American military leaders and policy makers should read Clausewitz, who has already been coopted by Marx and Lenin in Marxist military thought, so that policy and the military instru-

ment work as one in the pursuit of victory. He clearly envies the North Vietnamese single minded pursuit of their political and military objective and their perfect unity of effort.

(e) Fight limited war like it was done in Korea (the author classifies Korean war as an American military victory) with clear-cut division of military labour between the host country and the United States: the 'host' country should deal with the internal security (counter insurgency) and the Americans with the external enemy, by conventional means.

Summer's 'On Strategy' is the kind of book which military professional will like. Mostly because it packs the Vietnam War into a brief, neat, comprehensible, theoretical capsule. The fundamental flow with Summer's neatness is the assumption that the war in Vietnam was orchestrated by the Soviet Union and China, and that, the North Vietnamese and the Guerrillas in South were merely proxies of China and the Soviet Union. Nothing disproves this hypothesis more than the sacrifice and the will to win of the North Vietnamese and their Southern allies. Proxies, by their definition, are incapable of such inhuman effort, as the performance of the South Vietnamese army, the American proxy, so clearly proved.

Whether Summer's prescriptions would have won the Vietnam war is moot question; but largely irrelevant, in view of the outcome. The importance of Summer's theoretical analysis however, lies in the fact that it fosters a belief that the war could have been won without major changes in the way Americans wage war and outlook of the US military instrument. If one goes by Summer's book, the conclusion about the future that one can draw is that in the next 'Limited war' the American war effort will be more total, the battles brief, deadly and conventional, and the US military will have a greater say in conducting them.

Whether one agrees with Summer's blue print in 'On Strategy' or not is irrelevant. What, however, is relevant is that its prescription are being taught to the future leaders of the greatest military machine in the world. This fact alone makes the book a must reading for all those, in or out of uniform, who are interested in the United States pursuit of power and influence in the Third World.

Palmer's book: *The 25-Year War: America's Military Role in Vietnam* is unlike Summer's book in every respect except in that it

echoes his criticism of US war policy cource for US military failure, and many of his prescriptions for the future.

Where, however, Palmer differs in his conclusion from Summer's is in his belief that even significant improvement in US performance would not have altered the outcome of the war, i.e., the war was essentially unwinnable. Yet he too, like Summer, believes that Korean War type strategy of sealing the borders with North Vietnam along the DMZ till the Thai broder, accompanied with threats of invasion (across the DMZ and along the coast) would have been more advantageous than focussing the war efforts, especially the ground effort entirely in South Vietnam.

As for Americans strategy in the Vietnam war Palmer points out that it was skewed as a result of flawed assumption that the "Communist Block" was monolithic (if it had not been so, North Vietnam would have been invaded) ; inadequate understanding of the 'devilishly clever' nature of war, and US policy planners continued "faith in air power" to bring about a favourable outcome of the war. These mistake perceptions he says, led to flawed American strategy of 'attrition', the 'Americanization of the war' and the failure to do the 'number one job', i.e., to develop a South Vietnamese Army that could counter insurgency in the South.

The value of Palmer's book, however does not lie in its 'lessons learnt' but in the perception that it provides of the war and the American effort from a senior military leader who was involved in the war at the operational, logistic and policy planning levels. Palmer was a corps Commander in Vietnam before the great Tet offensive and he was responsible for overseeing logistic for over a million men in Vietnam, as General William Westmoreland deputy, during and after the Tet offensive. During the closing phases of the war he was in Washington as Vice Chief of Army Staff and for some time as acting Chief of Staff.

The structure and perspective of the book reflect Palmer's war experiences and his years in power. Palmer's is a straight forward account of the US military role in Vietnam from September 1950 when Turman ordered the first Military Assistance and Advisory Group to Vietnam till 30 April 1975, when the last American man in uniform left in the wake of north Vietnamese victory against the demoralised and ditintegrating South

Vietnamese Army. Palmer pulls no punches, and his account is free from cant and hypocricy so frequently found in 'War accounts' by generals who have had the misfortune to be associated with defeat in war. The book however is not an account of battles, but conduct of the Vietnam war as seen from the higher reaches of power, and its impact on US military policy and defence establishment.

Although the book proliferates with criticisms of American direction of war and its conduct, but most of all it finds fault in the failure and delay in 'Vietnamising the War'. What he does not dwell on, however, is why, the, North Vietnamese fought like 'lions', and the South Vietnamese like 'rabbits', in spite of phenomenal material and advisorial assistance it got from the US. This is the book's blind spot, as it is of 'On Strategy'.

Till the American can't realise that war, especially unconventional war, is more than all else a human encounter and not an encounter of productive capacities or weapon power, the lessons will only tend to be superficial and incapable of being learnt.

In the end, both books, although good guides to how US conducts war and why it failed in Vietnam, are by themselves inadequate for understanding the real reasons why the Americans lost the war in Vietnam. This is so because they do not adequately address the vital question of why the North Vietnamese and their allies won.

—VT

THE USSR IN THIRD WORLD CONFLICTS : SOVIET ARMS AND DIPLOMACY IN LOCAL WARS, 1945-1980
Bruce D. Porter,
Cambridge University Press, Cambridge, 1984; pages 248;
price : £ 20.00

THE book under review originated in BD Porter's doctoral dissertation in political science at Harvard University, completed in the autumn of 1979, but further developed through post-doctoral research during 1979-1980 under the auspices of the Centre for International Affairs (CFIA) at Harvard and later during his work as a research analyst of Soviet foreign policy at Radio Free Europe/ Radio Liberty, Inc., in Munich, West Germany.

This well-researehed book contains the following chapters: (1) Introduction; (2) The USSR in local conflicts : a historical

overview; (3) Soviet power projection, advanced in postwar military capabilities; (4) The case studies: a framework for analysis; (5) The Yemeni Civil war; (6) The Nigerian civil war; (7) The Yom Kippur war; (8) The Angolan civil war; (9) The Ogaden War; and (10) Conclusion. The text also contain some interesting Tables, e.g. The USSR in local conflicts, 1945-80 (in four stages: 1945-53; 1953-64; 1965-72; and 1973-80); Delivery of Soviet weapons to the Third World from 1972 to 1981; ship-days logged by Soviet warships during 1964-76; Soviet principal long-range military transport planes (VTA) during 1956-1971; Soviet anchorages and deep-sea mooring buoys in international waters; Military support facilities in Third World used by the USSR, 1945-80; Cubans in Africa and the Middle East, 1977-78; A chronology of the Yemeni civil war, 1962-70, showing stages of Soviet involvement; Estimate of Soviet arms deliveries to Republican Government in Sana, Nov. 1967 to end of 1969; Transfers of Soviet weapons to Federal Nigeria during the Nigerian civil war, July 1967 to January 1970; Soviet weapons deliveries and inventories prior to the Yom Kippur war; Soviet-bloc weapons deliveries to the MPLA during the Angolan Civil War, August 1974 to April 1976; Known diplomatic contacts between the PRC and the three major Angolan liberation movements, 1960 through 1975; Soviet weapons shipments to Ethiopia during the Ogaden war, March 1977 to May 1978; Quantities and levels of sophistication of the large military equipment transferred in the five case studies; the chronology of the Soviet firsts in the Third World since the mid-1950s; and the trend of Soviet military involvement in Third World conflicts.

In the early post-war peried both USA and USSR type-casted most of the Third World Conflicts as related to their larger East-West ideological struggle, and both made mistakes in dealing with them. While Moscow burnt its fingers in Egypt, USA hers in Iran and Vietnam. The fate of the Soviets in Afghanistan is uncertain. However, the author credits the Kremlin with more success in dealing with the Third World disputes by devoting considerable research and intelligence-gathering resources to studying and comprehending the dynamics of specific local disputes. "In true Leninist style, ideology was not generally allowed to interfere with the actual implementation of policy". In fact, Moscow did not back a losing side in any of the cases studied by the author in his book. Except in the Nigerian civil war, in all other cases of the Third World Conflict, taken up by the author, the USSR was the primary supplier of arms to its client, involved in the local conflict. However, all of

these conflicts had deep-rooted historical origins "essentially unrelated to the actions of the Soviet Union." Some, in fact, were well under way before the Soviet arms began flowing in. Of the five local conflicts studied, the Yom Kippur war of October 1973 and the Ogaden war were the largest in terms of troops, weapons, and scale of combat.

The author has come to another conclusion: the initial impetus for Soviet military assistance in each conflict was a specific request from the Third World client, rather than an offer from Moscow. However, the client states sometimes gained far more from their relationship with the USSR than they gave in return. For instance, Sana in the late 1960s and throughout the 1970s, "manipulated Moscow's desire for a foothold on the Arabian Peninsula in an almost brilliant fashion." Porter says that military dependence tends to become a lesser factor in shaping a supplier-client relationship once a conflict has ended. He further states that in the majority of the cases studied by him, the USSR had no known diplomatic contact whatsoever with the side opposing its client. Further on a human level, the performances of Soviet diplomacy unlike that of the U.S. has often been medicore However, the Soviet Union thinks strategically with regard to its economic and foreign affairs, and that "gives an overall purpose and cohesion to its foreign policy." It "generally withheld from its clients bombers and missiles of a range sufficient to make deep strikes against an enemy's homeland, including its population centres." The author believes that most of the Soviet naval deployments during local conflicts seems to have been motivated by political and diplomatic considerations, rather than by military calculation, but "the USSR has been much more conservatine than the United States with regard to deploying its own armed forces abroad", in pursuance of Lenin's directive issued after the Red Army's losses in the Polish campaign of 1920. But the recent Soviet military intervention in Afghanistan has refuted this.

The author has made another interesting remark: "It is the USSR that has acted as a revolutionary force in Third World affairs in the post-war periods, while the Unied States has acted as a conservative power, generally attempting to uphold the status quo and the established international order."

As regards China's role in the Third World conflicts, the author rightly says that she came off second to the Soviet Union for the most part, because in a war of considerable magnitude, military aid became "the only real currency of political influence, and China had

little to offer." Outside the Far East, "China's capacity to compete as a global power has always been and remains sharply limited." While at the military level, the USSR's success in local conflicts is attributable to its capacity to deliver arms rapidly to its clients, at the political and diplomatic level its "record has been much more ambiguous", because military victories could not always be translated into long-term political influence. Finally, at the global and strategic level, the author thinks that "a decisive strategic shift has not taken place in the Third World, despite notable Soviet successes in the 1970s". The Soviet Union's gains were neither country-specific, not region-specific. However, they have weakened Western influence in the Third world.

Undoubtedly, this is a remarkable book, which should be studied by all interested in Soviet policy in the Third World. The book has an Index, but no bibliography.

—BC

THE SPELLBINDERS : CHARISMATIC POLITICAL LEADERSHIP
By And Ruth Willner, Yale University Press, New Haven and London, 1984; pages 212: price $ 31.50.

IN this interesting book Prof. Willner has discussed charimatic political leadership in the contemporary world. She has specifically dealt with Sucarno, Hitler, Mussolini, Roosevelt, M. K. Gandhi, and F. Castro, Mao, Nasser, Nkrumah, Ho Chi Minh, and Peron were some other such charismatic political leaders who dominated the scence in the 1950s and 1960s. The blind following commanded in very recent times by Ayatollah Khomeini in Iran and Jones of Jonestown shows that the phenomenon is not dead. Although the modern media can make political leaders popular, personal charisma of some political leaders is unmistakably there to be reckoned with by their adversaries.

The author has indicated the following factors as necessary for Charismatic leadership :

"1. The leader is perceived by the followers as somehow superhuman.

2. The followers blindly believe the leader's statements.

3. The followers unconditionally comply with the leader's directives for action.

4. The followers give the leader unqualified emotional commitment.

Charismatic political leadership denotes a relationship between a political leader and a segment of his following that has these properties."

However, all charismatic leaders need not be revolutionary in the conventional sense of the term. For, charisma is word of Greek origin, meaning "gift of grace" in early Christian vocabulary, used in religious sense. Not only Moses, Jesus Christ and Muhammad had great charisma in the past, in the present times, religious leaders like Mahesh Yogi, Bhagwan Rajneesh, and Sai Baba are known for their Charisma. It was Max Weber who extended its use to extra-religious contexts. According to prof. Willner, the following elements seem to combine to produce political charisma:—

(1) a crisis situation,

(2) potential followers in distress, and

(3) an aspirant leader with

(4) a doctrine promising deliverence.

She has discussed about charismatic legitimation through the invocation of myth Sukarno as mythic warrior, universal monarch, and semi-divine lover, Castro as the Apostle returned, and Ayatollah Khomeini as the Imam): heroic conversion (Hitler as the Hero of the Rhine, Mussolini as Defiant Restorer of Honor, Roosevelt as Saviour from Fear and Want, Gandhi as the Conqueror of Self; prodigy-image (Sukarno and sexuality; Gandhi and abstinence); and the rhetoric of charismatic invocation. Political strategies in aid of charisma are made through the invocation of the glorious past, the eclat of innovation, the suspense tactic organisational overlap and competition, and deification of the leader. While political charisma sometimes leads to power or the consolidation of power, it has its limits. Even though a leader's charisma may last through his tenure of office or his life time, its legacy often endures much beyond either.

This is a book which will undoubtedly appeal to different kinds of readers—politicians, sociologists, leaders in different fields and even young readers. After all every body loves charisma, whether he or she is a film star, a cricketer, a politician or a religious leader.

—BC

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