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PRINCIPAL CONTENTS

India-China Border Question	<i>Rohit Vohra</i>
The Crisis of Obedience	<i>Colonel T.A. Mande</i>
A Fine But Neglected Force	<i>Joe</i>
Futuristic Trends of Artillery in Mechanised Warfare	<i>Lt. Col K.S. Sethi</i>
Modernisation Logistics & Indigenisation	<i>Lt. Col. S. Mohindra</i> <i>psc</i>
Causes of Higher Secondary Students' Preference for Military Career	<i>R. P. Gautam</i>

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CONTENTS

OCTOBER-DECEMBER

INDIA-CHINA BORDER QUESTION	Rohit Vohra	319
THE CRISIS OF OBEDIENCE	Col. Y.A. Mande	336
A FINE BUT NEGLECTED FORCE	Joe	348
FUTURISTIC TRENDS OF ARTILLERY IN MECHANISED WARFARE	Lieut. Col. K.S. Sethi	360
MODERNISATION, LOGISTICS AND INDIGENISATION	Lieut. Col. S. Mohindra PSC	368
CAUSES OF HIGHER SECONDARY STUDENTS' PREFERENCE OF MILITARY CAREER	R.P. Gautam	380
THE TRAGEDY OF LEBANON : DEATH OF A COUNTRY (A Review Article)	K.G.J.	391
BOOK REVIEWS		399

Gandhi and Civil Disobedience : Mahatma in Indian Politics 1928—34 (Judith M. Brown) Arms, Men and Military Budgets : Issues for Fiscal Year 1979 (Francis P. Hoerber, David B. Kassing and William Schneider Jr.) Modernizing the strategic Bomber Force : Why and how (Alton H. Quanbeck and Archie L. Wood) From Apes to Warlords 1904—46 (Solly Zuckerman) World Perspective in the Sociology of the Military (George A. Kourvetaris and Betty A. Dobratz) The Genesis of the Professional Officers Corps (G. Teitler) War and Peace in the Middle East (General Odd Bull) The Senai Blunder (Maj. Gen. Inderjit Rikhye Retd.) Australia's Military Alliances (B. Chakravorty) Unfought War of 1962 : The NEFA Debacle (Lt. Col. J.R. Saigal)

CORRESPONDENCE	306
SECRETARY'S NOTES	310
ADDITIONS TO THE USI LIBRARY	315

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India-China Border Question

ROHIT VOHRA

THE McMAHON LINE

BEFORE the Revolution of 1911 overthrowing the Manchu Empire, there was a brief period of resurgence during which Chao-Erh-Feng Warden of the Eastern Marches marched upto Rima in 1910 and placed a boundary stone south of it in the Lohit Valley in present day Arunachal Pradesh. McMahon, the then Foreign Secretary of British India Government, organized a number of expeditions to determine the boundary between Tibet and India east of Bhutan. This boundary was to follow the Watershed of the Himalayas and also the boundary between Burma and China further to the North East. At the same time Chao-Erh-Feng sent a force 2000 strong to Lhasa which reached there on New Year Day of 1910. This was the first time in history that China had sent a force to Tibet without the consent of the Tibetans and as an invading force. Only a few months before, the Dalai Lama had returned to Lhasa after his long exile in Mongolia and China since 1904. He had again to flee on February 13, 1910, and this time he took refuge in India. Side by side with this invasion into Lhasa, Chao-Erh-Feng also spread Chinese control over the Tibetan areas adjacent to India's North-Eastern frontier, in the districts of Zayul, Pome and Pemako. The Chinese now also asserted that Bhutan and Nepal were vassals of China. After the overthrow of the Manchus in 1911 the Chinese forces in Lhasa were expelled and the Dalai Lama returned to proclaim the independence of Tibet as has been reiterated by the present Dalai Lama in 1960 in communication to the United Nations. In 1912, the President of the Chinese Republic issued an order that Tibet was to be "regarded as on equal footing with the provinces of China proper". All this provoked the British into taking some decisive action in redefining the relationship between China and Tibet in order to strengthen their own position vis-a-vis Tibet. The British Minister in Peking presented a memorandum dated 17 August 1912 and although the Chinese were reluctant, they had to accept this as the

basis for negotiation at a tripartite conference between China, Tibet and India for determining the status of Tibet.

The negotiations were held at Simla and Delhi in 1913-14 and are called the Simla Conference at which the McMahon Line was agreed to, as defining the boundary between India and Tibet east of Bhutan. The negotiations turned out to be about the boundary and its definition rather than about the status of Tibet. There was disagreement on the part of the Chinese in respect of the boundary between "Inner" and "Outer" Tibet. This concept was introduced by McMahon on the analogy of the treaty between Russia and Mongolia in 1912 where both an "Inner" and "Outer" boundary were laid down. Whereas in "Outer" Tibet, there was to be no Chinese control, "Inner" Tibet consisting of areas further to the east and inhabited by people of Tibetan stock was to be subject to Chinese control. These alignments were accepted and initialled by the Chinese delegate on 27 April 1914 but were not confirmed by the Chinese Government. In fact even as the Simla Conference was going on the Tibetans had had to maintain a force of 10,000 in Eastern Tibet and the Chinese had attacked one of the provinces to be included in "Inner" Tibet.

On 3rd July 1914, the British and Tibetan delegates signed the agreement regarding the boundary between Tibet and India east of Bhutan, since known as the McMahon Line. The Chinese refuse to accept the agreement though they never have objected to the boundary line itself. British help in maintaining Tibetan independence took the form of sending British Army personnel to train and organise the Tibetan Army. In 1921, an agreement was also concluded between Tibet and Britain for the import of 10 Mountain guns, 20 Machine guns, and 10,000 rifles with ammunition. By 1933, all this material had been supplied.¹ Between 1912 and 1934 there were no Chinese officials in Tibet, but the death of the 13th Dalai Lama in 1933 prompted the Chinese to take advantage and they sent a General at the head of a mission to offer religious tribute and condolences of the Chinese Government. Having come for this purpose the General insisted on staying on as a permanent representative but was forced to leave. Two of his liaison officers however remained behind. Following this the British requested for a similar office and the British Mission in Lhasa dated from this time. When the 1939-45 World War was under way Tibet refused to allow any facilities to the

1. "Great Britain, China and Tibet, 1914-21", C. Christie, in "Modern Asian Studies" C.U.P., October 1976.

allied forces to survey a route through Tibet for a supply line from India to China. When India became independent in 1947 China enquired from the new Indian Government whether the treaty rights and obligations between British India and Tibet had been assumed by the new Government. On their part, the Tibetan Government resolved to send a delegation to China when the Communists took over in 1949. Such was the position prior to China's invasion of Tibet in 1950.

THE MIDDLE SECTOR, NEPAL AND BHUTAN

South of Ladakh lies Spiti and curving east along the Himalaya mountains lies the region of Kinnaur. Both these regions formed part of Ladakh and were given to the youngest son of King Skydie Magnon in the 10th century. In the 17th century Kinnaur became part of the Rampur Bashahr Kingdom. An important trade route from Rampur Bashahr lies via Shipki Pass. The British attempted to divert the wool trade from Gartok through this route to Ludhiana. The British thus attempted to break the monopoly of Kashmir traders over this wool trade; this was also one of the reasons why Zorawar Singh in 1841 invaded Western Tibet.

The Himalayan borderlands east of Rampur Bashahr comprise the northern Garhwal and Kumaon regions, today called Uttarkhand and forming the source of the Rivers Yamuna and Ganga. The Uttarkhand borderlands, also known as Bhot, contain the largest number of passes from India to Tibet. There were several trading marts of Bhotiya merchants in the Kailas, Manasarower region on the Tibetan side of the passes. The more important passes used by these traders are, from west to east, Nilang, Mana, Niti, Kingri Bingri, Unta Dhura and Darma. Between the rivers Sutluj (Shipki Pass) and the river Kali (Nepal border) the border with Tibet was well defined since the time of Katyuri dynasty contemporaneous with Gupta dynasty, and their successors the Chands and the Shahs. Infact Raja Raj Bahadur Chand (1638—78) marched into Western Tibet and defeated the Huniyas (Tibetans), virtually destroying the fortress of Taklakot in Tibet. People on both sides, apart from trade, had frequent contact by way of using pasturelands on either side of the border. After the British occupation of the area in 1815 (except Tehri Garhwal) occasional border disputes with the Tibetans had been settled more or less amicably by local officers. For instance in 1888 the Tibetans came to Bara Hoti near Niti Pass and had to be driven away by British troops. To safeguard the local population the British posted officials at Garbyang, Pithoragarh and Champ-avat.

NEPAL

For a length of 540 miles extending eastward of Uttarkhand lies the Hindu Kingdom of Nepal. The first King of unified Tibet had invaded Nepal during the 7th century and married a Nepalese princess. In the middle ages, the Kathmandu valley became the epi-centre of flourishing cultural and commercial contacts between Tibet and India. During the reign of the 5th Dalai Lama (17th century) two Nepalese Kings, Rama Shah of Gorkha (1606—33) and Pratap Malla of Kathmandu (1624—77) seized the border passes through which flowed most of the trans-border trade between India and Tibet. The Newar Merchants of the Kathmandu valley gained control of the Tibetan border towns of Kuth and Kerong and extended their activities right upto Lhasa. In 1773, the Gurkhas of Rajput ancestry conquered all the other smaller kingdoms to the unified kingdom of Nepal and thus made it into a major military power. Nepal invaded Tibet in 1788 and seized the border areas. Again, in 1791 they marched to Shigatse and looted the Tashi Lun-po monastery of the Panchen Lama. A Chinese army marched across Tibet into Nepal, but due to Malarial conditions it suffered a setback, incurring heavy losses in the battle of September 1791. The concluding treaty in 1793 bound the Nepalese king to send a mission every five years to China.

Now Nepal turned her energies southwards to India and between 1803—9 expanded her control to the neighbouring areas of Western Sikkim, Gorakhpur, Garhwal and Kumaon. This brought Nepal into conflict with the East India Company and Ochterloney's invasion of Nepal in 1814-15 got bogged down and he had to make peace. By the peace treaty of Sanjauli, the British gained the territories of Kumaon, Garhwal and Gorakhpur.

During the middle of the 19th century the ruling dynasty of the Shahs lost control of the kingdom to their "Mukhtiyar" Jang Bahadur Rana who established the Rana dynasty, allied himself with the British and invaded Tibet in 1855. (He first discontinued the five yearly mission to China). "The resultant treaty between Nepal and Tibet was as between two independent states and direct diplomatic relations were established on their pre-1793 basis".² The Nepalese merchants acquired Special rights by this treaty in Lhasa. However, in 1883 there was a riot against the Nepalese merchants in Lhasa, and thus their virtual monopoly of trade with Nepal and India came to an end. Now only Rice and Salt trade was left in their hands.

2. Leo-E Rose, "Nepal—Strategy for Survival"—1971.

SIKKIM

Sikkim lies east of Nepal and at one time included the Chumbi valley, which forms a wedge south of the main Himalayan range and through it runs the main route to Tibet. Bhutan and Nepal had both invaded Sikkim in the late 18th century occupying east and west respectively of the river Tista. In 1792, Chinese invasion of Nepal also resulted in the annexation of the Chumbi valley to Tibet. Again in 1803 Nepal also annexed eastern Sikkim. However, after the Anglo-Nepalese war the British restored this area to Sikkim and reinstated the Raja but under British suzerainty. In 1830, the British took on lease a tract on the outer Sikkim hills as far as Darjeeling and developed it for tea plantations. The Sikkimese had resented sequestration of their territory. The Sikkimese sought Tibetan help. In 1849 Dr. Campbell and Dr. Hooker who were developing the area were captured by the Sikkimese and released only when the British threatened armed retaliation. Another attempt by the Sikkimese in 1872 to regain the area was also suppressed. The British next signed a treaty with the Chinese Ambassador in Lhasa in 1890 by which China agreed to a delimitation of the border between Sikkim and Tibet and subsequently they also agreed to some regulations regarding trade. But both the treaty and the regulations were repudiated by the Tibetans.

BHUTAN

In the 7th Century AD, a line of Indian Chiefs ruled over Bhutan, under the tutelage of Kamarupa (Assam). During the 9th Century AD, Bhutan was infiltrated by people of Tibetan stock. By the 17th century the Drukpa sect of Lamaism became the prevailing religion of Bhutan. However the eastern part of Bhutan continued to be inhabited by the indigenous tribes whom the Tibetans called the Monpas.

The Drukpas recognised the spiritual leadership of Lhasa but maintained territorial sovereignty. In 1644, Gusri Khan the Mongol ruler of Tibet sent Mongol troops to Bhutan but they had to retreat. In 1648-9, however, a combined Tibet-Mongol force was sent and was at first successful only to suffer a crushing defeat in 1657.

Tibet got another opportunity to intervene in Bhutan during 1728-30 when there was a dispute over the choice of the Chief Lama of Bhutan. The Bhutanese had to accept an agreement with Tibet to maintain a representative at Lhasa, an arrangement which continued until 1951.

The Bhutanese state was a theocracy till the end of the 18th century. Gradually, however the political power passed into the hands of a "Devaraja" line of rulers who had been originally appointed by the Chief Lama. Bhutan annexed the area of the Duars at this time, but Warren Hastings was able to intervene and restored the area to the Raja of Cooch-Bihar. In 1864-65 the Bhutanese again attempted to take the areas of the Duars and were defeated. Thereafter, the British annexed the Duars and they also took the Kalimpong area from Bhutan in 1895.

The Chinese had laid claim to Sikkim, Bhutan and Nepal in 1910. This was repudiated by the British and it also led to the signing of a treaty between India and Bhutan by which the External Affairs and the Defence of Bhutan became the responsibility of the British India Government. This treaty was renewed by the Indian Government in 1949.

INDIA, CHINA AND TIBET

Tibet remained isolated because of its geographical position. Access to it from China lay through the Tsinghai region in the North-East and from the Sikang region in the South-East and these routes were obstructed by some of the most fierce tribes inhabiting these inaccessible mountainous areas. As opposed to this, the routes from India were easily traversable. The main route lay through the Chumbi valley, in-between Sikkim and Bhutan. The access from Central Asia into Tibet is relatively easy. This lies through the Aksai Chin region of Ladakh. This route from Central Asia (passing through Sinkiang), is the only all-weather route and had been used by the Dsungar Mongols in 1717 when they occupied Lhasa. Subsequently, at the end of the 19th century F. Younghusband advised the Chinese Amban in Sinkiang to occupy areas South of Kuenlun mountains and it was in response to this that the Chinese claim for the first time to have sent a representative to survey the area. Chinese ignorance regarding this region was demonstrated when in 1885 Carey passed into Tibet, along the route discovered by Kishen Singh (of the Indian survey department). Carey followed this route along the Eastern side of Aksai Chin from Rudok, via Polu to Kiria and surprised the Chinese authorities at Kiria who had not known of the existence of the Polu road to India. Therefore, when the Chinese built the Aksai Chin Highway passing through Indian territory, they had violated Indian territorial sovereignty, in spite of the existence of the alternative Polu route laying east of Aksai Chin. In addition to the Polu route, the China had available to them an easier and longer detour from Kiria to Lhasa via

Tengsi Nor (Lake) which had been followed in 1724 by the Chinese-Tibetan forces in pursuit of a rebel prince of the Quosot Mongols who had fled via the Kiria-Kotal pass into Turkistan.³ The independent status of Tibet becomes abundantly clear when we examine Tibetan historiography. Tibet was united by King Son-Tsan Gampo under the banner of Buddhism. He invaded China and peace was restored when a Chinese princess was given in marriage to him. Prior to this a Nepalese princess was given in marriage thus recognising the might of Tibetan power and her sovereignty. Charles Bell⁴ has quoted the texts of two stone pillars in Lhasa, the first regarding a Sino-Tibetan peace treaty concluded in the first half of the 8th century, and the second referring to Tibetan conquest in Western China in 763 A.D. The Chinese presence was for the first time required when the Tibetans asked for Chinese help to drive away the Dsungar Mongols in the early 18th century, after which the Chinese posted two Ambans (Magistrates or Ambassadors) at Lhasa unilaterally. These Ambans exerted authority and interfered in Tibetan affairs, with interruptions, until the collapse of the Manchu dynasty in 1911. Similarly Indian representatives were posted in Tibet from 1904 to 1954 when they were withdrawn.

Tibet's boundary with Ladakh was first delineated by King Skydie Magnon who ruled Western Tibet and Ladakh during the early 10th century. He divided his Kingdom among his three sons, the eldest being given the area of present-day Ladakh, the second the area of Western Tibet, and the third Spiti, Lahaul and Zaskar, the southern-most province of Ladakh district. In this manner the Ladakh-Tibetan border was defined as early as the 10th century. This boundary was confirmed in 1684 after the war between the King of Ladakh and Tibetan forces of the 5th Dalai Lama and "The borders then set stood unchanged even after the Dogra conquest".⁵ Infact they were confirmed by the treaty concluded in 1842 between Tibet and China on one hand and the Dogras and Sikhs on the other. Finally the Ladakh-Tibet border was surveyed and delineated by A. Cunningham and the other British officers appointed under the treaty of Amritsar, 1846. The report of these boundary commissioners revealed, that, "the boundary is well defined by piles of stones, which were set up after the last expulsion of the Sokpo or the Mongol

3. See L. Petch, "China and Tibet in the Early Eighteenth Century" 1950.

4. Charles Bell "Tibet Past and Present" Appendices I and II.

5. L. Petch, "A study on the chronicles of Ladakh", p. 158.

hordes in 1687 A.D."⁶ It is also clear, "that the alignment made by the Indians in 1960 was known and accepted nearly a century before"⁷ by the above mentioned Boundary Commission.

Examining the boundary question between Ladakh and Sinkiang, we find the frontier areas of Kashmir and the mountains to the north of them are a conglomeration of some of the highest peaks, plateau and desert regions. The plateau of Ladakh is separated from the Tarim Basin to the north by the Kuen-lun and the Kara Koram ranges. In between these ranges are the Raksam Valley in the west and the source region of the Yarkand and Karakash rivers to the east. Further to the east are the Lingzi Tang salt plains and Aksai Chin area. The fertile Raksam valley is about a hundred miles long bounded on the west by the Taghdumbash Pamirs. The Pamirs are the top of this gigantic mountain system and comprise the Pamir, the little Pamirs and the Taghdumbash.

The Russians had begun to explore and occupy the Pamirs after the agreement of 1885 with the British, fixing the border of Afghanistan from Hari Rud on the Persian border to Khwaja Saleh on the river OXUS. The upper reaches of the river Oxus and the Pamirs upto the Sarikol range were a vacuum. The British while unable to go into this area themselves were keen that the Russians also should not occupy it, fearing that the passes across the Hindukush and the Kara Koram would then become accessible to them. The British first attempted to induce Afghanistan and China to occupy this area from West and East respectively, but neither was willing to take on this responsibility in the face of Russian advance. In view of the Russian advances into the Pamirs in 1891 and 1892 under Lanov, a settlement with the Russians became urgent and both sides agreed to set up the Pamir boundary commission which completed its work in 1895. This allowed the Russians to annex the Pamirs, except the Taghdumbash. Afghanistan agreed to hold the Wakhan corridor as a narrow wedge between the two Empires and this was enough to lay at rest the spectre of Russian advance into India. This left Sinkiang as the only area of possible conflict between the two powers. China was not strong enough to withstand the pressure from either of them to maintain the independence of Sinkiang. Sinkiang was incorporated into the Chinese empire in 1758 but it was "lost four times and gained five times by the Chinese".⁸ The last reconquest of Sinkiang was after

6. Dorothy Woodman, "Himalayan Frontiers", 1969, The Cresset Press.

7. Dorothy Woodman, "Himalayan Frontiers", P. 42

8. C. P. Skrine, "Chinese Central Asia", London, 1926.

the death of Yakub Beg in 1877 and occupation by the Chinese in 1878 when the present name of Sinkiang was given, meaning "New Dominions". During the rule of Yakub Beg the British had been keen to explore the various routes leading from Ladakh to Sinkiang. In this regard they had signed a treaty with Kashmir to explore the route via the Chang-Chenmo valley. The Kashmir Government had established a fort at Shahidulla before the time of Yakub Beg. This lay north of Lingzi-Tang plains which include Aksai-Chin as a part. In 1890, Younghusband met the Amban of Yarkand and told him that 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"⁹.....This showed the Russophobia tendency of the British India Government and thus led them to encourage China to extend its boundaries South of the Kuen-lun. Although China occupied Sinkiang, it had not claimed areas south of Kuen-lun mountains. In 1892, however, they made forward moves into the trans-Kuen-lun areas and took the fort of Shahidulla and also set up a pillar on Kara Koram Pass. It was at this time also that they claim to have sent their representative to survey Aksai Chin area for the first time. In 1897 "Johnson's Atlas" published by the Government of India showed Aksai Chin as a part of Kashmir. The Chinese Tao Tai in Sinkiang received a copy of this Atlas and when it was shown to the Russian Consul General Petrovsky, he immediately asked Tao Tai to protest to the British representative Macartney regarding the inclusion of Aksai Chin in Kashmir. However, the Tao Tai, did not at any rate regard it as a part of Sinkiang as China was to claim 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 earliest maps published during the reign of Emperor Chien Lung (1735-96), and in the later maps of the Emperor Tao Kuang published in 1821 and 1824, the Kuen-lun had continued to be the boundary. As late as 1890, when the Chinese Minister Hung Ta-Chin had furnished a map to Macartney at Kashgar, both Aksai Chin and Lingzi Tang, had been shown south of the boundaries of the "New Dominions" (Sinkiang).

THE STATUS OF TIBET

For seventeen years after the death of the Thirteenth Dalai Lama in 1933, the Government of Tibet was in the hands of an interim

9. Quoted in G.N. Rao's 'The India China Border' P. 35.

regime approved by the Kashag. The Fourteenth Dalai Lama having been born in 1935, was too young to govern.

On October 1, 1949, the People's Republic of China was proclaimed and the Communists became the rulers of China. The Tibetan Government resolved to send a delegation to China in 1949 after the Communists take over. Even before the Communists had made a formal proclamation, the Peking Radio had broadcast on September 10, that the People's Liberation Army (P.L.A.) was ready to "liberate" Tibet. On September 16, the Communists occupied Sinkiang. On November 24, Peking Radio broadcast a message of Mao Tse-Tung exhorting the people of Tibet to overthrow the Dalai Lama.

The invasion of Tibet in 1950 raised the question of the status of Tibet for the Indian Government. The British India Government had entered into a boundary agreement with Tibet in 1914 and this was being acted upon by both sides in respect of the border between the two countries east of Bhutan, called the McMahon Line. Ever since the expulsion of the Chinese from Tibet in 1911, Tibet was an independent state, conducting its own external and internal affairs. The British had arranged a truce between Tibet and China in 1918 terminating the war in Szechwan. India had established diplomatic relations with Lhasa in 1921 when Charles Bell was posted there. He was followed in 1936 by Basil Gould. However, Prime Minister Nehru declared in Parliament on 6 December 1950, that China's suzerainty over Tibet notwithstanding, Tibet's autonomy should remain unblemished. But even this enunciation of Tibet's status was denounced by China. What had changed in 1950 was not Tibet's status since 1911, but the power of China and its determination to impose its will over Tibet.

Since 1904 India had trading and political facilities under the treaty signed by F. Younghusband. Soon after their arrival in Lhasa in 1952, the Chinese terminated these facilities. Again, India did not make an issue of it and when the Chinese Prime Minister Chou En-Lai suggested to the Indian Ambassador Panikkar that the Political Agency at Lhasa should be transformed into a Consulate General in exchange for a similar Chinese office in Bombay, India fell in line and an announcement was made on September 15 marking this change of status of the Indian representative at Lhasa.

To work out a new agreement between India and China vis-a-vis Tibet, formal talks were begun on 31st December 1953 in Peking. The agreement as completed in May 1954 was important for what it

stated but even more so for what it omitted to state. It omitted any reference to Tibet's independent status, and declared it as part of China. It also omitted any reference to the boundary question, although Chinese maps showed large parts of India's northern territories as parts of China, and when the boundary question was raised, the Chinese refused to discuss it, saying that it was an agreement about trading rights only. The agreement made no reference to the existing Indian rights in Tibet since 1904 and was worded as if the trading rights in Tibet were being agreed to for the first time and on a reciprocal basis for Chinese trading markets to be set up at Kalimpong, Siliguri and Calcutta. Thus the Chinese obtained entry into Calcutta port through which they moved goods, arms, as well as personnel, to and from Tibet. The Chinese were also allowed to open branches of "Peoples Bank of China", through which they financed their operations in India and Tibet. The point that was highlighted the most about the treaty, however, was the doctrine of "Panchsheel" which was enunciated in it as governing the Indo-Chinese relations. The treaty also named six passes in the Middle Sector through which trade could be carried out between India and Tibet (China). The Indian Government was guided by its desire to achieve Indo-Chinese amity when it gave up India's special relationship with Tibet, and did not stand up for Tibet's status which was that of an independent nation since 1912, when the 13th Dalai Lama had announced his country's independence.

BORDER AGGRESSION 1954—62

In October 1954, Prime Minister Nehru made a goodwill visit to China and raised the question of Chinese maps which showed northern territories of India as a part of China. Chou En-Lai evaded the issue by stating that "inaccurate boundary alignment between India and China (on Chinese maps) were merely reproductions of old Kuomintang maps and that the present government had not had time to revise them".

The non-aligned conference at Bandung in April 1955 gave China an opportunity to make friends with the non-aligned countries of Asia and Africa. When Chou En-Lai established contact with the Prime Minister of Pakistan he is reported, according to L. Rushbrook Williams, to have given the hint that all was not well with Indo-Chinese relations. The Indian visit of Krushchev and Bulganin in the same year when Krushchev had made a statement in favour of India's case in Kashmir and also offered to set up a

million-ton steel plant, further brought Pakistan and China together. The Chinese countered the above by inviting the Prime Minister of Pakistan to Peking, a visit that took place in October 1956.

China's intrusions in the Middle Sector began soon after the Indo-Chinese agreement of 1954. In July 1954, they complained that Indian troops had crossed Niti Pass into Tibet at Wuje. Actually it had been a Chinese intrusion into Bara Hoti, south of the pass. In April 1956, Chinese troops crossed over the Nilang Pass and in September over the Shipki Pass. All these passes (Niti, Nilang and Shipki) had been mentioned in the agreement of 1954 as among the six routes over which trade was to pass between India and Tibet. There was, therefore, no question of any misunderstanding. A deliberate flouting of the 1954 agreement took place and the points of intrusion chosen were those near which there had been local disputes earlier. China kept playing the double cards of reconciliation and encroachment simultaneously. In November 1956 during Chou En-Lai's visit to India, he informed Nehru that the Government of China had accepted the formalization of the McMahon Line in Burma and proposed to recognise it in the case of India also. At the same time they built, according to their own case, a motor road from Yarkand to Gartok, "of which a section of 180 K.M. runs through this area,"¹⁰ ie, the disputed area of Aksai Chin. The construction of this road was known to Indian authorities from intelligence reports, and in 1958 one of the two Indian patrol parties sent to survey the roads built by the Chinese in the Aksai Chin area was captured by the Chinese. Further Chinese inroads were accelerated in Ladakh, where Chinese troops crossed into Indian territory along the Pangong Lake in July 1958 at Khurnak Fort. This was a place of former dispute with Tibetans in 1924 when the latter had accepted that the area was outside their territory.

In July 1958, the Chinese magazine "China Pictorial" published a map showing 50,000 sq-miles of Indian territory as Chinese. Prime Minister Nehru protested and Chou En-Lai replied after a delay in January 1959 that the Chinese Government "on the one hand finds it necessary to take a more or less realistic attitude towards the McMahon line and on the other hand cannot but act with prudence and needs time to deal with the matter". Evidently they needed the time in order to continue their advance into Ladakh. The Indian Patrol parties had reported that the Chinese had been extending their surveys

10. "The Sino Indian Boundary Question," Peking, 1962.

further west of Aksai-Chin road to the depth of 70 to 80 miles within Indian territory, south of Haji Langar and west of Lanak La".¹¹

In March 1959, the Dalai Lama took refuge in India and the violent Chinese reaction in the form of a propaganda tirade ended all fiction about China following the Panchsheel. The tempo of Chinese advance in Eastern Ladakh gained momentum. In July 1959, they advanced near Khurnak Fort which they had occupied the previous summer, and captured an Indian Patrol party near Spanggur. In response to Indian protest they replied that both Khurnak Fort and Spanggur were within Chinese territory. In August they occupied a hill overlooking Chushul further south and near an Indian Supply Air Field.

First blood was drawn by the Chinese when they attacked an Indian Post at Longju near Migyitun in Arunachal Pradesh and killed three men of the Assam rifles on August 25, 1959. In Ladakh, Chinese road building activity had been intensified and a second road south of the one through Aksai-Chin had been built. Along it the Chinese sent troops to Chang-Chenmo Valley and Chinese troops ambushed an Indian Patrol at Kongka Pass, south of the Chang Chenmo range on October 21, and 9 Indians were killed including their leader Karam Singh. The place of the incident was 40 to 50 miles west of the traditional boundary but the Chinese asserted that the Indians had "unlawfully intruded into the Sinkiang territory south of Kongka Pass".

The Chinese Premier proposed on 7th Nov. 1959 that armed forces of both sides should withdraw from the line of the actual control as on that date but they continued to advance until 1962. According to Prime Minister Nehru, the Chinese had within 3 years "constructed a large network of military roads and posts west of Aksai Chin road.. ...At certain points the network of military posts were more than 100 miles west of Chinese positions in 1959".¹²

The final conflict, known as the 30 days' War began at Dhola, where on 4th June 1962 the Assam Rifles had set up a post near the tri-junction of India, Bhutan and Tibet. On 20th Sept. the Chinese made a surprise attack on the post and "settled into positions near and dominating the post"¹³. They made a massive attack on

11. BN Mullik, "The Chinese Betrayal".

12. Vide Annexure to a letter from PM Nehru to PM Chou-En-Lai dated 14 Nov., 1962.

13. Neville Maxwell "India's China War"

October 20, 1962 as part of a full scale operation on India's Northern borders both in the North-East as well as in Ladakh on the Western Sector.

BORDER CLAIMS OF CHINA AND INDIA

The Chinese case on the border dispute with India is contained in the book "The Sino-Indian Boundary Question", published in 1962. The Chinese had avoided making any commitment till 1959 when they put forward the claim that "The Eastern Sector of the traditional customary boundary seen (lies) along the southern foot of the Himalayas, the Middle Sector along the Himalayas, and the Western Sector along the Kara Koram range". The area under dispute was stated to be 90,000 sq kms in the Eastern Sector, 2000 sq kms in the Middle Sector and 33,000 sq kms in the Western Sector. The evidence produced by China in support of her claims was as follows :—

THE WESTERN SECTOR

The disputed area always belonged to Hotien of China's Sinkiang**. Regarding Aksai Chin, they claimed that the (disputed) area has always served as the traffic artery linking Sinkiang with Ari area in Tibet. The Kirghi and Uighar herdsmen of Sinkiang "are in the custom of grazing their cattle here".

THE MIDDLE SECTOR

The Chinese claimed that "the local authorities of Tibet region have kept the land conferring documents or land deeds concerning these places issued in the past five centuries".

THE EASTERN SECTOR

The area between the so-called McMahon line and the boundary line at the southern foot of the Himalayas has always belonged to China, and was until recently under Chinese jurisdiction. In particular, the Chinese claim about Tawang (east of Bhutan) was that "by the beginning of the 18th century, the local Government of Tibet region unified the whole of Monyul used always to appoint officials of the administration organs collect taxes and exercise judicial authority". Regarding the Mishmi territory in the N.E.

**But the Chinese TAO TAI of Kashgar had called it as part of Tibet and had not regarded it as coming within his jurisdiction, see page 327 *ibid*.

corner, the Chinese claimed that "In Loyul and Lower Tsayul, upto 1946 the people continued to pay taxes and render corvee to the Lhasa authorities".

We may note that the Chinese claim in respect of actual possession or line of control much less than the above noted claims. They did not contest that India was in possession of the disputed area in the eastern and middle sectors but they contended that the Indian possession was only since 1950. In respect of the Western Sector they asserted their own continuous possession and stated that "beginning from 1961" India Set Up "43 Strong points encroaching on Chinese territory".

An Indian publication of 1963 "The Chinese Threat" gives the Indian case, which may be summarised as follows :—

EASTERN SECTOR

(a) The British Indian Government which succeeded the Ahom rulers exercised administrative control over the tribals living in this area. That these areas always belonged to India is clear from the Indian legislative enactments. In sharp contrast the only document that the Chinese could adduce "indicated ecclesiastical connections which cannot be confused with exercise of authority".

WESTERN SECTOR

(b) From 1957 onwards the Chinese were gradually taking possession of the areas subsequently claimed by them and had been setting up military posts further west, and in doing so they came into conflict with Indian Border personnel. They extended their posts and communications till they occupied the so-called area of actual control as on 7 November 1959, though they actually occupied it by 1962. The Indian side claimed that the southern limits of Sinkiang never extended south of the Kuen-lun-ranges and furnished documentary evidence "that the people of Ladakh had used the Aksai Chin and other areas as of right of trading, hunting, grazing, salt collecting", and evidence pertaining to regular administration, revenue settlements, and legislative enactments and touring of officials was furnished in respect of the disputed areas".

MIDDLE SECTOR

(c) In regard to the middle sector the Indian case was supported by histories of local kingdoms and also referred to administrative records which they claimed "mirrored an unbroken and continuous exercise of normal governmental authority down till today."

CONCLUSION

China accepted the McMahon Line on the border treaty with Burma in 1960. After the 1962 conflict with India, they also withdrew beyond the McMahon Line. In negotiations with India prior to the conflict Chou En-Lai kept saying to Nehru that the Chinese Government would not contest the borderline as drawn along the Himalayan watershed in the area, but he was anxious that India should concede to the Chinese the area in Ladakh where the Chinese had advanced gradually, first around the road passing through Aksai Chin which they built, and later on, the area further to the west of it. In respect of the latter, the fact that the Chinese kept shifting and expanding their claims showed clearly that they were not in possession of any area in Ladakh, and the frequent border clashes since 1956 showed that they kept advancing in the face of Indian occupation.

India's case that the traditional customary boundary lay along the Himalayan watershed was not in fact contested by the Chinese. They denounced the boundary drawn by the British but they accepted that the Himalaya provided the traditional customary boundary as of old. However, Chou En-Lai wanted to legitimise the occupation of Aksai Chin and therefore advanced the case for the Kara Koram instead of the Kuen-lun mountains being the boundary in Ladakh.

The Chinese never had any claim to this area South of the Kuen-lun range. In fact it was after the visit of Francis Younghusband to the Amban in Sinkiang in the 1890's that the Chinese were encouraged to venture into the area south of Kuen-lun. The Chinese claim to have sent a surveyor to the Aksai Chin who, they say, went south to the Chang Chenmo river and then came back to Golwan river, i.e., went through Aksai Chin. A number of Historical Chinese maps showing Sinkiang drew the boundary as along the Kuen-lun range. The Chinese's claim to the area is therefore less than flimsy. When the Chinese found that India was not going to accept a negotiated settlement on this basis, they kept occupying still more territory in Ladakh till they occupied practically the whole of the area north of the Chang Chenmo river in the south and to the Chip Chap river in the north. Presumably they did this in order to strengthen their bargaining position. A so-called Line of Actual Control as on 7 Nov. 1959 was stated to be in existence but this was never spelt out and eventually claimed to cover nearly all the area they came to occupy by their continuing encroachments right till the conflict of 1962.

The Colombo Powers suggested that the Chinese should withdraw to a line 20 km behind what they claimed to be the line of 7 Nov.

1959. But even this the Chinese did not fully accept as they, subsequent to their withdrawal, set up a number of military posts to the west of it. In the eastern and middle sector however the Chinese withdrew to the north of the Himalayan watershed. Any settlement with the Chinese must reckon with the persistent refusal which China has displayed with regard to vacating the lands taken by the aggression in Ladakh.

The Chinese claim that the Aksai Chin Highway is the only all weather road into Tibet and therefore of strategic importance to China. The fact that other routes into Tibet existed and which have been enumerated earlier, clearly brings out the falseness of the Chinese claim. However, in the present context settlement of the disputed boundary question is of utmost importance and even if the Chinese wish to keep the area through which the Aksai Chin Highway passes, then they should be willing to settle for an exchange of territory. For India the Mt Kailas and Mansarowar region is of importance and three of the main rivers of India take their origin in this region (The Indus, Brahmaputra and the Sutluj). Besides, the above region holds a religious and mythological sanctity for all Hindus, but for the Chinese the above region is of no such value. An exchange of this nature must come from the political leadership of both countries if it is to take any concrete shape.

The Crisis of Obedience

COLONEL YA MANDE

NIETZSCHE observed that obedience is a phenomenon noticeable everywhere. Nietzsche was right in that no organisation can sustain itself without obedience ; it is implicit in all organisational relationships but one may equally and rightly say that disobedience is found everywhere. When we look around and observe disobedience in politics, educational institutions, industries and other social organisations including families, a feeling of dispondency sets in. Have we reached a stage of crisis ? That, in a progressive society, there must be a proper mix of obedience—disobedience, hardly needs any elaboration, but it is the shift towards disobedience which causes concern to every thinking man.

The armed forces have to remain constantly alive to the problem of obedience as discipline is the backbone of its organisational structure. Certain philosophies may question the authoritative structure of our organisation and the nature of command and control, but on the practical plane Macaulay was right when he said—that no army has ever prospered under a debating society. In the systematic concept, events in one part will affect the other parts and the whole, and obviously, therefore, what is happening outside will have its impact on the armed forces. The armed forces have no control on social and political environment but that would hardly be an excuse good enough to remain reticent. There is a requirement, more than ever before, to preserve the organisational culture of the armed forces and prevent corrosion due to external influences.

In this article we will examine factors which have led to the present crisis of obedience, its psychology and remedial measures with reference to our situation.

Disobedience is byproduct of social development. The way our society has progressed, it is painfully apparent that disobedience will increase with material progress. The old order with its belief

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1. Friedrich Nietzsche—German Philosopher of 19th Century.
 2. Macaulay —A well-known historian.

in God, faith, acceptance, pre-destination, divine retribution, cleavage to customs and suppression of desires was decidedly more conducive to obedience. Often we say—"this is not how we should have progressed" and since we also say—"this is not how we should progress", let us remain content with facts as they are. The values, attitudes and socio-philosophy of modern life contains the seeds of disobedience. There are obvious flaws in the method of upbringing of children, system of education, family ties, philosophy of work and industrial morality. Let us briefly examine each aspect.

UPBRINGING OF CHILDREN

Unlike in the past the children have become the centre of attraction in the families. No wonder, our markets are flooded with children's garments, toys, books, games etc. We accept that maximum possible freedom should be given to children, nothing should curtail their liberty, and some go to the extent of advocating that the relationship between children and parents ought to be that of equals, like friends. So far so good, but how are our children, brought up in free atmosphere, going to accept various constraints and restrictions posed on adults in a society? The spirit of freedom entails defiance; it would be a folly to expect wisdom from young hearts, ability to differentiate between principles and practice, and nor can we expect from them patience and understanding. Much of our troubles in schools and colleges are due to youth being carried away by emotional philosophies such as that of Rousseau and Marx without realising the brute realities of life and human nature. Here there is no place for cool reasoning and matured judgement.

Certainly, we must not impose restrictions on the growth and development of children, that would be a retrograde step, but to grant free reign to the passionate impulses of youth is equally harmful. What is required is balance, but balance is a difficult proposition in life which is manifest in movements.

SYSTEM OF EDUCATION

Radhakrishnan rightly pointed out that education produces sceptics. Educated people lack faith, they believe in God and religion for convention and convenience, and doubt almost every thing. Little education, that dangerous thing, neither gives understanding nor wisdom. The situation perhaps would be different if people in a society are highly educated, devoted to learning but that is not possible for the majority. The masses have learnt only material facts and defiance to promote self-interest by misinterpreting liberty and freedom.

The situation is not very different even in respect of elite, the privileged class who have had the benefit of higher education. The modern higher education produces specialists. It is indeed our great ability to break the whole into parts and study each part in detail, but what about the synthetic process ie ability to place each part in the whole ? Here our specialists fail miserably. They disagree and disobey (with conviction), propagating their own theories without understanding the totality of the situation.

Mere education does not give wisdom nor should we expect it. As far as obedience and order is concerned, most of us will have to learn these from socio environment and philosophy. We had expected that education will improve environment, the fact is that it is polluting the environment as far as social order and obedience is concerned. This however, should not be construed as a plea to scrap education, but change in the system of education is definitely warranted. Let us leave this problem to the educationists, still unable to resolve the very first and fundamental question—what should be the aim of education ?

FAMILY

Confucius summed up the problem in one sentence, as only a philosopher can—‘if only people can learn to live happily in a family, no other code of morality is needed’. We will have to learn a great deal from Confucius. The family is a primary unit of the society. Here in a rudimentary form lies all the subtleties of obedience, such as—respect for elders, the principle of give and take, acceptance of unfortunate handicapped and the desirability of sacrifice in the interest of harmony. Unfortunately, we decided to break joint families into smallest possible units and found hostels to house the limited but cumbersome children. If we destroy the very foundation of obedience, surely we should not expect any spectacular results from our children.

WORK

The modern notion that all work is a contract is equally disruptive for obedience. Implicit in contract is disobedience in case of breach by either of the parties. We accept right to strike, collective bargaining and the principle of self-interest. Painfully absent is the principle of sacrifice and work for work's sake. Compare this modern attitude without ageold concept that work is Dharma and the difference would be obvious.

Contract is unavoidable in certain spheres, but their lurks a danger of its extension into other fields. And sure enough, it is extending even into close relationships such as between husband and wife, parents and children. No wonder, confrontation and disobedience is the order of the day.

RESPECT FOR AUTHORITY

Our age is noted for lack of respect to men in authority. The cry is against the competence and character of men in power and their privileges. It is accepted as a principle, and not without reason, that power will corrupt any one. But, obedience without respect is a difficult proposition.

It is true that no man including Avatars, Buddha or Christ was ever born with a halo nor could have acquired one in the life time. Halo, miracles, super-natural powers etc are follower-made features of greatness designed to elicit respect and obedience.

The modern views are not very wrong. No leader is ever so great as he is made out; it is only others who make him great to promote their self-interest. The concept of great man is equally down to earth. The great men are those who do their work well, look after the welfare of men and look after their personal interests. These views, right as they are, are cold and cannot inspire and arouse public.

It does not need much of a common sense to explain that men who rise in any hierarchical structure do possess uncommon qualities, otherwise they simply cannot rise and this is so even after giving allowance to human weaknesses and faults in the selection system. Such men in authority must be respected. Privileges are not entirely without meaning; time being fixed, all facilities must be extended to such men so that they can devote their time to official work.

But, the pendulum has swung. There was a time when men in power blatantly abused authority; today despite all their show of simplicity, honesty and integrity—no one bothers.

Meanwhile, the function of administration in our complex society is becoming difficult day by day requiring exceptional grasp and competence. Those in authority do possess such qualities but the common man fails to realise because he is never confronted with such problems. Society is influenced by slogans and the slogan of the day is down with authority.

INDUSTRIAL MORALITY

Morality changes with age. From hunting and food gathering, we passed on to the agricultural and are now in the industrial age. India, however, displays a unique combination of industrial and agricultural morality.

Each age has distinctive features of morality. Typical features of agricultural code are hard work, thrift, peace, stable relationships, adherence to customs, rigid social structure, early marriages and innumerable children dear to God. The distinctive features of industrial code are specialisation, long years of training, fluid relationships, self interest, sexual promiscuity, search for new (however stupid) and avoidance of children who are verily a nuisance.

It should not be difficult to infer that agricultural morality is conducive to obedience whereas the industrial morality carries the seeds of discontent.

A scrutiny of above factors will explain why disobedience is increasing. It is byproduct of modernisation, which we will have to accept unless there is radical change in social value—attitude system.

Will the present trend of disobedience, in the long run, be beneficent to the society? If not, can we control it? Society generates forces of restoration and somehow equilibrium is reached, but the equilibrium is of dynamic kind and the direction of progress towards material comforts is fairly obvious. Revolts occur only when official machinery lacks competence and means to deal with expectations of people and mob fury. If progress in a society keeps pace with expectations of people, there should be no cause for disobedience, but that would be heavenly. Perhaps, the present phenomenon of disobedience is an aberration, a surface current without much of significance. A philosopher with his mind probing into the distant future, and a politician in power with his mind glued to the next election may say that present is not very material and better times are ahead. But the official class, lacking the clairvoyance of a philosopher and personal interest of a politician, has to face present problems. He needs to understand what individuals and groups obey and what they disobey.

PSYCHOLOGY OF OBEDIENCE

Serving in an organisation like ours, we have to watch the forces of disobedience generating within the group and take timely

remedial measures. We need to know two aspects; what is it that a man obeys? What does a group obey?

Let me take the liberty of narrating what I obey.

I obey self interest. On a particular day I wear best set of uniforms, appear most cheerful and carry out wishes of my boss with an unusual exuberance. I wonder if my boss knows (perhaps he does) that at a suitable moment I am going to request him for leave, car advance or some such thing. Subordinates obey their bosses to further their own self-interest and bosses have meaning only as long as they are in chair, in a position to help.

I obey fear. There are times when my boss gets annoyed. Extra energy wells inside me and I set out getting the work done, not unfrequently distributing to subordinates the very dose of anger which I received. I am indeed very conscious of security of my job.

I obey needs. I am governed by needs—both physiological and psychological. I obey money because I cannot do without it; if only I have money it satisfies my other needs. I want to belong to my coworkers and earnestly strive to get their affection and love. I am sensitive about my self-respect. I obey to earn money, belonging and self respect.

I obey social codes, customs and conventions. Here I follow others; I do what they do. Frankly, I do not analyse each and every action of mine. The social codes, customs and conventions elicit from me automatic obedience. The socialisation process started with me from my birth and had continued for long years. Today, I am victim of habit—I recall Thorstien Veblen; habits are the driving force behind human actions and thought.

I obey personalities. There are superiors whom I admire. I like to emulate them. I obey whatever they say. Sometimes, their decisions are wrong. I know it, but even then I get carried away finding reasons to justify even wrong actions. I know I am prejudiced. Take the opposite case, sometimes I am reluctant to obey even the most legitimate and just orders of the bosses whom I do not like.

I obey ideals. There are times when I disregard self-interest, fear, money, social customs etc. In such moments I am either sublime or stupid.

There is one thing which I do not necessarily obey and that is orders and instructions. It is not that I take pleasure in flouting

orders, but I simply do not know the plethora of rules, regulations, orders and instructions. The way in which every organisation and association expects me to know all their rules and regulations is frustrating. And if this is my case, imagine the plight of our ordinary workers. I obey most of the orders because they appeal to simple commonsense. But you can trust my intelligence, I circumvent orders when I want to.

The problem of individual obedience is complex as no two individuals are same. Our drives, motives and experiences are different, but, luckily when it comes to groups, ideas get crystalized. It is comparatively easy to command groups because its sentiments are fairly well defined. No wonder, most of us who command groups fairly successfully fail to elicit obedience from our wives and children. In any organisation, it is individuals who pose problems; its severity depends on chairs occupied by them.

What does a group obey? This problem has occupied sociologists for quite some time and we must profit by their findings. A group is not an aggregate of individuals. Admittedly, there is no such thing as group mind, but the groups show distinct personality traits with its own likes, dislikes and sentiments. Groups differ from each other; they are very conscious of their entity, preservation and progress. Groups are more rigid and change-resistant compared to individuals.

A group can be sustained only on right lines. A band of robbers can be held together only by the towering personality of its leader. Such groups perennially face crisis of succession and sooner or later disintegrate.

Much depends on the attitude of officers for the maintenance of healthy climate within a group. Their attitude can ruin or promote healthy atmosphere. (See Table below). Cliques, rivalries and formation of subgroups foul life within a group. We must maintain healthy group-life to elicit obedience.

TABLE OF ATTITUDES

<i>Attitudes which ruin group life</i>	<i>Attitudes which promote healthy climate</i>
Hate	Sympathy
Dislike	Affection
Aversion	Trust
Distrust	Tenderness
Suspicion	Love
Spitefulness	Friendliness
Malice	Kindliness
Cruelty	Courtesy
	Helpfulness

Actions which conform to group sentiments such as welfare schemes, religious ceremonies, social functions etc. find ready obedience. But the function of leadership is not merely to follow group sentiments. Here the task of military leadership is indeed difficult. Leadership, according to Field Marshal Sir C. Slim, is projection of leader's personality to make a body of men do those very acts which they are not inclined to. Battlefield is a most challenging situation to elicit obedience from individuals or groups. Military leadership demands managerial ability plus something. The best we can do is to ensure that before the battle, groups are healthy, full of faith and confidence, and thereafter lead it from success to success.

OBEDIENCE CLIMATE IN INDIA

Much that has been written on factors creating crisis of obedience applies to Western countries rather than ours. However, the malady has taken roots and symptoms are visible. Will we follow the known Western model?

The obedience climate in our country is frankly good and in many respects enviable. It is due to factors such as cultural heritage, agricultural morality and economic conditions.

Here in our country, a socio philosophy was evolved which is most conducive to obedience climate. Tolerance, acceptance, non-violence, self-abnegation, respect for others etc. come to us naturally as a part of social heritage. We have preserved our culture but how long more? Will we crack under the impact of modern education, money-economy and industrialisation? MacIver, an eminent American sociologist thinks that cultural progress in a society takes place at a very slow pace. MacIver distinguishes between civilizational and cultural progress; in a society, civilizational progress pertaining to art and material facts takes place very rapidly but cultural progress pertaining to socio philosophy is very slow. There is an ample evidence to show that we have progressed a great deal in matters of housing, material comforts, means of communication, transportation etc, but our values, attitudes and folk-ways have not altered much. One sincerely hopes, that we are able to maintain affiliation dominated philosophy which is most conducive for social harmony and obedience.

Earlier we had noted that agricultural morality is conducive to obedience climate. The west has completely switched on to industrial morality. Although we have started off fairly well with industrialisation, but we may never be able to completely switch to industrial morality. This is because of population distribution. Compare 80

percent of our population being in villages with America whose rural population is only 4 percent, Canada and Australia 2 percent and Europe 8—10 percent. It does appear ridiculous to accept two sets of code within the same country but that is how the Indian situation is. It would be prudent to accept industrial morality within the overall framework of agricultural code. The agricultural code has its drawbacks but it is more conducive to obedience climate.

Poverty makes people obedient. Gods are safe as long as mankind remains poor. Napoleon wondered how is it that poor don't get together and throttle the throats of rich ? Faith and religion provide glimpses of hope to the poor who are otherwise shackled in chains. Mankind has sufficiently exploited poverty and religion to exhort obedience and one sincerely hopes that the days of such exploitation are over.

Cultural heritage, agricultural code, poverty and religion are the factors which contribute to good obedience climate, but this should not mean that we remain complacent. The awakening amongst the masses can easily turn violent and overthrow the influence of cultural heritage, religion and the natural demands of agricultural code.

The old equilibrium was different where intellectuals (Brahmins) showed disregard for wealth and material possessions. the Kshatriya had meaning due to frequent wars and Vaishyas in any case did not enjoy social prestige. We are trying to reach a new equilibrium in the age of money economy and industrialisation. Till such time that we reach new equilibrium, we must not lose sight of dangers. These dangers can only be averted by population control and increase in production.

REMEDIAL MEASURES

We do not run any training courses for leadership alone, nor is it desirable to learn this art in isolation. In thousand and one ways, we are instructed in the art of gaining obedience—such as experience in command of troops, guidance from superiors, art of communication, professional knowledge, management, maintenance of proper code and conduct by officers and so on. Throughout our career, we learn the art of leadership in one way or the other. If only we understand the underlying spirit behind the scores of our daily activities rather than follow like a clog in the wheel, the organisation will be a great deal gainer.

In an article of this nature, it is not possible to dwell on each and every aspect. We will examine only two aspects ie need to understand and personal example.

NEED TO UNDERSTAND

Sociologists are right when they say that most of our problems are due to lamentable lack of understanding. We have to understand reasons for deterioration in the obedience climate. Frustration is least likely to solve any problem. Every age has its own problems and we must learn to face them squarely. Today, an officer has to learn many more details than his predecessor had to know. Authority cannot be exercised by mere rank and appointment. We need to understand psychology of obedience and improve human relations. We must adjust with time. There is no panacea to the problem of obedience; much depends on situational analysis. Leadership has no fixed ingredients; it is an art which changes with time and is highly individual.

The earlier parts of this paper were meant to develop understanding. Disobedience is one of the lamentable side-effects of modernization. Freedom, liberty and equality are terms which are not understood in correct perspective by an average man. It will take some time to restore equilibrium and till then we must show patience.

We distinguish one organisation from the other because of culture, and to be sure, the army has its own distinctive culture. A new entrant, very understandably, finds difficulty in adjusting to the new environment, but with the passage of time most of us adjust and learn to enjoy life under the new culture-pattern. Those who fail to adjust get weeded out in due course.

It is natural that people in one organisation compare their life with those in different organisation. Comparisons are very valid in certain spheres such as pay and emoluments, material comforts, retirement benefits and so on, but there can be no comparison in organisational culture. When it comes to code of conduct, discipline, conditions of work, officer-man relationship etc, there is no question of any comparison whatsoever. This is one aspect, which officers need to understand and explain to men. Understanding of organisational culture will certainly improve obedience climate.

PERSONAL EXAMPLE

It would appear trite to emphasise the importance of personal example. But look around! All over the world, the elite are busy in money making and sex. Philosophy knew it long before, man is addicted to women and property. There is nothing novel or new about our behaviour.

For a sermon, we don't have to look outside. Here is what Gita says—lower classes or castes emulate upper classes and castes. Men do what the officers do. In a situation, where officers concern themselves only with comforts, material possessions and amassing of wealth, one can hardly expect anything else from men. In material culture, the warfare can only mean furtherance of material self-interest ; it would pathetically lack ideals of maintenance of Dharma, social order and destruction of evils. Scriptures repeat and repeat the importance of sacrifice, which is hard to find.

There is something more which Gita has to add. Masses are always steeped in ignorance, darkness and lethargy. 'Pramad' is the word used in Sanskrit. But this should not be the reason to detest subordinates. We must understand the environment under which they are brought up and show sympathy. Magnanimity is an important attribute of leadership.

The most admirable feature of our organisation is narrow gap between the pay and emoluments of officers and men. This is how it should be and one must accept it with understanding and cheer. This does not mean indifference and disregard to the living conditions of officers, but a wide difference in the living conditions between officers and men will only ruin the obedience climate. The disruptive element in a society, according to sociologists, is not class or caste but economic disparity.

To preserve obedience climate, officers must set personal example. They must show respect and obey their seniors in the traditions of the armed forces. If only officers show personal example, men will follow suit. This does not mean that officers have to become conformists and 'yes men'. We have to avoid extreme situation ; take for example two cases. Case one—an order is passed and it is obeyed without stir or even raising of a voice. Such a situation would appear ideal from the point of view of authorities but it is full of dangers. It closes all the avenues of progress. Are we to assume that the order is so perfect that there are no different opinions ? Case two—order is passed, it is flouted openly and no action is taken. Drawbacks of such a state are fairly obvious. For progress, we must promote discussions, views and ideas. There must be differences of opinion at the planning stage, but once a decision is given there must be whole-hearted cooperation even if decisions appear wrong to certain individuals.

CONCLUSION

In this article, we have briefly examined the causes of disobedience in modern societies. Frankly speaking, there is a little hope for improvement unless there is a radical change in social, economic and political situation.

In the army, we are most concerned about the problem of disobedience. The culture and philosophy of our organisation is different but it is essential and inextricably linked with goal effectiveness. Our problem, then, is how to maintain our culture and philosophy in an environment which is none too conducive.

We certainly envy the past culture in which —

“Theirs not to reason why ;
Theirs but to do and die.

Or, where the soldiers too had

“Drunk delight of battle with their peers
Far on the ringing plains of windy Troy.”

We cannot go back to the past, but also we cannot accept the present as obedience is a functional requirement. The solution, then, lies in understanding the problem. The lead, as in other cases, has to be taken by officers. They must understand the culture and the philosophy of the organisation and explain to men. Equally they must demonstrate a high standard of personal example in obedience.

A Fine But Neglected Force

"JOE"

(There are at present roughly 200 Army officers from the rank of a Major General down to the rank of a Capt on deputation to the Force. Since the average tenure of deputation is 3 years, about 1000 officers would have served in the Force since it was thrown open to Indians after Independence. All the battalions of the Assam Rifles, except two, are under the operational control of the Army. All the battalions have been placed under the Army Act for discipline. All the officers in the Force, are either Army deputationists or are ex-Army officers. There are no Police officers in the Force. The Army, therefore, has a vital stake in the Force and Army officers should have great interest in the Force.)

THE PROBLEM

THE Assam Rifles is an old Force and traces its descent from the Cachar Levy raised in 1835. The preface to the Assam Rifles Manual states : "When the province of Assam was first constituted, in 1847, there existed no organised Military Police. Frontier defences was undertaken by the three India Regiments, stationed at Silchar, Dibrugarh and in the Naga Hills. In each district, however, part of the ordinary police force (known as the Frontier Police) was armed and performed not only the duties now carried out by the Armed Branch of the Civil Police, but also occupied a number of small out-posts, along the Inner Line—duties of a nature now performed by the Assam Rifles."

The Force has a proud heritage and rich traditions. Its men—Gorkhas, Garhwalis, Kumaonis and hill tribes of NE India—come from the same stock as their brethren in the Indian Army and they have distinguished themselves both in war and peace. In its long history, the Force has taken part in numerous trans-frontier expeditions, internal security duties, two world wars and the recent insurgencies in Nagaland, Manipur and Mizoram.

In operations, its record for gallantry is impressive.

1891—1913	World War I 1914—1918	World War II 1939—1945	Insurgency in Nagaland, Manipur, Mizoram
IOM 3	IOM 7	IOM 1	AC 3
IDSM 11	IDSM 15	MC 4	KC 22
KPM 7	MSM 12	IDSM 16	VrC 5
		MM 10	SC 65
		MBE 2	SM 30
		BEM 6	VSM 15

The Force is now bracketed with other paramilitary forces—BSF, ITBP, CRPF, CISF—under the Ministry of Home, but is it correct? A glance at its history will show that its functions, little realised by many and especially the Army, “is as much administrative as police and military”.¹ In war, it has been closely associated with the Army. In peace, it has been the right hand of the Political and the left hand of the Military in the wild tribal areas where it has been located for over a century, carrying out watch and ward duties on the frontier and internal security duties in the tribal areas. The Assam Rifles is not, as is commonly presumed, a Civil Force under the Military but a Military Force under the Civil. It would therefore be more correct to call it a gendarmerie than to call it a paramilitary force. This is the only paramilitary force whose battalions are affiliated to Regiments of Infantry of the Army and the only paramilitary force which is modelled on the Army.

“The organisation is a military one but every man is enrolled as a police officer; their duties are primarily police rather than military”². No better tribute can be paid to the men of the Assam Rifles for their work in peace than paid by Dr Verrier Elwin who was a disciple of Mahatma Gandhi, friend of Pandit Nehru and for many years Adviser to the Governor of Assam on Tribal Affairs.

“Modestly and without fuss, they have faced every possible hardship and difficulty and thousands of villagers in the wildest areas think of them with affection and gratitude. May they long continue to provide the foundations of security and order in our border areas”³.

1. Report on the Administration of the Assam Rifles 1958-59. Foreword by Shri N. K. Rustomji, ICS, Adviser to the Governor of Assam.
2. The Assam Rifles in Peace and War by Sir Robert Reid, KCSI, KCIE.
3. A Philosophy for NEFA by Dr Verrier Elwin.

A fine force has become a neglected force because of :

- (a) Diarchy
- (b) Faulty Employment.

Diarchy : Dual Control is bad in any organisation but it is worse in an armed force. This is the only armed force in the country where there is dual and parallel control by two agencies; the Army for operations, HQ IGAR for administration. The Force is under the Army's "Operational Control" and what that term means is not clear because it has not been defined in the Glossary of Military Terms or anywhere else. Taking advantage of this and the fact that in matters military, operations always take precedence over administration, the Army takes the maximum out of the Force and give back little in return. On the other hand, HQ IGAR which is responsible for administration of the Force and for the welfare and morale of its men, has perforce to play the secondary role. It can be said with a little bit of exaggeration and lot of truth that Army has authority but no responsibility and HQ IGAR has responsibility but no authority. If the problem could be put into mathematical terms then it would be something like this : Bifurcation of responsibilities + multiplication authorities = confusion of purpose + divided loyalties. The net result is that the rank and file are perplexed, junior commanders are critical and senior commanders are embarrassed.

This diarchy has repercussions all round with consequences which are sometimes disastrous, sometimes ridiculous and often both. Here are a few example : The annual inspection of a battalion is done by the DIGAR but the annual confidential report of a battalion commander is initiated by the Army formation commander; leave of officers is sanctioned by the Assam Rifles authorities but approval is first given by the Army formation commander; operational tasks are given by the Army formation commander but the training to make the troops fit for these operational tasks is the responsibility of the Assam Rifles authorities; manpower planning is the responsibility of the Assam Rifles authorities whereas strength at various out-posts is laid down by the Army formation commanders ignoring the man-power situation; leave policy is laid down by the Army formation commanders but to ensure that all men get their due leave in time as per their entitlement is the responsibility of the Assam Rifles authorities; pay is as on the Army analogy but pension is as per civil rules; terms of enrolment entitle the rank and file to serve upto 58 years of age but operational

requirements of the Army compel HQ IGAR to send men on pension about 10—15 years earlier; major part of the Force is under Army Act 1950 but certain units of the Force are under The Assam Rifles Act of 1941; throughout their service men are under the Army Act but once they retire they are not treated as Ex-Servicemen; a battalion is inducted and located as per the desire of the Army authorities but acquisition of land and construction or provision of accommodation is the responsibility of HQ IGAR; re-deployment is ordered by the Army formation commanders but the mechanics involved in re-deployment such as transport, contracts, accommodation ("op works" is not authorised in Assam Rifles), is the responsibility of the Assam Rifles authorities; finally, expenditure for that which the Assam Rifles does, what strictly it is not supposed to do, is book debited to the Army and is about one-fourth of the total budget of the Assam Rifles.

Faulty Employment : The Assam Rifles is a territorial force and once inducted in an area, they stay put there for ever. 1 Assam Rifles, 2 Assam Rifles and 3 Assam Rifles have been in their respective areas for a century and 4 Assam Rifles in its area for just over fifty years. Each battalion is widely dispersed in out-posts and covers hundreds of square miles. For example : 1 Assam Rifles looked after Lushai Hills (Mizoram), 2 Assam Rifles looked after Balipara Hill Tracts (NEFA, now Arunachal Pradesh), 3 Assam Rifles looked after Naga Hills (Nagaland) and 4 Assam Rifles was stationed in Manipur. The territorial affiliation develops certain affinity and rapport between the locals and the Assam Rifles, especially as some of the men of the Assam Rifles settle down in these areas after retirement. All this helps in building up long term intelligence of great value which would be indispensable to the Army when it moves into these areas. This should be remembered by the Army.

A point not appreciated by the Army is that the Assam Rifles battalions are armed, organised, trained, equipped, staffed, administered, and deployed in such a way that they are not capable of carrying out the normal operations of war. In World War I (1914—1918) the Assam Rifles battalions as such did not take part in the war but supplied drafts to various Gorkha Regiments who fought with them in all theatres of war. They provided a total of 23 Indian officers and 3,174 other ranks as reinforcements. Out of this, 5 Indian officers and 237 other ranks were killed and 6 Indian officers and 247 other ranks were wounded. That these drafts proved their worth is shown by the fact that 11 Indian officers and 131 other

ranks received promotion in the field, while 7 officers and 69 other ranks were awarded various honours, including IOM, IDSM and MSM⁴. In fact, the Assam Rifles battalions are never concentrated as infantry battalions and never move out as battalions. All the tactics they learn or employ are platoon level tactics : ambush, road blocks, patrolling, columns, convoy duties, escorts, screens, raids, road opening and cordon and search. They are expert in jungle craft and jungle lore and excel as scouts, guides and interpreters. Even during World War II (1939—1945) when the Force was put under command of the Army, they were employed and deployed in this way. In the Lushai Hills, men of 1 Assam Rifles together with the men of Chin Levies provided a screen to the Lushai Brigade of three regular battalions "formed.....to take over watch and ward duties from the depleted Hasforce and Barforce,.....to guard the approaches to the Surma Valley through the Lushai and Chin Hills from Silchar southward"⁵. Again a detachment of 400 men of 2 Assam Rifles furnished a column as "eyes and ears" to guide a British brigade which made a flank attack from Mokochung in Nagaland and subsequently advanced to Ukhrul in Manipur. In another sector, seven platoons of 3 Assam Rifles took part in the heroic defence of their "Home", Kohima, which was besieged by the crack Japanese 31 Division under Lt Gen Sato. Also a few platoons of 3 Assam Rifles and bulk of the platoons of 4 Assam Rifles provided the framework for the famous guerilla force known as the "V" Force, whose activities extended far beyond the border and even across the Chindwin. "Each (Zone) had a platoon of the Assam Rifles..... as a fighting element and upto 1000 local men enrolled but not formally enlisted. Its main task was the collection of information....."⁶.

The way the "V" Force whose backbone was the Assam Rifles, operated is best described in the book *Eastern Epic* :

"Patrols penetrated deep into enemy held territory to obtain information and harass the foe. These patrols could cover 30 miles a day with full pack ; they were masters of the surprise, they were able to lead army patrols on their first sorties into enemy territory ; they planned ambushes ; they provided guides and interpreters"⁷.

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4. *The Assam Rifles in Peace and War* by Sir Robert Reid, KCSI, KCIE.
 5. *History of the Second World War : The War against Japan, Vol III* by Maj Gen Kirby and others.
 6. *Ibid.*
 7. *Eastern Epic* by Compton Mackenzie.

Apart from the above mentioned operational roles, the Force provided a trained nucleus of 500 JCOs, NCOs and men to raise the newly formed Assam Regiment. It assisted in the evacuation of Burma refugees. It also furnished detachments to protect the observer posts stationed far out in the forward areas to cover the northern air fields, in which position they were completely cut off and supplied entirely by air.

Such has always been the employment and deployment in the past. *The Force was used as complimentary to and not supplementary to the Army* with mutual benefit to both. But not now. Without changing its basic structure (arms, equipment, organisation, recruitment, training) its battalions are used as mere additions to infantry battalions in brigades, a task for which they are eminently unsuited. Besides, although they carry out the tasks given by the Army and in the way the Army wants the tasks to be carried out, they are not "Under Command" but under "operational control" (whatever that undefined term means). Thus, the Army itself breaks its own fundamental principle that administration cannot be divorced from operations. Here it would be worth while to pause and ponder over the words of Mr. N.K. Rustomji, ICS, who was the first Indian to hold the post of Adviser to the Governor of Assam for Tribal Areas and who, in his 10 years of service in this appointment, came to know the Force and its problems intimately.

"It is important, however, to bear in mind the lessons of history, especially in relation to the Second World War. The distinction which the Force then achieved was in no small measure due to the insight of Military Commanders, who did not regard its battalions as a mere numerical accretion to the strength of the regular Army, but recognised its special traditions rooted in deep local knowledge of the terrain and population of the Frontier. They accordingly deployed its detachments under Army Command in the areas and in the manner in which they were best fitted to operate"⁸.

It is a pity that neither the Army which uses the Force for its own need, nor the Ministry of Home which is ultimately responsible for it, has studied and analysed this problem : Diarchy and Faulty Employment. It is also unfortunate that Generals of to-day had no opportunity to serve in the Force in their younger days and get practical knowledge of its working, because the Force was a preserve of British officers prior to Independence. Equally unfortunate it is,

8. Report on the Administration of the Assam Rifles 1958-59. Foreword by Shri N. K. Rustomji, ICS, Adviser to the Governor of Assam.

that the Force has gone under Ministry of Home since 1965. Ministry of Defence would have been able to better appreciate the problems of this premier paramilitary force as did the Ministry of External Affairs during the long period it looked after the interests of this Force both prior to Independence and after Independence.

And after the World War II, how did the Force operate? It reverted to its traditional role. As Mr. K.L. Mehta, ICS who was the second Indian to hold the post of Adviser to the Governor of Assam for Tribal Areas puts it :

"It has been fully realised that the Assam Rifles is designed and fashioned for specific tasks Whereas it is but natural, even essential, to carry out necessary reforms and changes in its organisation structure There is no attempt to imitate the ways of the Army automatically. It is essential that this fine Force should be helped to develop along the lines of its own genius The important fact that the Assam Rifles is a Civil Force and functions as an integral part of Civil Administration, has been fully realised the men of the Assam Rifles have assisted the Agency Administration in several of the development activities, such as the building of tracks and roads, growing of vegetables, the enumeration of population and even the spreading of literacy amongst the people and all those who are privileged to have a hand in the shaping of their future development, will remember that their strength lies in the maintenance of their own special traditions, their own specialise way of training and will ensure that these and other essentials are not forgotten"⁹.

By all means make use of the Force but why misuse it ?

SUGGESTED SOLUTIONS

The problem has many solutions but before suggesting them two things must be accepted as axioms : Men are more important than money; economy at the expense of efficiency is not economy.

To arrive at a correct solution it is necessary to examine the role of the Force. Dr. Verrier Elvin put it very succinctly when he described it thus :

"The Custodians of law and order, the pioneers of every advance into the interior, the guardians of our borders, and above all, the friends of the hill people"¹⁰.

9. Report on the Administration of the Assam Rifles 1957-58. Foreword by Shri K. L. Mehta, ICS, Adviser to the Governor of Assam.
10. A Philosophy for NEFA by Dr Verrier Elwin.

The role as defined officially is :

- (a) Security of the North Eastern States on the International Border.
- (b) Maintenance of law and order in the tribal areas of Arunachal Pradesh, Nagaland, Mizoram, Manipur and Tripura.
- (c) Internal security of other areas, only when local police are unable to cope with the situation.
- (d) Counter-Insurgency operations in Nagaland, Manipur and Mizoram.

The official role, except sub-paragraph (d) which was inserted at a later date when insurgencies broke out in the North Eastern States, was defined by a high powered committee known as the North and North Eastern Border Defence Committee which was set up by the Government of India in 1950. It is commonly known as the Himmat Singhji's Committee as it was presided over by the then Deputy Defence Minister, Maj Gen Himmat Singhji. Its members were the Chief of the General Staff, a Joint Secretary from the Ministry of External Affairs and the Director of Intelligence Bureau.

Broadly speaking the committee recommended that the Assam Rifles battalions which were hitherto organised on platoon basis should be re-organised on Wing and Sub-Wing basis as opposed to infantry battalions which are organised on Company basis. These battalions would have greater man-power than infantry battalions as they had to be deployed over vast and difficult areas, where once inducted, they would stay put for ever. The committee also recommended that only two of the three wings were to be deployed in Sub-Wing strength. A Sub-Wing was the smallest complete sub-unit capable of independent deployment as it had its "in-built" administrative paraphernalia. One would hold a Firm Base, one would carry out vigorous and extensive long range patrolling and the third platoon would train, rest, act as a reserve and rotate with the other platoons of the Sub-Wing. The sections were made up of ten men and there were four sections to a platoon. In a complete platoon, including platoon headquarters, there were about fifty men so that sufficient man-power was always available at isolated Firm Bases. A Sub-Wing had sufficient strength after catering for personnel who were on temporary duty, on "Command", in transit or sick. One Wing was always to be kept at battalion headquarters as a reserve in case of an emergency. This reserve wing was to be rotated once in every two years so that the forward wing could fall

back in reserve for the much needed rest, re-fitting, training and leave. No specialists platoons of mortars, MMG, pioneers and anti-tank, were authorised, as along the borders and in the tribal areas there was no major threat—Tibet was a buffer state, the border with Burma was placid and there was no insurgency in Nagaland, Manipur and Mizoram. The recommendations of the committee were accepted by the Government of India and implemented and this is how the Force functioned till the sudden eruption of various insurgencies. In Nagaland operational control was assumed by the Army in 1955, in Arunachal in 1962 and in Mizoram in 1965. This was inevitable at that time but not now when the situation has been stabilised in all these places and the Army has had enough time to assess the situation, mobilise the resources and move in the quantum of troops it requires.

The Force is not in a position to carry out the role given to it in 1950 because of the changed political and military situation in these areas. At that time there were no insurgencies, Burma was not in turmoil, Tibet was a buffer state, the Border Security Force did not exist and the North Eastern States—Arunachal Pradesh, Mizoram, Nagaland, Tripura—were only districts of Assam/Union Territory and not full-fledged states and hence did not have their own Armed Police Battalions. The role given to the Force is too diverse for the present circumstances. The organisation of the Force is adequate for Internal Security or Counter-Insurgency duties but not to secure the border, especially the border across which a powerful and militant China faces India. If the latter role is to be carried out effectively, then a complete overhaul of the structure of the Force is necessary.

Considering the above, one of the following needs to be done immediately :—

(a) The Force could be temporarily placed "Under Command" of the Army as was done during World War II. The Army then, when exercising authority, will also have to shoulder responsibility. This, it is at present avoiding, on the plea that the Force is only under "operational control" of the Army.

(b) The Force could be removed permanently from the Ministry of Home and placed under the Ministry of Defence. The Force would be a separate entity from the Army and retain its identity. The IGAR with a small HQ would be located in Delhi and act as a liaison officer between Ministry of Defence and Army HQ and also as an adviser to the Chief of the Army Staff on problems peculiar to the Force. He would also be

responsible for what may be termed as domestic administration of the Force. He would have no command responsibilities and only limited administrative functions. His rank could be that of a Major General. HQ IGAR as it now exists would disappear, so would the various Range HQs of the Assam Rifles as they would become redundant. Instead, there would be a team of liaison officers from Eastern Command down to the Corps and Division under whom the Assam Rifles battalions are deployed. There could be a Brigadier in Command HQ, a Colonel in Corps HQ and a Lt Col in those Divisions which have Assam Rifles battalions under them.

(c) The Force—since one of its role is the security of the border—could be amalgamated with BSF or the ITBP. The Force would then lose its identity and will also be lowered in status. From the Cachar Levy of 1835, to the Assam Military Police of 1890, to The East Bengal and Assam Military Police of 1905 and finally the crowning glory as the Assam Rifles of 1918 after taking part in World War I, then back to a Police Force ! Hardly a tribute to a gallant force.

(d) The Force could be concentrated in Arunachal Pradesh withdrawing it from other North Eastern States who now have their own Armed Police Battalions such as Nagaland Armed Police, Manipur Rifles etc. and who hence should not require the Assam Rifles for Internal Security duties. Arunachal is a huge area of about 30,000 square miles of rugged and wild country with poor communications. This State is just being "opened up" and its people are simple and unsophisticated. The Assam Rifles would fit in very well here as a sort of gendarmerie. As Dr. Verrier Elwin says :

"In NEFA we are fortunate in having the Assam Rifles, an ideal force,.....their approach and conduct is in refreshing contrast to that of the forces of law and order in other parts of tribal India,.....a tradition of highest consideration for the tribal people has been established by the Assam Rifles.....May they long continue to be the upholder of law in the NEFA mountains" ¹¹

11. Ibid.

- * It is worth noting the difference in pay between a BSF Constable and a Rifleman of the Assam Rifles, both serving in Mizoram. Where the former gets a total emolument of Rs. 511.65 P (less Rs. 18.00 deducted for rations), the latter gets a total of Rs. 309.00. The difference is colossal, i. e. Rs. 184.65 P.

Vide Chapter XVII, para 2 of the Assam Rifles Manual, certain ration concessions—'A' Class, 'B' Class rations and Extra Half Ration on payment—were given to JCOs and men. These too have been withdrawn since 1971. It seems that when other paramilitary forces get additional benefits, the Assam Rifles personnel lose their benefits.

If this happens the Force comes under the Government of Arunachal Pradesh, at least 25% of recruitment should be from the tribals—Mompas, Dafflas, Mishmis, Akas, Wonchos etc. This would open up employment opportunities for the locals and later on, the percentage could be raised to 50%.

(e) The Force could be merged with the Army. The Gorkhas who form the vast majority would form additional battalions of various Gorkha Rifles. The Garhwalis and the Kumaonis who come next, could go to their respective regiments. A lot of pruning, mostly on account of age would of course be necessary before the Assam Rifles personnel are absorbed in the Army. The Army would benefit by having trained, disciplined and tough personnel for about fourteen infantry battalions, or in other words, infantry elements for a division plus. The technical personnel of the Force, signallers, mostly South Indians, would fit in very well in the Corps of Signals. The Force would lose its identity but most of its men would be well rehabilitated in the Army and many personnel of the Force seem to desire this.

(f) The ITBP could be merged with the Assam Rifles as the former is a much smaller force and of very recent origin. At present both these forces are deployed on different sectors of Indo-Tibetan Border. The combined force could be given an appropriate name. The long and vulnerable border of India will then be guarded by two major forces : BSF on Pakistan and Bangladesh border; this new force on Tibet and Burma border.

(g) Disband the Force before it disintegrates.*

An aspect on which a passing reference may be made is regarding the name of the Force. The present name is a misnomer. About 10 years ago an angry M.L.A. from Assam wanted to know :

(a) How many Assamese are serving in the Assam Rifles ?

(b) How many battalions of the Assam Rifles are stationed in Assam ?

The answer he got was startling. There were only about 5% Assamese in the Assam Rifles and not a single battalion of the Assam Rifles was stationed in Assam. The name of the Force needs changing and there are no financial implications for the proposal to get bogged down ! Appropriate names would be : North Eastern Frontier Rifles,

North Eastern Frontier Force, North Eastern Border Guards, North Eastern Rangers, North Eastern Scouts and Guides.

These are some of the suggested solutions. What the eventual decision will be, is anyone's guess. But whatever the future holds in store for this fine but neglected Force, it is hoped that the Force will live up to the sentiments expressed by Col L.W. Shakespeer, CB, CIE, who writing about it in its history said :

"Assam Rifles will ever be ready when wanted and will ever maintain their traditions of faithful service, progress and efficiency"¹².

12. A History of the Assam Rifles by Col L.W. Shakespeer, CB, CIE.

Futuristic Trends of Artillery in Mechanised Warfare

LIEUT COLONEL KS SETHI

"Infantry, as well as armoured troops, whether attacking or defending, need the protection of the artillery. Without it they may occasionally win successes, but are liable to severe losses and defeat in a great battle against a foe equipped with good artillery".

—LANZA

INTRODUCTION

Victory if it emerges will depend on the ability to inflict losses—a function of fire power than it will on the capacity to absorb them—a function of mass. Command realisation that successful operations are dependent on effective and high concentration of fire power at the point of decision, is now a fact in most tactical conceptualization. In fact fire power can be defined as the combat multiplier.

The role of artillery has been to support combat arms by direct, indirect and long range fire against point targets and by area fire for effect against enemy concentrations, logistics and rear areas. Artillery establishes fire supremacy in the battle area by destroying or neutralizing the enemy's ground and air weapons, by causing casualties and ultimately breaking his will to fight. The modern battlefield environment is now characterised by the high mobility of armoured targets and improved protection enjoyed by all combat troops and supporting forces. Though there is little change in the role of artillery, but in the scenario of the mechanised warfare, artillery for maximum effect during mobile operations must also be able to react quickly and surprise the enemy with accurate first salvo capability and cost effective fire in as high a concentration as possible.

In this paper I shall discuss the future role of artillery in mechanised warfare with special reference to optimisation of effect of artillery fire. I shall present the paper in three parts as follows :—

- (a) Field branch.
- (b) Air defence branch.

(c) Counter bombardment and target acquisition branch.

FIELD BRANCH

FIELD branch of artillery should be designed to further tactical operations of the commander. This is made possible by providing timely, accurate and effective fire support in a concentration which is compatible with the relative force levels. Technical procedures must aim at reducing reaction time from demand to 'on target' fire support. The designing of equipment and organisation must ensure that maximum fire support is available at short notice to fight critical actions. Further the ammunition must have powerful terminal effect to cause damage and caution on the adversary. Field branch will be discussed under the following heads :—

(a) *First Salvo Capability.* In mechanised warfare, it is imperative to acquire a first salvo capability. First round accuracy, frequently eliminating the need for adjusting rounds, saves ammunition and achieves tactical surprise. Out dated, orthodox and time consuming procedures of adjustment of fire not only train and condition the enemy but also give him adequate time to take evasive actions. Enough is being done to streamline the procedures and to eradicate weaknesses in technical procedures, with a view to attain higher capability of neutralization of the target rather than the ground. One of the latest innovations in this regard is the introduction of 'Master Gunner'; a class room trainer with a new approach to train artillery observers. This system relies on computer generated imagery to superimpose shell bursts and enemy activity symbology on to a conventionally projected view of the battlefield. The types moving targets simulated by Master Gunner are battle tanks and armoured personnel carriers. The instructor can manoeuvre each target independently or control them in groups. This aid is a definite improvement on the use of miniature ranges and enhances the realism which was significantly lacking. Technological advancement in equipment has made it possible to cut down response time. In other armies of the world, computerisation of data and inclusion of Fire Control Equipment have further reduced the probability factor of human error and have largely eliminated the variables of prediction of fire like the inaccuracies in survey of gun positions and targets, meteorology, calibration of gun, variations in charge temperature and charge weight. Some of the artillery compiling systems which have been produced include FADAC (USA), Odin (Norway), Falke (FRG) and FACE (Field Artillery Computer Equipment) (UK). These systems basically concentrated on solving the technical problems at battery level. However, future development will include a new generation of fire control computers to do all that FACE does but with the necessary input/output facilities for integration into the overall command and control system. This integrated system will

dramatically improve the effectiveness of weapons by solving technical gunnery problems quickly and accurately. Further the probable high intensity of a general war has given rise to the requirement to provide automatic data processing at different levels of artillery command. Artillery staff will need to have the means of receiving and collecting target, tactical and logistic data which must be rapidly processed so that commanders can take decisions without delay. TACTICAL FIRE of which BLC (Battery level computer) will be an integral part is being adopted by USA and equivalent system in the UK will be BATES (Battlefield Artillery Target Engagement System) which could possibly capitalise on the experience gained to take the concept stage further. In our own artillery, we have improved our capability by introducing sophisticated equipment and with forethought and innovation we should be able to acquire matching capability of responsiveness with the other manoeuvring elements.

(b) *Build-up of Artillery at the Point of Decision.* Equally important is to ensure adequate quantum of artillery support for engagements at points of contact. Since the enhanced mobility of targets reduces the engagement time, conventional battle drills to ensure build-up of artillery to support the actions of mechanised forces will not meet the requirement. Despite a deliberate appraisal of the enemy pattern of operations by the commander, it may not be possible to evaluate exact points of anticipated engagements because the enemy may react differently. Hence there is a requirement of long range guns which could cover wider zones of battle engagements. Long range guns will also reduce the frequency of deployments and hence would be comparatively less vulnerable to enemy air. Therefore, there is a case to have guns of the calibre of 155-mm as Field Guns and of 185-mm calibre and above for medium guns.

(c) *Terminal Effect.* Modern battlefield is characterised by targets which enjoy improved protection. The ammunition currently in service for field guns falls short of the required destruction of target. Hence, the terminal effect of the ammunition should be enhanced to either ensure destruction of the target or to damage it adequately to disable the same. The contention that the terminal safety of the ammunition must be so small that it ensures intimate fire support when the troops close in—at the cost of reducing the effect on target, is misconceived. Infact the first priority must go to the achievement of required degree of kill probability of the target and thus the necessity of a heavier shell. Consequently, a heavier shell will need to have larger safety distances. During the conflict with Pakistan in 1971 and the Yom Kippur War, experience shows that there were very few examples of hand-to-hand fighting. In any case the safety distances laid down could be reduced in war depending upon the mutual confidence achieved between the gunners and the supported arm. Further, it may be better to have a few minor casualties by fire of own guns than to get the

troops butchered by the fire of the enemy—a matter of command decision though.

(d) *Decision Making.* To capitalise on the dramatic improvement in response time of the weapons, a similar improvement is desirable in the decision making process. It is generally acknowledged that the number of artillery targets to be engaged in a general war situation will be far greater than the number of fire units available. Therefore, priorities have to be established and targets engaged in rapid succession using all artillery within range to create the required effect. In order to do this efficiently the old artillery boards, proformas, and china graph pencils must be replaced by data processing, facilities linking artillery batteries, FOOs, target locating devices and artillery staff at various formation levels.

AIR DEFENCE BRANCH

Despite the ever increasing use of surface-to-surface missiles in land battles and the continuous improvement of land based weapons (such as increased fire power of guns), aircraft will continue to play a significant role in land warfare by virtue of its operational flexibility and its ability to carry a variety of armament to be used for a wide range of missions. It is therefore, obvious that air threat will continue to be a problem for ground forces.

Air Defence Artillery requires a highly efficient system to be able to carry out its task of providing air defence to combat forces in the field. The air defence weapon systems must possess a degree of mobility which is atleast equal to mobility of the supported force and must be flexible to provide adequate air cover in any situation.

Existing air defence systems for providing the necessary cover for a division against low level threats, is limited. Surface-to-air missiles by themselves have only a limited capability against this type of threat, while rapid firing small calibre air defence guns are handicapped by the short effective range (1500—2000 m).

A single type of weapon cannot effectively provide air defence against all types of air attacks. This necessitates development of complementary weapons. The Egyptian air defence network was composed of a mix of guns and missiles system. The new Soviet SA-6 missile proved to be very effective, being able to engage targets either by radar or optically, and was able to operate in an electronic counter-measures environment. The Soviet ZSU-23 system also performed very well. However, the Egyptian air defence did not move along with the manoeuvre units and as the ground forces stripped the air defence cover, they were subjected to heavy air attack and

further progress stopped. In keeping with its role and latest tactical doctrines, most modern armies are using both missiles and radar controlled (small calibre with high rate of fire) guns for defence against low level air attacks. Some of the correct missiles and guns in Service with the modern armies are as follows :—

(a) *Missiles*

(i) *Red Eye* (US Army). An all arm air defence guided weapon. Man portable, shoulder fired, supersonic, low altitude air defence missile; can engage fixed wing aircraft and helicopters upto 3000 feet height. American Division has—15 Red Eye air defence missile sections having a total of 65 teams allotted to infantry/armour/artillery units.

(ii) *Blow Pipe* (UK). Shoulder fired, short range missile. Monocular optical sight, radio command guidance with IR proximity fuze; can engage targets upto a height of 1500 metres. IFF system fully integrated.

(iii) *SA-7* (USSR). Shoulder fired, short range missile akin to the Red Eye. Maximum slant range 4 kms and effective between altitudes of 15 m to 2000 m.

(iv) *SA-6* (USSR). Mobile, low level surface-to-air guided weapon system. Range between 3.5 kms and 24 kms and effective between altitudes of 30 m to 7000 m.

(b) *AD Guns*

(i) *Vulcan*. (US army.) System based on 20-mm six barrel guns to engage low flying aircraft. Rate of fire 3000 rpm. Mounted on self propelled vehicle and employed in combat zone for the protection of Vulnerable Areas and Points. American Air Defence Battalion organic to Division is equipped with 24 Vulcan guns.

(ii) *Schilka* (USSR). System based on 23-mm four barrelled automatic gun, fire control radar and a computer to engage low level aircraft. Rate of fire 3400 rpm. Mounted on self propelled chassis of PT 76 tank.

Despite a variety of effective AD gun and missile systems in service in many countries, the threat posed by hostile aircraft to leading mobile combat groups in the modern battlefield has not been fully catered for. The answer lies in shoulder fired missiles of Red Eye, Blow Pipe or SAM-7 family. These missiles are fairly accurate and can easily be carried along by the troops in combat zone. These are particularly suitable for providing air defence to combat group or team which may be assigned a special mission task or other tasks for which they have to operate outside the AD coverage provided by

other weapons. In sum, air defence of the leading combat troops in a division should comprise of the following :—

- (a) Very low altitude all weather missile system.
- (b) Low altitude all weather gun system for defence of vulnerable points.
- (c) A new portable system, like the Red Eye family, for defence of leading combat teams.

USA, Germany and France have gone in for Roland Air Defence System. Roland is a compact and highly mobile weapon system for the defence of both fixed installations and troops, against low level air attacks. Roland principal role is the defence of mobile units, even when on the move in the combat zone.

COUNTER BOMBARDMENT AND TARGET ACQUISITION BRANCH

It should be an endeavour of every commander to gain ascendancy in force levels over his adversary before the commencement of hostilities. However, there is a limit to which it can be achieved. An alternative method then is to negate the fire power of the enemy first by detecting, identifying and locating the hostile targets and then to destroy the same by bringing down highly concentrated fire. By and large commanders have not been much interested, except in extreme stress or on quite a low key retrospect, in the institutionalization of counter bombardment and target acquisition (CB and TA). This is probably because of lack of appreciation by commanders of the effectiveness of locating devices and partly because of meagre resources normally allocated for CB. Perhaps the example that best illustrates this lack of appreciation for CB is a casual allotment of two to three fire units (out of a total of 30 odd fire units) at priority call to DCBO during fire planning in support of a brigade attack and hope that all hostile guns and mortars will be neutralized.

There is a requirement to adopt a fresh approach with a view to utilize the CB and TA resources effectively. The tendency to employ CB resources in orthodox and machine like process must be avoided and its utilization made less mechanical and more flexible. It is desirable to carry out a realistic appraisal of the enemy pattern of operations and assess as to where he is most vulnerable and then to hit him with a high concentration of fire power like a boxer aiming at the chin or solar plexus to knock out his opponent. The troops in contact are adequately protected; however the targets in depth areas are generally complacent about their security, are less protected, and

hence are more vulnerable. Such targets normally include concentration areas, enemy's headquarters communication centres, administrative echelons, move of resources and hostile and potentially hostile guns and mortars. It is these targets on which we need to concentrate our attention and reduce enemy's operational capability. In the context of mobile warfare, such targets though lucrative, will be of fleeting nature. Current surveillance equipment falls short of the requirement of location of hostile guns and for battle-field surveillance in precision and reaction time. Modern advancement in technology should be geared to improve upon acquisition of targets and link these with the guns at priority call to CB to make the whole system more responsive to take on fleeting targets. One such example is the enemy artillery locating radar AN/TPQ-37 introduced in service in USA. This employs a principle of three dimensional vigil by electronically scanning the horizon with a pencil shaped beam moving so fast that it forms a sensitive barrier. It can pin-point enemy artillery gun position with great speed, sometimes even before the first incoming shell hits the ground. It can handle a number of targets simultaneously, is mobile and can be deployed quickly.

There is a requirement to improve range and quality of battle-field surveillance with the help of electronic and optical devices. Use of drones—a radio controlled pilotless aircraft designed for identification and location of targets is one step towards the enhancement of this capability. It would have a radius of action of approximately 50 kms and carry a photographic sensor system whereby targets would be capable of being located to an accuracy of 25 mills. Other surveillance equipment includes a surveillance Radar Section (Radar AN/TPS 25A with a range of 18000 m) at Division level and Ground Surveillance Section (Radar AN/PPS-5 with a range of 10,000 m. Besides, Aerial Surveillance, with the help of helicopters with increased optical range at brigade and division level, will pick up moving targets like movement of reserve and administrative echelon from one battle zone to another and within a zone.

There is a general consensus on the opinion that TA and CB will be ineffective in the mechanised warfare due to the fluid nature of battle. I have a differing view. In fact it may be easy to pick up moving to argets and hostile guns and mortars due to large movement of forces. Besides the extent of fluidity of operations has to be viewed in the context of the likely nature of terrain on which the mechanised forces are to operate. Therefore, the chances are that the enemy will expose more lucrative targets than expected. Of course, targets till expose themselves for a very short time. However, once the targets

have been located and the fire brought on them in the shortest possible time, the effect achieved will be out of proportion to the effort and this will lead to reduction of operational capability of the enemy.

CONCLUSION

Artillery, to maximise the effect of mechanised operation, must be geared to make it a useful partner to other manoeuvre elements, armour and infantry. It must be equipped with tracked long range guns to be able to cover wider areas of operations to ensure high concentration of fire with latest computerised fire control system to improve its responsiveness with first salvo capability. To counter a variety of air attacks—air defence is based on a mix of gun and missile with shoulder fired missiles to give much needed air defence at combat group and team level. A realistic appraisal of CB and TA with a view to enhancing its capability to engage fleeting targets with impunity should be made and a new family of battle field surveillance agencies and gun and mortar locating radars introduced in service. There is a need to re-assess the weightage given to CB and TA to inflict casualties on enemy with results out of proportion. Further, tendency of taking shelter behind conventional doctrines and rigid mathematical golden rules must be avoided and employment of artillery made more flexible.

Modernisation, Logistics and Indigenisation

LIEUT COLONEL S MOHINDRA, PSC

MODERNISATION of a country's defence potential is a dynamic process. The import of new equipment, maintenance systems and new ideas have far reaching effects on the country's industry, her war potential, strategic reserves and the fundamental concept of combat logistics. These ramifications extend beyond the borders as each acquisition of military hardware is carefully monitored and immediately matched by an equally sophisticated military deterrent by the potential enemy.

Red China's recent decision to modernise her armed forces has evoked widespread interest in not only the major armament producing countries of the West, but also her immediate neighbours. It is obvious that the reactions of the West and her neighbours vary widely. China is negotiating for 50 Roll Royce engines and for facilities to manufacture them under licence. In addition she has asked for Cyber 172 computers, Messerschmidt helicopters, underwater listening devices, Crotale anti-aircraft missiles, HOT and Milan anti-tank missiles and Harrier STOL aircraft.

While the acquisition of military equipment enhances the strike capability of the Services, military thinkers are unanimous in the view that the basic problem in every country is how to ensure the constant combat readiness of the armed forces. It will be recalled that General Charles de Gaulle in his Book "Army of the Future" written prior to the Second World War, posed this question : "Does she (France) seem capable of getting the best out of her war machine at a moments notice ? Can she strike in real earnest from the very outset ? Twenty centuries answer, No". It was France's greatest tragedy that this very book, which was ignored at home, was picked up, carefully studied and applied by German General Staff to humiliate the French Army in the Second World War.

The compulsions of national strategy will reveal that the question posed above is eternal in character and the same doubts are more relevant today than they were half a century ago. The long war concept of yester-years has been replaced by the short war concept

of today. Operational readiness has to be planned and oriented to a quick and sharp short war with years of intervening years of preparation. Whether a force is required to go on the offensive at a moments notice or defend the country against a surprise attack, functional service-ability and operational readiness of the war machine is of prime importance. It is in this general process of modernisation of the armed forces that logistics, and indigenisation both play vital roles in ensuring the strategic sanctity of the battle front. Though this has all along been accepted, the operational necessity of these aspects were particularly highlighted during Yom Kippur War in 1973. General Moshe Dayan in his Book "Story of My Life"—writes of how he came under criticism for not pursuing with vigour, the Israeli plan for an indigenous rifle. He admits that Israeli's war industry was not prepared for a possible war during that period and that Israel's equipment production department should have worked day and night (before the Yom Kippur War) to produce the 'Galil' rifle for the Infantry. In the years that followed, Israel quickly selected, approved and produced the "Galil", which today, is accepted as the best combat rifle in the world and a leader in the export market. The importance of logistics is evident from the low state of operational preparedness of the Barlev Line before the War. The importance of administrative vigil and logistical preparedness in war is an aspect which assumes even greater importance in a short and intense war as complacency in this field can affect the course of a campaign.

It is seen that while the combat arms and Army field formations can readily adapt themselves to changing war scenarios, it is vital that a country's Industry and the rear services are so organized that they allow the military Chiefs the necessary flexibility to achieve a military decision.

War in our context is one brief period of numerous intense combat engagements with both adversaries locked in battle till the final end or ceasefire. The ceasefire is followed by a span of relative peace, neither hot nor cold, when both sides re-arm for the next round. This period will, if we take the Middle East or our own sub-continent as precedents, extend from 7-10 years. The combat forces will undoubtedly have the requisite administrative backing but will largely have to depend upon what they have at their disposal prior to hostilities. Some military strategists and civilian advisors in the Ministry doubt the validity of this concept which suggests that the next round is merely the postponement of hostilities. This point is reiterated by the pace of military build up as forced by

international political compulsions. Pakistan today boasts of parity in armour whereas in 1971, it was not so. In the early seventies, in the air, we had a (3 : 1) advantage in supersonic fighter squadrons, whereas today the margin is 3 : 2. This numerical advantage has been offset by Pakistan by having a quality edge over our aging air fleet. On the sea, during Bangla Desh War, we had eight anti-ship missile launch platforms against none with Pakistan, whereas, today, the latter has already 7 and hopes to achieve a ratio of 25 : 15 by the early 80's. In addition to this it is necessary to mention that in 1971 Pakistan could only obtain 10 modern jet fighters from its allies to bolster its strength whereas today she could obtain 5 times or more from Libya alone (these figures have been obtained from the Times of India June 26/27, 1978). China on the other hand has land and air forces almost 4 times as large as ours and these forces are steadily increasing. In addition she has undertaken a massive rail and road construction programme in the West and South-West of the Country which gives her the enhanced capability to deploy 36 additional divisions against India within 6 months. This additional troop strength is also physically available to her as the Sino-US rapprochement has freed over 30 divisions for deployment. Thus other sectors along the Sino-Soviet border will not be affected. It is obvious that in such scenario logistics and indigenisation will play an ever increasing role in the year to come. Modernisation of the armed forces must, therefore, become a continuous process. Modernisation of the military machine is synonymous with the State of readiness of the armed forces. An out-dated military organisation cannot be expected to be responsive in present times.

THE CHANGING FACE OF LOGISTICS

Post war discussions of logistics were confined to the American War experience in Korea and Vietnam and were perforce restricted by the emphasis placed by Mr Robert MacNamara on economy and modern management techniques. Following the example of the Pentagon, logisticians rarely went further then to implement efforts to cut the tail in favour of the teeth. In certain cases intermediate echelons were reduced in size if not eliminated altogether. There is no gain saying the fact that this approach is a vital pre-requisite because all such proposals must operate within the constraints of finance and other parameters as may be imposed by the Government from time to time. In our case the maximum size of the Forces has been restricted. Hence every defence proposal, has to review all aspects of the problem, viz its financial impact and the possibility of corresponding reductions in other spheres.

During, World War II, the Americans had plenty of everything. The result was the corresponding growth of Ordnance and supply organisations to handle the seemingly unlimited equipment and stores. The rear areas of the field Army had huge depots and storage areas where all types of maintenance operations were performed including rebuild and industrial assembly. Even technical services have their own support systems, and quite naturally, they had no ability to render to the combat consumer one-point-service.

The Korean and Vietnam War years were characterized by the fact that the entire national (American) industrial base had not been mobilized for the war effect. There were fewer resources at hand and consequently more stringent measures were enforced to ensure their optimum utilization. The era of unlimited supplies of World War II was a thing of the past. On the otherhand the Vietnam War, particularly, was characterized by the substantial contribution of science and technology on the battle field. The equipment was becoming more complex and destructive with each new innovation. Lethality of the battle had increased manifold and emphasis was on first round kills, night navigation and night fighting capability, flying platforms, higher performance of weapons and equipment and more demands for security. This introduced the better trained technician as a vital element of the combat force. There was a realization that equipment management and its optimum utilization was the key to success. The fighting soldier also had a role to play in the maintenance of his equipment. The man-machine team had become a vital battle-winning factor of the combat zone.

Yet, the deeper ramifications of these changes was not to play an important role in American logistical planning. The reason was not due to ignorance or preoccupation with a losing military situation on the ground battle in Vietnam but the fact that the full effects of these changes are only felt by Commanders when there is parity or near parity in the technological facilities and resources available to the field forces. Under these conditions, the superiority of logistical services pays dividends. Both in Korea and in Vietnam the US Forces were technologically decades ahead of their adversaries. Hence the liability or drag imposed by outdated services was not felt. This scenarios is not applicable to the battle fields of the Middle East or the Indian sub-continent where the acquisition of a new sophisticated weapon is immediately matched by similar acquisition by the other side. In such a situation, generous dividends can be

reaped by having superior logistical organisations functioning with streamlined methods and systems.

The above statement can be best appreciated when we analyse the changes made in the US Army in recent years. In February 1969 the US Deputy Secretary of Defence established the Joint Logistics Review Board to review the logistics support provided to the combat forces during the Vietnam War. The J.L.R.B produced several significant recommendations to improve the overall logistics support. Their recommendations emphasised the need to exploit, to the maximum, the American transportation capability, particularly its sealift and airlift resources. Further it emphasised the need to test boldly engineered logistic systems exploiting the advantages inherent in well balanced transportation modes since, in the foreseeable future, the bulk of the US Army would be deployed in overseas theatres. Without dilating on the other aspects of the JLRB report, which are essentially relevant to the US, it is necessary to mention that a pragmatic appreciation of the future requirements of logistics in War was only made possible after the 1973 Yom Kippur War which provided a battle field where the adversaries were equally matched and hence provided military analysts with much needed insights into the likely problems of the future. Briefly they are as follows :—

- (a) Increased lethality of the battle field.
- (b) Repair and maintenance in combat.
- (c) Development of forward maintenance as a concept.
- (d) Feasibility of "logistic arteries".

INCREASED LETHALITY OF THE BATTLE-FIELD

Sophistication and advancement in weaponry have ramifications much wider in scope and magnitude than most professional soldiers are willing to accept. With technological advancements the rate of battle field attrition increases manifold and imposes a higher maintenance responsibility on the logistics staff. The Israelis were, in the Yom Kippur War, rudely surprised to learn that the face of war had dramatically changed. Moshye Dayan in his Book "Story of My Life" admits that even those who had carefully followed scientific advancements in weapon systems could not conceive that rate of destruction such weapon system would bring about. The increase

in rate of destruction is directly proportional to the accuracy of the equipment and can be seen from the table below :—

DEVELOPMENT IN ACCURACY

<i>Increase in destruction capability in Operations</i>			
<i>Action Probabilities</i>	<i>World War II</i>	<i>Korea</i>	<i>Middle East 1973</i>
Chances of a tank gun or missiles hitting an enemy tank with its first shot	5%	33-1/3%	70%

From the above it is obvious that if holdings of spares and estimates of personnel for repair echelons are based on World War II statistics, they would be unable to cope with present day demands of the battle field. The store-holding echelons would find themselves hopelessly inadequate as greater repairs and replacement tasks would be involved within a shorter period of time. It would result in greater non-availability of spares and an increase in the routine replies to consumers confirming the stock-out of vital components. This situation is likely to effect the morale of front line units.

A short war must necessarily be intense. More weapons are deployed and more fire is brought to bear across shorter fronts over the brief period of time. More emphasis is therefore, placed on guns and armour than even before. In World War II the French had covered their main defence line, the Maginot Line, with 2000 tanks whereas the German had attacked with 3000 tanks. During the North African campaign Field Marshal Montgomery at El Alamein had 1030 tanks and Rommel about 610 tanks. On the Indian sub-continent and in the Middle East the weight of armour thrown into each successive conflict has always increased. In the Yom Kippur War the Arabs had about 5500 tanks; the Egyptians employed approximately 2200 tanks and the Syrians about the strength the Germans employed against France. From all current indications, it is reasonable to assume that the trend is unlikely to change. In fact the growing emphasis on arms sales in the World will show bigger increases of tanks and APCs in the orbats on both sides of a border. It is, therefore, all the more important that all available resources must be marshalled so as to repair and maintain the equipment so that their full impact is brought to bear on the enemy.

It should also be accepted that the consumption of ammunition on the field of battle is directly proportional to the lethality desired. The Israelis planned well and in most sectors consumed ammunition as per their expectations. Nonetheless, it is important to note that they had used more than 50% of their national ammunition stock in 18 days. This may will be a pointer to us when we know that in our case our past experience may not be the pattern for future conflicts. It therefore follows that individual scales and formation reserves should be re-designed with an eye on the next round. Unfortunately in all peace time theoretical deliberations the part played by the factors of economy and financial constraints supercedes the fears expressed by the administrative staff.

This rise in the lethality index of the battlefield has also resulted in a high wastage rates for combat vehicles. Both the Israelis and the Arabs (Egypt and Syria) lost from 25% into 33% of their inventory of tanks and APCs during the 18 day War. Such wastage figures will also apply to major assemblies and vital spares for all equipment.

REPAIR AND MAINTENANCE IN COMBAT

In view of the built-in element of surprise in favour of the attacker, most countries maintain large standing armies. The economic strain imposed by such large sophisticated outfits imposes on the armed forces financial constraints and quantitative limits. Thus if such forces are to have the perceived deterrent value in the concept of a short war, the forces should grow qualitatively by the introduction of more sophistication. This factor is another new challenging dimension for the logisticians who have constantly assimilated new equipment and train their personnel.

Sophistication and the qualitative growth of equipment imposes greater strain on the staff responsible for repair and maintenance. In actual combat increased lethality of the battle field compounds the problems of maintenance. Hence to meet the anticipated damage to vehicles guns and radios, the equipment down time should be the very minimum. In the Yom-Kippur War the Israelis maintenance engineers did a remarkable job and in many ways they helped to keep their formations combat worthy on the battle field. Highly qualified technical specialists from their base workshops were inducted into forward contact teams of divisions and they who went forward to carry out damage assessment and maintenance tests. They did it very efficiently using maintenance SOPs and battlefield recovery and cannibalization techniques. Instead of equipment

moving back-wards, their spares and repair personnel moved forward. During those 18 days they turned around more equipment than they owned. The effectiveness of Israeli repair and maintenance SOPs can be judged from this statement from Moshe Dayan's book "Story of my life", where he gives out the problems the General Staff faced when they became aware of their high armour casualties during the Yom Kippur War. "Formally, we had three armoured divisions on the northern front, but in fact they were very much below strength. It was possible that during the night more of our damaged tanks would be repaired". This was the confidence the planners had in their logisticians.

Recent events have more than ever highlighted the need to emphasise the man-machine concept as a war-winning factor. This is important not only during combat but in training and as the routine maintenance activity of a disciplined Unit. We have to modify our thinking and consider the soldier and his equipment as one integrated team on the battle field. Equipment Management, must therefore be equated at par with management and be accepted as an important aspect of leadership. Successful management is the absence of break-downs of equipment and not their efficient repair. One of the accepted ways of achieving this during peace time is to inculcate a sense of belonging to the equipment and associated with it is a sense of pride and responsibility.

EMERGENCE OF FORWARD MAINTENANCE AS A CONCEPT

In the past, rear-ward movement for administrative cover was accepted as the general principle. Equipment generally moved rear-wards to re-arm, refuel and to be repaired. The Yom Kippur has seen a significant, re-orientation in the logistics structure and now the emerging concept is the re-direction of critical supplies and men forward to the material in need of the same. The sharp brief nature of the conflict, the sophistication and lethal configuration of modern weapons have emphasised the following factors :—

- (a) Need to reduce the time that tanks and other vital combat equipment is off the firing line.
- (b) Need to enhance the staying power of equipment and units and formations.

The emerging concept of Forward Maintenance envisages support functions vital to achieve the above mentioned purposes and critical to battle being carried out as far forward as possible. Responses to demands for supplies and spares must be swift and accurate.

The application of this concept for the repair of damaged equipment has already been discussed. Forward Maintenance of ammunition is already a critical requirement in battle and should be carried out as far forward as possible.

FLEXIBILITY OF LOGISTICS ARTERIES

Recent years have witnessed the growth or permanent fortifications almost parallel to sensitive borders. These lines of defence have been constructed at a tremendous cost and have resulted in the development of new tactical and strategical doctrines. With the development of fixed front lines based on permanent fortifications there is a growing feeling at certain directional echelons that there is a need to reduce the administrative backing presently allocated to fighting formations. They are of the conviction that actions will inevitably be fought along those defence lines and penetration will be limited. Moshe Dayan in his book "Story of my life" has pointed out that this is a fallacy of strategic planning and even Israel, in 1973, seemed to have forgotten the lessons the French, so dearly learned on the Maginot Line. He has stressed the fact that both the Barlev Line and the Second Line (this he does not disclose in detail) did not achieve their purpose because the manner in which they were utilised was different from the initial concept, which the Israeli General Staff had planned. He reiterates the point that mobile forces—tanks and artillery—if they are to retain flexibility to continue in the fight after the initial penetration, need "logistic arteries" and these forces cannot and should be tied down to fortified lines and forward outposts. It is only the existence of "Logistic arteries" which can enable mobile forces to meet the changing demands of the tactical and strategical situation. It is the complete absence of rigidity in administrative planning which can enhance the destructive power of the Army and restore to the defender the initiative so vital for the offensive. Curtailment of logistical flexibility will tend to reduce the effectiveness of the combat strike formations.

THE NEW DIMENSION OF INDIGENISATION

Indigenisation should not be viewed as merely a singular R&D effort in association with industry to make the country self reliant. It is to be considered as a national effort working within a tight time schedule with a tangible objectives defined as short term and long term. The short term objectives as they relate to equipment production should be so as to ensure that the military hardware intended for the armed forces appears in the field and is deployed against the enemy

well before the next round. Lead-time in planning will have to cater for the period of indepth training by the users.

Heavy expenditure on R & D is vital but for a developing country the main obstacle is finance. Our defence expenditure being one of the lowest in the World, approx 4 percent of the GNP, there is an urgent case for its increase and also the enhancement of the R & D effort. Hence the main thrust of our effort should be directed towards tangible long term key result areas. The high cost of research can be appreciated from the following statistics :—

COST OF RESEARCH AND DEVELOPMENT

<i>Country</i>	<i>Weapon System</i>	<i>Cost in dollars (Mil)</i>
(a) USA	B1 strategic bomber	2000
(b) UK/France 50% each	Jaguar strike/Jet trainer	380
(c) France	Avion-de Combat Future Strike aircraft	1000
(d) Sweden	Project 80, Fighter JA-37	212
(e) Japan	C1 Transport Aircraft	50
(f) West Germany	Leopard 1, Main Battle tank	25

It is certainly not intended to compare the R & D outlays of the above countries to that of India. But it does focus our attention on the need to have requirement orientated programmes and the desirability to ensure efficiency and the imperative need to cut waste. Equally important is the ability of the organisation to force the evolution of new weapon systems and their futuristic development. This is not only an essential prerequisite to success in combat but would also result in the development of advanced weaponry and it would ultimately be economical also. It is the strategic importance of advanced weapon systems, which by themselves act as deterrents to a possible aggressor and are the invisible pay-offs from such expensive R & D projects. Since the period between two successive conflicts extends approximately from 7 to 10 years indigenous projects should yield tangible results within that period. Resources must, therefore, be so allocated based on well defined priorities.

It is in this situation that the logistician or strategic planner is faced with the dilemma of which project to pursue first? This

difficulty will be evident from this hypothetical problem. A planner has the task of allocation of priorities to develop two defence projects-viz, a new medium bomber and a midget submarine. Financial outlays and time for development are identical viz 1000 crores and time for production 12 years for each. The alternative to this planning production schedule is to reduce the time for one project to 7 years by increasing its financial outlay and thereby increasing the time for the other project to 15 years.

Under normal conditions, it would be prudent to pursue both projects in a manner so that they will be available within the decade. But in a possible short war situation and when there is an arms race going in a neighbouring country it is imperative that the alternative suggested above be carefully weighed so that at least the dividends of one project are available before the next round. This is obviously based on the assumption, as perceived earlier, that a conflict is merely a postponement of hostilities by 7—10 years.

Ideally, of course, the answer would be to increase the financial outlays so as to get both the projects available within 7—10 years, but financial and other constraints on resources have to be reconciled for optimum pay-offs.

By indigenisation, we generally mean the ability to produce the required stores within the country. In a short war concept it has yet another dimension. Ordnance and other Army maintenance echelons in Israel are geared to accept and refurbish captured equipment, particularly tanks. In that country, it is accepted that they have three main sources of supply for tanks, viz outside suppliers (USA), own tanks rehabilitated by Army workshops and repairable Soviet armour captured from the Arabs. This supply concept has ensured a very high equipment availability ratio to their Armed Forces. As regards tanks, in a lighter vein, it can be said that the Russians are considered, by Israel, as the more reliable suppliers, as compared to the Americans. It will be agreed that in any Third World combat zone, even quantities upto 50 tanks, if either rehabilitated or captured and modified and immediately put into action, can make a considerable difference to the military balance in that battle area.

CONCLUSION

In conclusion, it will be seen that the next round will make greater demands on logisticians. The whole structure, the concept of indigenisation and logistics will be tested suddenly and to the last ounce of its combat reserve and creative ingenuity. With the present emphasis to cut the tail in favour of the teeth, the system will have

to function with lesser personnel than were available in World War II, in 1965 or 1971. Thus available personnel will be called upon to be more imaginative and sophisticated in delivering the goods and ensuring the staying power of formations.

Support organisations are tailor made to meet the needs of formations but will have to be *skilfully* engineered to meet the operational demands of each combat force for each mission. The supply, maintenance and ordnance services must orient themselves to dynamic operational scenerios in the field of combat logistics.

A truly responsive system will be characterised by continuous modernisation, efficient logistics system by reduced down-time for equipment, forward maintenance, increased reserves to combat the enhanced lethality of the modern battle fields, automation, and economical and skillful management of the available resources.

Causes of Higher Secondary Students' Preference for Military Career*

R. P. GAUTAM**

A number of studies have been reported on occupational preference (Krishnan, 1956, Sinha and Niwas, 1958, Chatterjee and Mullick, 1961, Joshi, 1963, Kunungo and Panda, 1966, Pestonjee et al 1967). But none of them studies the preference for Military Career except mentioning it as a passing reference (Cook 1962). Sinha (1972) rightly remarks that "One is not infrequently struck by the absence of any work on problems falling within the area of Vocational Choice and Guidance" in Military Psychology. It is in this perspective that a study was undertaken to survey various aspects of vocational choice for Military Career. First report in the series has already been published (GAUTAM, 75).***

SAMPLE

As the Higher Secondary Examination is minimum academic qualification for getting commission in the Indian Armed Forces except for certain Technical Corps, it was decided to conduct this survey on the Higher Secondary (final year) students and their equivalents, that is first year students in Intermediate Colleges. There are only two Higher Secondary Schools in Roorkee, namely St. Gabriel Academy and the Central School. The former is purely a male school and runs only Science Classes and while the latter is co-educational and runs both Science and Arts Classes. All the male students of XI Stb. in both these schools were taken as sample for the present study. But on the day of data collection only 45 male students could be available. The St. Gabriel provided 24 and the Central School 21. This number was considered small and it was decided to increase the same by including Ist Year male students of local Intermediate Colleges. 42 students from the BSM Inter College and 43 students from the Government Inter College were randomly selected.

* This study was conducted in 1975 when the author was posted at Selection Centre North, ROORKEE.

** Senior Scientific Officer (Psychologist), Selection Centre East. ALLAHABAD.

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Table 1

Showing parental education and income.

Institution	Parental education				Parental income			
	Illite- rate/ Primary School	High School/ Inter- mediate	Gradu- ate and above	Total	Below Rs. 500 p.m.	Rs. 500- 1500 p.m.	Above 1500	Total
Central School	—	12	9	21	9	10	2	21
St. Gabriel	—	6	18	24	—	15	9	24
Govt. Inter College	8	13	22	43	16	26	1	43
BSM Inter College	17	18	7	42	30	12	—	42
Total	27	47	56	130	56	62	12	130

METHOD

A proforma named "Career Preference Proforma" (CPP) was developed to record necessary information from the members of the sample. It was divided into two parts. The first part dealt with personal particulars and the second contained questions pertaining to vocational preference and reasons for preferring/not preferring military career.

DATA COLLECTION

Group-testing method was followed to administer the above mentioned proforma on the students of each institution separately. Teacher-in-charge of the class in every institution was requested to remain present in the class throughout the period of testing so that the students would respond to the questions with adequate understanding and alertness.

In the beginning, the investigator read out the whole proforma and then answered the clarifications sought for by a couple of students. Then the students were asked to fill in the proforma with necessary information. There was no time limit. However, all the proforma duly filled in, could be collected back within a period of 45 minutes. Thus full data was collected within four days from all the four institutions by approaching each institution on each consecutive day. The classified data is given under the following heads :—

Table 2

Showing number and percentage of students from each of the institutions giving reasons of their preference/no preference and giving no reason at all.

Institution	No. of students giving no reason of their preference/no preference for military career	No. of students giving reasons of their preference for military career	No. of students giving reasons of their non-preferring military career	Total
Central School N=21	2(9.52%)	17(80.96%)	2(9.52%)	21
St. Gabriel Academy	3(12.50%)	10(41.67%)	11(45.83%)	24
Govt. Inter College	8(18.60%)	27(62.35%)	8(18.60%)	43
BSM Inter College	7(16.66%)	18(40.48%)	17(42.86%)	42
Total	20	72	38	130

Table 3

Showing reasons of preferring military career as stated by students from various institutions.

Ser. No.	Reasons of preferring military career	Schoolwise No. of students				Total N=130
		Central School N=21	St Gabriel Academy N=24	BSM Inter College N=43	Govt. Inter College N=43	
1.	It is a service to nation.	14	5	9	15	43
2.	It keeps one fully busy.	2	—	—	1	3
3.	It is an outdoor job.	2	—	—	—	2
4.	It provides good pay and other facilities.	3	—	1	1	5
5.	It is a respectable job.	2	1	1	4	8
6.	It is an adventurous job.	3	2	—	—	5
7.	It makes life disciplined.	2	—	1	6	9
8.	It promises good prospects.	1	1	—	—	2
9.	It keeps one fit and healthy.	—	1	—	2	3
10.	It enables one to visit different parts of the country.	—	1	—	1	2
11.	It fits in the pattern of interests.	—	3	6	4	13
12.	It has become almost a family tradition.	2	—	—	3	5
Total		31	14	18	37	100

Table 4

Showing reasons of not preferring military career as stated by students from various institutions.

Ser. No.	Reasons of not preferring military career	Schoolwise No. of students giving each reason				Total
		Central School	St. Gabriel Academy	BSM Inter College	Govt. Inter College	
1.	It provides strict atmosphere	—	3	—	—	3
2.	It is full of risks to life.	—	2	—	3	5
3.	It involves killing.	—	2	—	—	2
4.	Transfers are frequent.	—	1	—	—	1
5.	Unable to resign as per one's convenience.	—	1	—	—	1
6.	Life becomes monotonous.	—	1	—	—	1
7.	Postings are far from home.	—	—	1	—	1
8.	Parents discourage.	—	—	1	—	1
9.	Already decided another career.	1	2	3	2	8
10.	Physically handicapped.	1	2	1	—	4
11.	Lack adequate ability.	—	1	—	—	1
12.	Compulsory Maths in NDA Competition.	—	2	—	—	2
13.	Interested in higher studies.	—	—	—	—	1
14.	Not interested.	—	3	15	3	21
15.	Pay is not much attractive.	—	1	—	2	3
Total		2	21	22	10	55

Table 5

Showing reasons of preferring and not-preferring military career in relation to the students' parental education and income.

PART I

Ser. No.	Reasons of preferring military career	Parents' education				Parents' monthly income			Total
		Illiterate/primary classes N=27	High School/Intermediate N=47	Graduate & above N=56	Total 130	Below Rs 500/- p. m. N=56	Rs 500/- to 1500/- p.m. N=64	Above Rs. 1500/- p.m. N=10	
1.	It is a service to nation.	6	19	18	43	16	24	3	43
2.	It keeps one fully busy.	—	2	1	3	2	3	—	3
3.	It is an outdoor job.	—	2	—	2	—	2	—	2
4.	It provides good pay and other facilities.	1	2	2	5	2	3	—	5
5.	It is a respectable job	—	6	2	8	2	5	1	8
6.	It is an adventurous job.	—	2	3	5	—	5	—	5
7.	It makes life disciplined	1	4	4	9	3	5	1	9
8.	It promises good prospects.	1	—	1	2	1	—	1	2
9.	It keeps one fit and healthy.	1	2	—	3	2	1	—	3
10.	It enables one to visit different parts of the country.	—	—	2	2	—	2	—	2
11.	It fits in the pattern of interests.	3	4	6	13	6	6	1	13
12.	It has become almost a family tradition.	1	3	1	5	2	3	—	5
Total		14	46	40	100	34	59	7	100

PART II

Ser. No.	Reasons of not preferring military career	Parents' education				Parents' monthly income			
		Illiterate/ primary clas- ses N=27	High School/ Intermediate N=47	Graduate & above N=56	Total N=130	Below Rs 500/- p.m. N=56	Rs 500/- to 1500/- p.m. N=69	Above Rs 1500/- p.m. N=10	Total N=130
1.	It provides strict atmosphere.	—	—	3	3	—	2	1	3
2.	It is full of risk to life.	1	—	4	5	1	2	2	5
3.	It involves killing.	—	—	2	2	—	1	1	2
4.	Transfers are frequent.	—	—	1	1	—	—	1	1
5.	Unable to resign as per one's convenience.	—	—	1	1	—	1	—	1
6.	Life becomes monotonous.	—	—	1	1	—	—	1	1
7.	Postings are far from home.	1	—	—	1	1	—	—	1
8.	Parents discourage.	1	—	—	1	1	—	—	1
9.	Already decided another career.	1	4	3	8	2	4	2	8
10.	Physically handicapped.	—	2	2	4	2	1	1	4
11.	Lack adequate ability.	—	—	1	1	—	1	—	1
12.	Compulsory Maths in NDA competition.	—	—	2	2	—	2	—	2
13.	Interested in higher studies.	—	—	1	1	—	1	—	1
14.	Not interested.	6	8	7	21	16	4	1	21
15.	Pay is not much attractive.	—	—	3	3	—	2	1	3
Total		10	14	31	55	21	21	8	55

DISCUSSION OF RESULTS

A glance at the table 3 reveals that the largest number of students (18.60%) giving no specific reason of their preferring/not preferring military career comes from the Govt Inter College followed by the BSM Inter College. This shows lack of awareness and specificity of goal on their part. They seem to have made their response of occupational preference almost on hearsay basis without making any serious attempt of going into the details of military career. This as compared to the Central School and the St. Gabriel Academy is understandable in the light of their parental background as table 2 presents that there is no student from these two schools whose parents' education is nil or below High School while there are 8 and 17 students in this bracket from the Govt. Inter College and BSM Inter College respectively. Almost similar is the case with economic status. There is no student in St. Gabriel Academy having his father's income less than Rs. 500/- p.m. while in the above mentioned two Inter Colleges their number in this category is 16 and 30 respectively. Though there are 9 students in this economic bracket from the Central School, yet they seem better aware of military career and more specific about their occupational choice. One of the reasons of this striking finding may be that out of these 9 students 5 students belong to the families of OR's and JCO's. As a result, they have better awareness of military career.

This shows, in nut shell, that the parental background plays an important role in children's general awareness and facilitates their task of occupational choice.

Table 3 also reveals that the largest percentage (45.83) of students not preferring military career comes from the St. Gabriel Academy which is a Convent School while the lowest percentage (9.52) in this category comes from the Central School. This finding clearly shows that a widely held belief that the Convent Schools are greater source of the armed forces, does not hold true any more. This study shows that their place is being taken up by the Central Schools.

Table 4 provides a list of 12 reasons which motivate the students towards military career. These reasons may very well be called occupational values of Higher Secondary students in relation to military career. It is seen that the largest part of the sample perceives the military career as a service to nation and an evidence of patriotism. Though this value receives the largest number of responses among all the values in every institution, yet the Central School provides highest percentage of students sharing it. The St. Gabriel comes last.

Value No. 3 in the same table is shared by Central School students only. Similarly values No. 7 and 11 are more shared by the Govt. Inter College and the BSM Inter College students respectively. When taken on the whole, it is the values Nos. 1, 5, 7 and 11 which attract relatively larger number of responses i.e. 43, 8, 9 and 13 respectively.

Table 5 reveals that there are 15 causes which discourage the students from preferring military as a career for them. Thus, a very broad comparison of table 4 and 5 reveals that the students find negative points (15) more than the positive ones (12) in the military career. Institutionwise, we see that the students of the St. Gabriel Academy are more conscious of negative aspects of military career than those of any other institution. Their positive responses being 14 and the negative ones 21 further confirm the finding that the convent school students are no more so much interested in military career as they might be earlier.

The same trend is seen among the BSM students whose positive response (18) have been exceeded by the negative ones (22). A plausible reason may be found in the fact that they were commerce students and as such would have decided their occupational choice for jobs like banking, accountancy etc. This arguments is confirmed by the finding that 15 responses indicate lack of interest in military career on their part. Once they are not interested, they will tend to perceive its negative aspects more than the positive ones.

Table 5 also reveals that the values No. 2, 9 and 14 are shared relatively by more students. Value No. 2 indicates that the hazardous aspects of the military career is more obvious to the students. Value No. 9 implies that some of the students choose their career before they enter higher secondary school wherein bifurcation of the teaching subjects starts. This is in contrast to a widely held belief that in our society the concept of vocational choice develops relatively at a later stage. Similarly, value No. 14 reveals that a number of students included in this study have not developed interest in military services and hence do not prefer it as a career for them.

Table 6 gives distribution of causes of both choosing and not choosing military career along with the parents' education and income, Both educational and economic status have been divided into three brackets each. Part I of the table reveals that the students whose parents are either illiterate or have obtained education upto primary school level, are relatively least aware of the positive aspects of military career. There are 27 students in this bracket while their

responses are only 14. As compared to this, the response percentage of students whose parents' educational level is High School and Graduation is 46% and 40% respectively. Economically also it is the middle class parents whose children are more aware of military career. For instance their children contribute 92.19% of the total response while those of low and high income group contribute 60.71% and 70.00% respectively. It is the low bracket; that is those having monthly income below Rs. 500/- p.m. wherein the response percentage is 34 while in case of other two brackets, the same is 59% and 70%. Thus it is the category of both educationally and economically middle class parents whose children are more aware of positive aspects of military career than the children of those parents who fall in low and upper brackets of educational attainment and economic status.

If we look at the same part of the table value-wise, we see that value No. 1 is more shared by the children of middle class parents. So is the case with values Nos 5 and 7. It is the value No. 11 only which is, however, more shared by the children of those parents who are educationally graduates but economically fall in the low and middle income groups.

Part II of the same table almost confirms above findings. For instance, the percentage of negative responses is the lowest (29.79%) in case of children whose parents constitute middle class both educationally and economically as compared to other categories where the percentage is 37.04 and 55.36 respectively. It is again seen here that an important cause of not choosing military career is the lack of interest.

CONCLUSION

The higher secondary students perceive more negative attributes than the positive ones in the military career. Institution-wise, Central School students are more motivated towards military career than those of other institutions specially the convent school. In terms of parental background, the students coming from middle class homes are more inclined than those coming from other social strata. Major aspects of motivation for military career are patriotism, social recognition, discipline, interest and family tradition while the the main deterrents are element of risk involved, self-concept, lack of interest and an earlier decision of career.

SUGGESTIONS

Students relatively at an early stage such as VIII Standard should be appraised of various aspects of military career such as procedure of selection qualifications, emoluments and future prospects. Negative aspects as risk to life and hardships of field should also be put forth in correct perspective so that there remains the least scope for any wrong notion or unrealistic expectation.

Various media of communication should be used for this purpose. Lectures by retired military officers or civilian psychologists working at the Services Selection Boards can probably be more effective than any other method. As the vocational interests are not inborn, these can be inculcated by feeding information.

While doing so, more attention should be paid to the Central Schools or other ordinary institutions which provide education to the large population specially the children of middle class people. Convent Schools should no more be considered as the main source of supply to the officer-cadre of the armed forces as per the findings of the present study.

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The Tragedy of Lebanon

DEATH OF A COUNTRY*

(A Review Article)

KG J

JOHAN BULLOCH, correspondent of the Daily Telegraph was for several years a prominent member of the international press corps living in Beirut. This group of more than one hundred correspondents and cameramen attached to news agencies, radio and TV networks, and newspapers covered West Asia, moving to Cairo, Damascus, Baghdad, Teheran and even Tel Aviv reporting wars, coups, and assassinations in this turbulent part of the world. Anytime they returned to Beirut it was like withdrawing to a safe and secure place because though Beirut had its own brand of violence, the foreigners were generally left alone provided they did not interfere in local affairs or indulge in direct abuse of any friendly government. They therefore filed their despatches not from other capitals but from Beirut where there was no censorship in normal times and clearance of films and tapes was easy.

But this was not all. Hints and cues about the developments in any part of the Arab world from Casa Blanca to the Gulf could be easily picked in Beirut. It was a sounding board which not only the states in the region but even other nations used. Politicians banished from countries of the region generally took shelter here and as someone once remarked in an emergency one could gather enough people in Beirut with sufficient experience to form new governments in several Arab countries. Banished political leaders, commercial travellers, businessmen, and undercover agents provided valuable tips. Beirut was both a sounding board and a whispering gallery. Useful information had to be sifted from the planted rumours in its pubs, restaurants, clubs and hotels, which were an inseparable part of the life of the Lebanese capital which it was often referred to as the commercial

*Death of a country, the civil war in Lebanon by John Bulloch and published by Weidenfeld and Nicolson, London, 1977. pp 197, Price £ 4.95 in UK only.

capital of West Asia. It was equally well-known net and produced not a synthesis but an amalgam, where life was sophisticated but not fully Westernised, living was costly but not frightfully expensive, domestic help was still available, the call of the *muezzin* calling the faithful for prayers was heard from loudspeakers fitted on mosques and yet alcohol and pork were freely sold, the Sunday morning service in churches was popular but not obligatory, and hot pants and the Braless look existed peacefully with the *Chadder* (burqa) as did suits of the latest style from Paris with the Arab *Jalabieh*.

This was possible because over the centuries, Lebanon had evolved an ethos typically its own. The Maronite Christians who fled Turkey to escape oppression by the Greek Orthodox Church had taken refuge in the mountains of Lebanon and had come to live peacefully with the Muslims. One could find in Lebanon followers of almost every Christian sect—Maronite, Roman Catholic, Protestant, Greek Orthodox and Armenian. There were of course the Sunni, the Shia and the Druze, an esoteric sect, outwardly Muslim but having rites and ceremonies of its own, which in many respects ran counter to the teachings of orthodox Islam. There were even Jews, mostly concentrated in a crowded part of Beirut.

All these communities lived peacefully at the centre of the vertex of violence in West Asia, almost unmindful of the wars around, spinning money and seeking pleasure. The Government had perfected the art of governing by least interference, taking part in Intra-Arab affairs and yet avoiding extreme positions. It was a tight rope walk for the country and its government, made possible by the fact that not only the super powers but also neighbouring Arab countries needed Lebanon. The United States, its traditional friend, found Lebanon useful for its diplomatic and other activities, as it had to close its embassies in Cairo and Damascus. The Soviet Union found Lebanon a useful place to watch developments in Israel. The nations of the Gulf found Lebanon useful as a holiday resort where they could enjoy life away from the prying eyes at home. What was more important, Beirut with its one hundred banks offered opportunities for investment. The investment was indirect insurance against a rainy day. The deposits in banks tripled during a single calendar year and many nations raised quick loans at a high rate of interest but without the rigorous procedures and the publicity involved in operations through international institutions or government to government deals. The deposits with the banks were reflected in the spiral of inflation and the soaring skyscrapers which sprouted all over Beirut without any thought to the beauty of the landscape or even to simple

problems of ingress or outgress or ancillary facilities like water and power supplies. Most of the buildings were owned by people from the oil-rich countries. They were not worried about immediate returns on their investment because they had more cash than they could use. The multi-storeyed buildings were there as an investment and the owners did not care if most apartments remained vacant. Rents like prices also rose and the worst sufferers were the poor because the rich were getting richer. There was therefore an atmosphere of prosperity and plenty in Lebanon. Myriad lights glittered in the Casine de Liban, 30 kms from Beirut and in the night clubs and night bars in Phoenicia Street and elsewhere in the city, business was brisk, building activity was at its peak, transport and other services were fetching the country substantial resources and in the midst of the turmoil in West Asia, Lebanon seemed a land of peace.

The civil war in the middle of the seventies destroyed Lebanese economy and brought about a virtual division of the country. Lebanon has not yet recovered from the nightmare and it seems as if it may not do so for years to come. Nearly 50,000 people were killed in the fighting and some 2,00,000 injured, even by conservative estimates. There can be no correct estimate of the property destroyed though a large part of Beirut including the commercial centre has been reduced to a shambles. Tripoli, Sidon and Tyre, the other main cities also suffered and so did the countryside.

What were the causes which led to the destruction of this fine delicate mosaic created with so much diligence, patience and accommodation over the centuries? The answer lies in the description itself. The Lebanese political and economic structure was much too delicate to withstand the stresses and strains to which it was being subjected to because of the political situation in the region. Every Arab-Israeli conflict was invariably followed by a flare up in Lebanon and if the October 1973 war changed the political picture of the region drastically, the backlash in Lebanon was bound to be equally sweeping. Like the events which led to the larger conflict, forces had been building up within Lebanon for several years which made a clash on an unprecedented scale inevitable

Bulloch's book (*Death of a Country*) devotes only two of its twelve chapters to the causes which led to the conflict. The others are devoted to a description of the fighting in Beirut and the countryside, the position of the Palestinians, the involvement of the Syrians, and the uneasy peace which was in the end enforced on the country. Since the root causes had not been tackled, the peace is proving

untenable, the peace-keeping force is facing a difficult task and a return to normalcy remains a distant dream still. Bulloch's handling of the subject is that of a person who lived through the nightmare of the civil war and was more concerned with the events as they happened rather than with the causes behind them.

What were these reasons? The foremost of these was of course the political structure which laid down that the ratio between the Christians and the Muslims was as six is to five. This ratio was considered unreal forty years ago when it was first accepted. Changes in the population of the two main communities, Christians and Muslims, large-scale migration of the Christians to America, Europe and Australia and the influx of refugees from neighbouring countries had destroyed what validity it originally had. What was needed was a restructuring of the political system so as to bring it nearer to reality. But this was precisely what the ruling elite did not want. Under the present system, the President had to be a Maronite Christian, the Speaker of the National Assembly a Shia, the Prime Minister a Sunni. The other sects were also assured of at least one senior office. If the Muslims felt that they were in a majority, among the Muslims, the Shias claimed to be in a majority. No one could prove or disprove these claims because there had never been a census and the Christians claimed that in deciding this question it was not merely the Lebanese living in the country but also those who had migrated to other countries and held dual passports, should be taken into account. Since an overwhelming majority of the Lebanese settled abroad were Christians they would have supported continuance of the status quo which benefited the Christians and among them the Maronites more than the others, then the Sunni Muslims particularly the richer ones but not the Shias who were generally poorer than the others.

The constitution of Lebanon stood in the way of the growth of political parties with well-defined ideologies. Almost all the constituencies were multiple member constituencies with seats reserved not only for the different communities but also sub-sects based on their population there. The candidates therefore formed tickets. Thus in a three-member constituency which, for example, had to return a Maronite Christian, Sunni Muslim and a Druze member candidates from the three different constituencies would club together after assessing their strength and approach the electorate seeking votes for common ticket. It was not uncommon therefore to see candidates of two parties on a common ticket in one constituency while in the neighbouring constituency they would be on opposing tickets. There was naturally no

approach to ideology or programme and the election was reduced to a process of arriving at marriages of convenience entered into only with the immediate gain in view and dissolved soon after. The politics of the country therefore centred not round political parties but round personalities. Lebanon was the only country where top offices were shared by some twenty families—the Chamouns, Franjiehs, Gaymels among the Christians, the Salams, Solhs, and Karamis among the Muslims and the Jumblatts and the Marslans among the Druze to name only a few. Needless to say they were all prosperous and could afford the costly game that politics had become. The system therefore gave rise to two contradictions. Firstly, the election of a President or Prime Minister depended not on his ability or acceptability to the nation but his birth. A popular leader like Kamal Jumblatt, a Druze, could never become the President or the Prime Minister. Secondly, even among these communities, the less affluent had even less chance of making a mark in political life than elsewhere in the world.

Lebanon was thus living in a world of its own making in a part of the world which was torn by bitter Arab-Israeli hostility which had already caused three armed conflicts, till the early seventies and inter-Arab feuds. These feuds were only slightly less bitter than the Arab-Israeli hostility with a slow polarisation between the conservative governments like Saudi Arabia on the one side and what were often called radical nations like Iraq and South Yemen on the other. President Sadat stood almost in the middle, depending on the conservative governments for financial support as he did on the mercurial Col Kadaffi of Libya but also friendly with the radical governments because he had a treaty of friendship with the Soviet Union and depended on her for the hardware needed for his armed forces. All this found its echo in the political life of Lebanon, which was already beset with problems of her own—an outmoded political system, growing economic disparity between the poor, who were predominantly Muslims and ruling elite in which the Christians occupied the prominent place.

Conditions were already critical by the time the Arabs and Israel went to war for the fourth time in October 1973. During these years and more particularly in the yearly seventies, a new element had been introduced—the Palestinians. After every Arab-Israel war, more and more refugees came to Lebanon from territories occupied by Israel and their number rose to nearly 3,00,000 in 1973. Most of them live in 16 refugee camps, three of which are in the neighbourhood of Beirut and the rest in the countryside.

The relations between the Palestinians and the Lebanese were cordial in the beginning when the anti-Israel feeling was at its peak and the Palestinians were considered as brothers seeking refuge from persecution by the common enemy of the Arabs. The Muslims who were for greater identification of Lebanon with the Arab cause were more well disposed towards the Palestinians than the Christians.

After the 1967 conflict a new element—the Palestinian Commandos—came into play. Humiliated on the battle-field in 1967, the Arabs looked upon the Commandos as an expression of their spirit to fight Israelis. It was even felt that the Commandos could do what the Arab government could not, humiliate Israel if not on the battle-field at least by their attacks which caught the imagination of the common people.

But soon the Commandos became a source of embarrassment to Arab governments particularly because of the hijackings and the raids carried out by splinter groups. Most Arab countries were prepared to give moral support to Commando activities as a legitimate expression of the Palestinians resolve to fight and even to finance them. But were not prepared to allow them to operate within their own territory. The two exceptions were Lebanon and Jordan. Till they were exterminated from there by King Hussain's army in 1971, the Palestinian Commandos virtually controlled the east bank of the Jordan River. In Lebanon, they took over full control of the refugee camps and any attempt by the Lebanese government to enforce its rule within these camps failed. After King Hussain of Jordan exterminated the Commandos from his country in a series of military operations in 1970 and 1971, they moved into Lebanon, controlling the areas bordering Lebanon in the south. Clashes with Lebanese authority became more frequent, so did the raids on Israel from South Lebanon. Inevitably, Israeli reprisals also mounted and since rockets, bombs and shells make no distinction of nationality among the victims, the Lebanese suffered as much as the Palestinians.

The Christians of Lebanon had not taken kindly to the large influx of Palestinians and even less to the control that they exercised over part of Lebanon's territory. They were quick to point out that this was loss of Lebanese sovereignty. Israel also carried out a relentless propaganda that she was 'compelled' to carry out raids of reprisal in South Lebanon because of the Palestinian Commandos there and if the Lebanese suffered in these raids, it was not Israel but the Commandos who were to blame. This propaganda also had its effect in souring the relations between the Palestinians and the Lebanese. The lightning Israeli raid on Beirut in which three

Commando leaders were killed further soured the relationship as the Palestinians openly alleged that the Lebanese government had done nothing to fight the raiders. Some Palestinians even went to the extent of alleging collusion between the Israelis and the Maronite dominated Lebanese army. The raid caused a political crisis and the Prime Minister Mr. Saeb Salam resigned as President Franjeh refused to take any action against the army commander, a Maronite Christian.

After the Arab-Israeli war of 1973, Egypt swerved towards the USA. With Cairo, Alexandria and Damascus once again open to the Americans, Beirut lost its utility as a listening post. The prosperity aroused jealousy. Why should Beirut be the commercial capital of West Asia and not Teheran or Kuwait. And why should goods meant for the Gulf Countries be unloaded at Beirut Port and not at Latakia in Syria? In any case, reopening of the Suez Canal had reduced the land route to secondary importance. Unfortunately, while the country's position was threatened by external factors, conditions within Lebanon were also becoming critical. The tension between the Palestinians and the Lebanese, particularly the Christians had reached a peak, and the mounting deposits in the banks exercised an inflationary pressure on the prices which affected the poor most. The personality of President Suleiman Franjeh was also such that he did not receive the universal support that a Head of State enjoys. Conditions were ripe for a flare-up but no one ever imagined that it would take the form of a regular civil war and leave the country crippled, with a peace-keeping force largely composed of Syrians on its soil, the Christians trying to carve out an independent State of their own and Central authority practically non-existent.

John Bulloch has not analysed the factors which led to this civil war in as much detail as one would expect from him. Even about the war his account is largely limited to the Battle of Kantari in Beirut and the Battle for hotels—Holiday Inn, Phoenicia and St. George. This failure is understandable because even if correspondents had dared to move out of their area at the risk of their lives, it would have been impossible for them to do so. The description of these battles is very graphic. What happened in the rest of the country is mentioned but this is not based on first-hand observation.

Bulloch has however given a graphic account of the interplay of politics which influenced the course of the civil war and ultimately brought it to an end. The alliance of the Palestinians and the Lebanese left at one time seemed to be winning the civil war, as it was

backed by neighbouring Syria. He has analysed the factors which led to a cooling off between the partners and the withdrawal of Syrian support which robbed it of a certain victory. The motive was clear, Syria wanted a change in the political system in Lebanon but not a change so drastic as to leave a Lebanese Left-Palestinian alliance in complete control. It therefore opted for a policy where the Christians were able to carve out an enclave of their own, the alliance controlled the rest of the country and both looked for their survival to the 30,000 strong predominantly Syrian peace-keeping force.

Taking a short-range view, this policy seems to have succeeded. But the presence of a foreign army on its soil unites a nation as nothing else can. In the years since this uneasy peace has been imposed on Lebanon, there are already signs of a new awakening among the Lebanese youth. The Lebanese claim descent from the Phoenicians named after the Phoenix. This legendary bird is said to have the boon of rising from its own ashes. During its long and chequered history, Beirut and Lebanon have been destroyed many times only to rise again from its ruin. "The Death of a Country" as one sees it today may be only the prelude to its rebirth from the ashes of its old form, rid of the contradictions which brought about its end;

BOOK REVIEWS

GANDHI AND CIVIL DISOBEDIENCE: MAHATMA IN INDIAN POLITICS 1928—34

by JUDITH M. BROWN

(Published by Cambridge University Press, Cambridge, 1977),

pp 414. Price £15.50

THIS is a research study prepared by a scholar whose authority on the subject is well illustrated by her previous publication, entitled "Gandhi's Rise to Power: Indian Politics, 1915—1922". As the detailed bibliography of the book shows, the author has gone through a vast mass of source material spread over three continents—in New Delhi, London, Manchester, Canterbury, Oxford, and Canberra,—and tried out some of her ideas in several universities of Britain, Australia and New Zealand. Returning from Africa in 1915, Gandhi joined the Indian politics to become its leader in no time. The period, 1928—34, covered by the book under review, witnessed Gandhi's reassertion of authority in Congress during 1928—1934, after his apparent self-withdrawal from the thick of Indian politics in 1922, and also repetition of the same phenomenon of abnegation of party politics after 1934. This covers certain important political developments on the Indian scene—the Salt Satyagraha and the Civil Disobedience Movement, the Gandhi-Irwin Pact, and the Round Table Conference. It is difficult for any person, especially for a foreigner, to assess the role of an enigmatic personality like Gandhi, "Who claimed to be governed by religious commitment, who was hailed as a Mahatma, but who traded in the doubtful currency of politics". But to Gandhi there was no inconsistency in his behaviour. As a 'karmayogi' of Arjuna's type it was his 'dharma' to launch a political struggle to emancipate India. Gandhi introduced a novel type of weapon in political struggle in the form of mass 'Satyagraha' or Civil Disobedience. The author has rightly said that "Gandhi's role and standing in Indian politics were extraordinary phenomena when seen

against the barriers to continental leadership created by regional and social divisions and the limited development of mass media." The author has shown how Gandhi played his all-India role to enable the Congress to develop as a national party free from regional and communal pulls. His Civil Disobedience movement served as a tool to reinforce his party's continental role. The author has said perceptively: "The absence of any internal constraint of aspiration to a political career through office in Congress or the governmental structures gave the Mahatma a flexibility which paradoxically was vital in enabling his continued political importance in a period of rapid change".

This is a masterly study of an important phase of our political struggle against the foreign rulers, and anyone interested in Gandhi or Indian history of the present century will surely find this book stimulating.

—BC

ARMS, MEN AND MILITARY BUDGETS : ISSUES FOR FISCAL YEAR 1979

By FRANCIS P. HOEBER, DAVID B. KASSING AND WILLIAM SCHNEIDER JR.

(Published by Crane, Russak and Company, Inc. New York, 1978), pp 157. Price \$5.95

THIS volume is the third annual survey comparing military strengths between the United States and the Soviet Union. Published by the National Strategy Information Centre in New York—a well-known hardliner group in the United States—its central purpose is disingenuously mentioned in the preface itself: "...for many years the United States has been investing a dangerously inadequate proportion of its resources in national defence, when measured against the massive Soviet buildup in all branches of its military establishment". It is, consequently, hoped that this publication would engender greater debate on "the inadequacy of the present defence effort."

Need we add that the anti-Soviet pressure groups in Congress, academia and arms manufacturing firms would welcome this analysis. The Pentagon could hardly complain, either. In the American

system of governance, the role of pressure groups, with access to the media, is completely out of proportion to their size. This book would, therefore, advance the interests of those Americans who gain from U.S.-Soviet tensions and the arms race, despite assertions that it seeks to strengthen American resolve, and enhance defence preparedness.

The authors point out obtaining American deficiencies in separate chapters devoted to Strategic Forces, Army and Air Force, and Navy and Marine Forces. Trends in U.S. and Soviet defence expenditures are analysed, before the study's main recommendations and conclusions are drawn.

The major chapter on Strategic Forces by Francis P. Hoerber concedes that the Soviet Union has reached nuclear parity with the United States. The familiar argument is, then, made that the Soviet Union seeks nuclear superiority, since it believes a nuclear war is "thinkable" and "winnable". The SALT agreements merely codify the Soviet drive towards nuclear superiority, rather than moderate the superpower nuclear competition. The equally familiar argument is also made that the Soviet advantage in throw-weight, derived from heavy-land based missiles, would overwhelm the America land-based forces. As regards the greater accuracy of American missiles it is argued that the Soviets would soon reach these accuracies; similarly, warhead numbers, which presently favour the United States, would level off as the Soviets MIRV their missiles. The Soviet civic defence programme is highlighted as affecting assured U.S. second-strike capability; it is, however, difficult to visualise how the Soviet Union could survive the radiation following an all-out nuclear war.

At the prescriptive level, Hoerber suggests that the decision not to produce the B-1 bomber or Minuteman III should be reserved. Cruise missiles in all its modes, MX, and Trident submarines should be produced in adequate numbers. Missile accuracies should be produced in adequate numbers. Missile accuracies should be improved by developing the Mark 12-A warhead. Further, R&D should be stepped up for improving ABM capabilities; civil defence and air defence schemes must be implemented; anti-satellite defences and high energy technologies investigated. In fact, there is hardly any feasible measure which is neglected.

The fallacies in these processes of argumentation are numerous. First, nuclear deterrence rests upon the strategic Triad of land-based missiles, submarine-launched missiles and long-range bombers; hence a deficiency, even if credible, in land-based missiles—one leg of the Triad—does not radically alter the nuclear balance or the fabric of

nuclear deterrence. Second, the different geo-strategic situation of the two superpowers needs appreciation. The United States, whilst pursuing its traditional maritime strategy, undertook a balanced development of its Triadic forces. Being a continental land-mass the Soviet Union, however, laid emphasis on its land-based forces. Third, the history of military technological developments within the nuclear arms race clearly establishes an American lead in innovative skills, which the Soviets have sought to neutralise by greater stress on numbers. Any thesis, therefore, that the Soviets are moving towards strategic superiority is incomprehensible. All that can be said is that nuclear developments in the two superpowers being different, equivalence in each sector is a chimerical pursuit.

With regard to the Navy and Marine Corps, David B. Kassing points out that the U.S. naval role envisages both sea control and power projection. The Soviet Union lays emphasis on operations against shore facilities and "sea denial"—especially across the Atlantic. However, Kassing fairly acknowledges the major Soviet disadvantage in having dispersed fleets located in the Black Sea, Baltic Sea, Arctic and Pacific Oceans: the Soviet Navy must also pass through choke points to reach the oceans, adding to their vulnerability. Besides, the Soviets lack port facilities in other countries, their submarines are noisy, their ships are limited in range, habitability and shore projection capabilities, diversity of weapon systems reduces ammunition reserves and firepower and so on.

Kassing concludes that the Soviet Navy has a nuclear orientation, and its nuclear missile armed submarines serve to preserve the second-strike capability. Its general-purpose forces have considerable potential for inflicting the damage on U.S. Navy/merchantmen in a conflict. But, on balances, its many inherent disadvantages, reveal that the Soviets would ultimately lose the naval battle. This is a fair assessment. Kassing takes note of the growing naval capability of developing countries. He credits them with greater offensive capabilities. Nevertheless, he asserts that the U.S. Navy, with its tactical air arm, could easily overwhelm these fledgling navies.

The author is firmly in favour of aircraft carriers, appreciating their multi-role capabilities. In fact, he estimates that large ships are more cost-effective than smaller ships to position sea-based aircraft. Larger ships are, further, more survivable, and could provide reconnaissance and communications facilities, should satellite communications systems get disrupted in a conflict. On the prescriptive side, it is suggested that the United States might take advantage of the geographic constraints on the Soviet Navy, and procures counter-

vailing systems against Soviet air and missile antiship strength. These include surveillance and early warning systems, apart from air and missile defence systems.

William Schneider's chapter on Army and Air Forces makes clear that the only theatre where the United States envisages deployment of these forces is West Europe, and to counter a possible Soviet attack. Attention is drawn to the new Soviet doctrine of "daring thrust", which involves shifting tactical manoeuvre from the division to the regiment; reliance on "meeting" or "encounter" engagement—bypassing prepared defensive positions and engaging rear forces moved up as reinforcements—and, launching the offensive along numerous axes, rather than a few major axes. The Soviets have, consequently, initiated major changes in their land forces, tactical air forces, field air defences, and command and control arrangements. Taking the Soviet weaponry inductions into account, Schneider believes that the United States should upgrade its field air defences, procure major weaponry units for the conventional armoury, and the neutron bomb/short-range nuclear missiles for the nuclear armoury. Interestingly enough, growing personnel costs are adversely commented upon, which are reducing the outlays available for military R&D and procurement.

The major conclusion is that reductions in defence expenditure, proposed by the Carter Administration over the FY 1978–82 Five-Year Defence Plan period, would substantially degrade U.S. capabilities. The Soviet Union utilises between 12 to 14% of its G.N.P. on defence and its annual expenditures is some 25% over U.S. defence expenditures. The manner of estimating Soviet defence expenditure is beset with numerous difficulties, but these are somewhat conveniently ignored to support the general thesis that U.S. spending on strategic forces should increase by \$10 bn each year, and on General Purpose Forces by around \$10 bn to \$20 bn annually.

This, indeed, is the main purpose of the book—create the intellectual rationale for larger defence outlays by the United States. Apart from sustaining this central purpose, the book is of some value to those interested in making comparisons of military strengths, and studying the methodologies available for such exercises.

PRC

MODERNIZING THE STRATEGIC BOMBER FORCE: WHY AND HOW

BY ALTON H. QUANBECK AND ARCHIE L. WOOD

(Published by Brookings Institution, Washington, 1976), pp 116.
Price \$ 2.95.

WHEN President Carter of the United States announced on 30 June 77 his decision to abandon the production of the B-1 supersonic strategic bomber in favour of the air launched cruise missile (ALCM) it was to say the least a most unexpected decision. Carter gave three reasons for his decision, firstly that the cruise missile is in itself an effective weapon, secondly that the USAF Boeing B-52 Gs and Hs armed with cruise missile would be effective into the 1980s and thirdly that the triad of SLBM, ICBM and the cruise missile armed B-525 would give the USA "an effective, flexible strategic force with capability fully sufficient for national defence". This decision has generated heated controversy both from those who support the B-1 and those who do not. There are supporters of the B-1 in the USAF, the Pentagon, the US Congress and the industry.

The decision not to produce the B1 is not irrevocable. This is evident from the fact that although the \$1500 million production programme for the first five series Rockwell B1 has been deleted from the 1978 defence budget, the R&D activity by the Rockwell International, the manufacturers of the B 1, will continue to operate with \$ 443 million funding in 1978*. Giving reasons for this President Carter has said that the existing B-1 development programme will continue in order to provide a technological data bases "in the unlikely event" of the cruise missile running into technical problems or relations with the Soviet Union deteriorating to the point at which a strategic bomber in the B1 class again becomes necessary.**

So far three B-1s prototypes have flown and a fourth which is under manufacture was expected to fly in early 1979, three production B1s under construction are now likely to be scrapped. A total of over \$ 20 billion has already been spent on the B-1 programme. After so much commitment by the Ford administration what were the reasons which led to this unexpected decision and

*Inter Avia 8/1977

**Flight International 9 July 77.

which some responsible aviation thinkers feel will have pleased the Russians, because it does not demand the cancellation of the Soviet bomber BACKFIRE as a reciprocal gesture.** Some observers feel that this decision will confer upon the Soviets an unfair advantage. The editorial in 'Air Force' Aug 77 voices this concern when it states that the decision has been widely interpreted as an either/or case—the B1 or the cruise missile—whereas the cruise missile carrying capability of the B1 has long been foremost consideration in justifying the (B-1) programme. "The critical and over-riding need to penetrate Soviet defences has yet to be addressed definitively. Launch vehicles standing off miles from the Soviet perimeter, even though armed with the best of cruise missile yet to be perfected, cannot fill this long felt need".

In this context a study carried out by the BROOKINGS INSTITUTION of Washington has come to our notice. This study is entitled "MODERNISING THE STRATEGIC BOMBER FORCE" by ALTON H. QUANBECK and ARCHIE L. WOOD.@ It is quite possible that this and other such studies may have been responsible for influencing the US decision against the B-1 bomber. In order to understand the reasons which have led to such a major shift in strategic doctrine, the above study assumes importance.

This book provides a fund of useful information on the US bomber forces, the reason for their needs and their tasks, their existing state and replacement programmes and cost, examines the pre-launch survivability of the bomber and its capability to penetrate into Soviet air defences, and analyses alternate means of meeting the threat which are the sea launched ballistic missile (SLBM) and the air launched cruise missile (ALCM). Before the treatment of these crucial questions, the book outlines the origin of the US bomber force, examines the justification for retaining them, discusses the role of the bomber in relation to other US strategic offensive forces, the arms control possibilities, and comparative cost analysis and ultimately recommends a course of action. A brief review of these aspects is outlined in subsequent paragraphs

BOMBER FORCE

The authors estimate that the current US bomber force under the Joint Soviet-American statement on strategic Arms Limitation

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1775 Massachusetts Avenue NW,
Washington D.C. 20036
Price \$2.95

signed on 24 Nov 1974 at Vladivostock could comprise of 270 B-52 G/H, 80 B52 D/F and 75 FB-111. These are held as 5 squadrons of B-52 D/F, 18 squadrons of B-52 G/H and 4 squadrons of KC-135 tanker force to provide air-to-air refuelling, each squadron with 15 aircraft. There are 23 primary bases in the USA of the Strategic Air Command, each SAC base having 1 bomber and 1 tanker squadron. In addition there are 70 military and civil air bases for dispersion. 40% of the bomber and tanker force has been kept on ground alert but since 1975, this has been reduced to 30%. The ratio of aircraft to crew is 1 : 3. During early 60s, 1/8 of the bomber force was kept on airborne alert and half the force on 15 minute alert. Presently the airborne alert is less than that in 1960. A B-52 squadron has 1100 officers and enlisted men and at the monthly flying rate of 45 hrs for each B52, the direct operating cost for a squadron of B52s is about \$40 million annually. The indirect operating cost has been estimated to be nearly equal to the direct operating cost. The current cost of maintaining the US bomber force is \$6 billion annually and accounts for 35% of all expenditure on strategic arms. About 25% of nuclear weapons in the strategic arsenal of USA are carried by the bomber force.

The mainstay of the US bomber force is the B-52 G/H Boeing Superfortress, which are expected to remain structurally sound into the 1990s. They are equipped to carry 4 nuclear bombs and 20 short range air-launched missiles (SRAM) or cruise missiles or armed decoys. The B52 G/H are under-going modernisation of their ECM system at a cost of about \$ 350 million. These aircraft are fitted with quick start accessories to improve pre-launch survivability and have electro-optical viewing system (TV) to improve low altitude performance by providing a view of outside and forward of the aircraft when the cockpit is hooded to protect the crew from bright flashes created by nuclear explosions. The latest version B-52 H has a range of 12,500 miles in unrefuelled flight. Thus the B-52 G/H appear capable of performing all the desired roles of a manned strategic bomber force, subject to the uncertainty about their vulnerability to surprise attacks while they are on ground alert and to Soviet air defences.

The FB-111 is the strategic bomber version of the F-111 variable geometry fighter bomber produced by General Dynamics, can carry a payload of 6 SRAM over a range of 4100 miles and has a top speed of M 2.5 at high altitude. The FB-111 is expected to be operational upto 1990.

B-1

The B1 is based upon a 1962 design concept for an advanced manned strategic aircraft (AMSA). The first prototype of the B-1 flew in 1975. The B-1 was designed to carry a maximum of 24 SRAM in three rotary launchers, and had a normal unrefuelled range of about 6100 miles. The B1 was provided with terrain following radar to enable it to fly at 100 ft at a speed of 400 kts, its maximum speed at high altitude being M 2.2. It was estimated that the B-1 would cost over \$ 100 million each. The B-1 was to be introduced into the force structure in 1981 and a total of 244 aircraft were planned to be built.

TANKER FORCE

The KC-135 Strato-tanker is a development of the Boeing 707 and over 700 of such aircraft have been built and used since 1956 for air-to-air refuelling of the SAC bombers. One tanker can transfer 120,000 lbs of fuel, refuelling one bomber at a time. A tanker squadron requires half the personnel of a B-52 squadron and each aircraft flies at a rate of 35 hrs monthly. The overall operating cost of a tanker squadron has been estimated the same as for a bomber squadron.

AIR LAUNCHED CRUISE MISSILE

The authors have carried out a study of the air launched cruise missile (ALCM) its lightweight turbofan engine, its navigation system known as TERCOM (Terrain contour matching) having an accuracy of the order of 0.1 nautical mile (600 ft) circular error probable (probably at ranges of upto 1500 miles) and its procurement cost of approximately \$500,000 per missile (in 1976 prices). The development of the ALCM since 1967-68, the views of the Senate Armed Services Committee and the plans to arm the B52s and the B-1 bomber with these missiles have also been reviewed. It is interesting to note that the first flight of the missile had been scheduled for 1978 and for deployment on B52 (now that the B-1 is no longer to be produced) in early 1980's. The procurement annual costs of the launching platforms (the FB-111, the B52 and the B-1), the tanker the cruise missile based on an annual force structure upto 1985 has been given and include direct and indirect operating costs. This chapter makes very interesting reading for anyone dealing with planning of a force and weapon system structure.

BOMBER SURVIVABILITY

The rest of the book deals with the crucial question of bomber survivability both in the pre-launch phase against attacks by Soviet

missiles and during the bomber penetration of Soviet air defences in order to reach within range of targets to be able to launch the ALCM. The chapter on pre-launch survivability of the US bomber force is a fascinating analysis of the ground and airborne alert system in force and the quantum of Soviet ICBMs and SLBMs (Submarine launched ballistic missile) their flight time against US continental targets and the US bomber force reaction time, based upon the warning systems available and alerts and dispersion of force and bases. The book comes to the conclusion that the US bomber force can maintain a high level of pre-launch survivability of depressed trajectory SLBMs and long range submarine launched cruise missiles are excluded and even if such threats were to become evident, steps could be taken to protect the bomber force. In the chapter on penetration of Soviet air defences by US bomber force the authors have first examined the extent of Soviet air defences by fighters and SAM assuming that the Soviets do not deploy an ABM (anti-ballistic missile) force to protect the air defences. The analysis assumes that the US bombers must attack "through" Soviet air defences because of the limited range of present-day ALCMs. The US strategic bomber penetration of Soviet airspace in a nuclear war, has been calculated as 85% with an attrition rate of 1 to 1.5%. It concludes that current Soviet air defences have little capability at low altitudes to intercept bombers or subsonic cruise missiles and have no capability to intercept SRAM (short range attack missiles) which are nuclear armed supersonic missiles (Mach 2.5) delivered from the parent bomber at ranges of upto 100 miles in a high altitude semi-ballistic profile and of 35 miles at low altitude.

The study concludes that there is no reason to produce the B-1 bomber as the effectiveness of the current US bomber force equipped to carry stand-off air launched cruise missiles, is adequate against Soviet targets.

It will be evident from the above summary that the book "Modernising the Strategic Bomber Force" by Alton H. Quanbeck and Archie L. Wood of Brookings Institution is a study of great significance which could be considered as an item of essential addition not only to Air Force Planning and operational departments but to Air Force Stations and squadrons as a model for force-weapon-target planning considerations and calculations.

VMB

FROM APES TO WARLORDS 1904—46

By SOLLY ZUCKERMAN

(Published by Hamish Hamilton, London, 1978), pp. 447. Price £ 8.50

LORD Zuckerman's autobiography is the recounting of an unusual life: a "full life" which he has obviously enjoyed. Starting with a South African childhood, a medical degree, though he never practised medicine, he rose to be the Chief Scientific Officer to the British Government. During World War II he was one of the fore-runners of the scientific tribe which has since then grown vastly, all over the world. Most of the book deals with the war years and he has little to say in this book of the post war period. What strikes one is the catholicity of outlook, the wide interests in people and things. And what a vast canvas is covered. His portrayal of almost all the famous air marshals of the Second World War is excellent. So too the academic world of the era just before the War, especially that pertaining to biology and zoology.

Although a lot of the book is taken up with ups and downs of battles between the "Air Barons" and the controversy over the bombing policy, the main point which comes out is the necessity to look at the means of waging warfare in a dispassionate "almost a biological manner". The professional soldier, sailor or airman is not normally so detached in his outlook. The effect of munitions on the enemy depends on a large number of factors, his mental attitude not the least. The serviceman often rightly stresses the psychological effect far greater than does the clinical scientist. As has been said rightly, warfare is very much a "matter of the spirit". On the other hand, with the changes which came about in World War II and which have continued at an unimaginably rapid pace thereafter, there is much to be said for having a "tame scientist" in the commander's pocket who can be let loose to ferret out the essence from a mass of seemingly unconnected detail; on the battlefield from damage inflicted on material and man, in his laboratory (and now based on computer data), and relay and process it back to the Commander for understanding the concept, redesigning the weapon and later for its employment. The tactical as also the strategic usage of weapons is the field of the Commander, but his results could be all the more effective, if he is prepared to use the scientist's assistance.

It is interesting to note that in World War II Britain used its intellectual manpower for the first time for assistance to warfare as

a whole. In a typically British manner "it grew like Topsy". Churchill had Prof Linderman (The Prof) advising him on these matters from the days he was still in the wilderness. From accounts now published of research carried out in such diverse fields as cryptography, the running of agents, radio intercepts and so on, as also the better known results of scientific research leading to the production of radar, it is obvious that Britain gathered a real harvest from the effort of its intellectual community although possibly it was but a "random harvest".

Solly Znckerman's main contention is that far better results could have been obtained had all this effort been channelised more purposefully. Being a scientist and an active one at that, he realises fully that scientists cannot be dragooned into set grooves so dear to the heart of the serviceman and even more so, the bureaucrat. Immediately after the war he went back to his chair in Birmingham University of Anthropology, but continued his associations with a large number on the Government Committees for scientific research. At the same time, he realises that until the Services and especially their Heads, have been exposed to the capability of the trained scientists, they are unable to make full use of them for war or, for that matter, peace. What he pleads for, therefore, is a companionable marriage of the Services and the scientific community for a more efficient projection of war. "I was to learn that the military trappings of the past and the interests by which they are sustained, do not necessarily relate to the political realities of today".

We do continue with the British system with some of our scientists associated with Defence as well as other Government agencies viz the Electronics Commission. On the other hand, it is for consideration whether we have tapped our scientific corpus enough; or alternatively, are they so enshrined in their ivory towers that they are unable to get down to the realities facing those who have to execute policies, be they soldiers or statesmen. The author says "Like others, I now have my doubts whether scientists, who had rightly been lauded for what they had done to win the war, have since lived up to what was expected of them, and to the promise which was theirs".

At the same time, with the emphasis now given to science in the training of our officers since World War II, will they be capable of making use of the scientist for the conduct of war at the national level? In our case it will be not only the Service Officer, but the senior civilians working in our Ministries who will have to be enlightened enough for the total employment of the national effort

for national defence. Afterall, as Clemence said "war is too complex to be left only to the soldiers". And yet, at the same time, we should remember that Defence is not merely the sum of the Army, Navy or the Air Force or the multiplication of the effort of men, tanks, ships and aircraft, but encompasses much more; the nation as a whole from which spring the Armed Forces, the industrial infrastructure and last but not the least the top echelons of Government who only can enunciate national policies, of which the articulation of the national will to win, is possibly its most important aspect.

Although a long book, 372 pages, with detailed appendices, it is easy reading. For those connected with armaments and the higher directions of war in general, it is a must.

AMS

WORLD PERSPECTIVE IN THE SOCIOLOGY OF THE MILITARY

GEORGE A. KOURVETARIS AND BETTY A. DOBRATZ

(Published by Transaction Books, New Brunswick, ED, USA, 1977), pp 294. Price \$14.95.

THIS is an anthology of research articles pertaining to sociology of military institutions and civil-military relations.

The book is divided in three parts. Part I deals with an overview of the state and development of sociology of the military. In Part II the main theme is the professional and organisational perspectives and deals with such subjects as professionalism, recruitment and politics; military professionalism and civil control; trends in military occupational structures and their political implications; technology, organisational culture and recruitment in the British Military Academy; and a comparative perspective in social recruitment and political orientations of the Officer Corps. Part III deals with civil-military relations and includes topics such as military intervention, its causes and effects and cites examples of such intervention in countries like Greece, Brazil and some other developing countries in Asia and Africa.

It is obvious from a detailed study of this book that its themes are based mainly on Western-oriented sociological-political-military environment and the comparative analysis and interpretations from the basis of this thought process.

Of particular interest to our own military researcher and those military officers dealing with policies and plans of recruitment in the Indian Armed Forces, would be the chapters on Trends in Military Occupational Structures and Political Implications and the various tables on the occupational structure of the US Armed Forces. The tables on occupational assignment by grade and years would equally prove interesting and instructive. Another interesting chapter is on Technology, Organisational Culture and Recruitment in the British Military Academy wherein the recruitment pattern of officers is divided under four categories, viz aristocratic, non-aristocratic, artillery/engineers and the technical. It also deals with the system of pattern of selection and commissioning of officers to various regiments etc. Although the Indian Military Academy at Dehra Dun is modelled on the Sandhurst pattern it must be said that in this day and age where social disparities are dwindling we have perhaps adopted a pragmatic policy of recruitment and of allotment of officer potential to various regiments/corps. The chapter on Selective Socialisation : Airborne Training Status would appear to be more American oriented as their regimental system has no traditional background as that of the British or Indian Armies and therefore, the Airborne corps in the US armed forces structure assumes a special status symbol and significance.

On the chapter on Military Intervention there does not appear to be much validity in the theory expounded or its formula for measuring military intervention based on sound principles to form the basis of a reliable and accurate model. In the table depicting military intervention index scores and ranks for 88 nations, India ranks at 76.5 with a military intervention score of 27.3. This is entirely misleading and without any solid or proven background. Perhaps this misleading rating is due to unprecise understanding of the term "military intervention" by the authors as compared to what we in India would regard as such. Perhaps the authors have in mind our Armed Forces role in "aid to civil power" situation which in our country is treated as a legitimate mission and which in turn has been construed erroneously in the West as military intervention in the country's political affairs.

This is a well compiled reference book on sociology and civil-military relationship—although much of it in the realm of theory. It would be useful for military research scholars and scientific evaluation groups. It is well documented and something the service officer does not come across it often. Written in typical American academic prose this book perhaps would have had a different impact had it been written by British authors in simple but more effective and direct

prose. Nevertheless an interesting and informative anthology which may be used in future for carrying some type of similar studies on sociological-political pertaining to the Indian Armed Forces.

SNA

THE GENESIS OF THE PROFESSIONAL OFFICERS' CORPS

By G. TEITLER

(Published by Sage Publications Inc., London, 1977), pp 246.

Price \$13.50 net.

THIS book is part of the Sage series on Armed Forces and Society which analyses the sociological forces that shape the composition and functioning of the defence forces. This particular book has examined how military leadership, which for many centuries was treated as an amateur pursuit, gradually got professionalised.

The professionalisation of naval leadership which took place in Europe during the period 15th through 19th centuries has been analysed in great deal and with considerable insight. The differing paths which the Royal Navy and the continental navies took in their developmental process as well as the interactive roles played by technology and tactics in this sociological process are particularly illuminating. The study of the development of military leadership on land is equally interesting although it has been done much more concisely.

VK

WAR AND PEACE IN THE MIDDLE EAST

By GENERAL ODD BULL

(Published by Leo Cooper, London, 1973), pp 205. Price £6.95.

THE SINAI BLUNDER

By Major General INDER JIT RIKHYE (Retd.)

(Published by Oxford and IBH Publishing Co., N.D.). pp 240.

Price Rs. 75.00.

IT must perhaps be a coincidence that the review of the two books on the United Nations Peacekeeping operations in West Asia, must fall upon a reviewer who was himself an original member of the Indian Army contingent with the UNEF in 1956-57 and was also closely associated with the activities of the Egypt-Israel Mixed

Armistice Commission (EIMAC) of the United Nations Truce Supervision Organisation (UNTSO).

The theme of both the books are more or less identical; both deal with personal and authentic accounts of the operations and trials and tribulations of the UNTSO and the UNEF. While the UNTSO still survives in some form or the other, although its effectiveness has been considerably reduced with the passage of time and the changing political and power equations in West Asia, the UNEF and its successor UNEF II have disappeared from the peace-making scene.

General ODD BULL erstwhile Chief of Staff of the Norwegian Air Force, deals in his book with the operations and *modus-operandi* of the UNTSO. The UNTSO had its origin in the UN Security Council resolution No 23 of April 1948 and which provided for the setting up of an organisation to supervise the armistice between Israel and its Arab neighbours, viz Egypt, Jordan, Lebanon and Syria. The UNTSO's role has been succinctly summed up by General BULL which is "to observe, investigate and report" and which has been accepted by both the contending parties as having been fairly successfully implemented. In this Gen BULL himself has played no insignificant part. He not only appeared to be impartial in his dealing with both the Arabs and the Israelies but in actual fact acted with utmost impartiality. Perhaps he was the only Chief of Staff of the UNTSO unlike some of his predecessors who were more inclined towards the Israeli view-point and hence in broader perspective Western bloc geopolitical attitudes. He understood and appreciated the Arab point of view as well to hold the scales even. The success of the UNTSO during his stewardship therefore must be judged from the fact that he was respected both by the Israelies as well as the Arabs and had their trust and confidence right throughout his long tenure with this organisation. While there has been general cynicism in the UN and amongst its member states, particularly amongst the two power blocs supporting one party or the other, it must be admitted that UNTSO did manage to keep the contending parties away from active hostilities by its impartiality, promptness and finesse with which it handled many explosive issues and truce violations. Gen. BULL recounts the many incidents which would go to illustrate that even minor violations of the Armistice agreement some of them accentuated by the fact the Armistice demarcation line was never well defined on the ground and which could have resulted in major hostilities but which were defused by tact and compromise acceptable to both parties. The role of the UNTSO during the Six-day 1967 war was highly commendable like that of its counterpart the UNEF and both had to undergo some

trumatic experiences during this period. Coincidentally both the headquarters of the UNTSO and the UNEF came under direct conflict with the Israelies and for more or less the same reasons trotted out by the Israeli government and the Army. The part played by the UNTSO along the SUEZ Canal and the tremendous problems it faced from both the belligerents in the investigation of truce violations has been described with great accuracy and objectivity by the author.

General Rikhye in his book deals with the operations of the UNEF. This force was set up as the first experiment in the use of a composite military force for UN peace-keeping operations following the SUEZ War but unlike the UNTSO it was authorised by the UN General Council. Unlike the UNTSO, Israel never *de jure* recognised the UNEF and it was deployed only on Egyptian soil with the government of Egypt exercising its full sovereign rights on any matter concerning the presence and functioning of the UNEF. While the UNEF was successful in maintaining general peace along the Armistice demarcation line between Egypt and Israel (commonly known as the "ditch") and the International frontiers between these two nations, its unfortunate involvement in the Six-day 1967 war was mainly as result of failure of diplomacy at the UN as well as on the part of the power blocs. The Six-day war in the area of operations of the UNEF has been vividly and accurately described by Gen. Rikhye in great detail and objectivity and without any rancour. The role of the UN Secretary General U Thant in accepting President Nasser's ultimatum for the total withdrawal of the UNEF came for a great deal of controversy and criticism but in the final analysis U Thant had no other option than to accede to Egypt's demand in exercise of its sovereign rights. That the UNEF was caught in a pincer between the Israeli and Egyptian armies was inevitable in the pattern of its deployment. The Six-day war also brought the inadequacy of any contingency plans for its orderly withdrawal under such situations mainly due to political and military non-acceptance by one party or the other of help from nations who were outside the pale of conflict directly or indirectly and who were looked upon with undue and unfounded suspicions. In any future deployment of the UN peace-keeping force this factor must receive due consideration.

Both Gens. ODD and Rikhye were professional servicemen. Both had been associated with UN peace-keeping operations for a long time. Both had won the trust and confidence of Israelies and Arabs and both had gone through trumatic experiences during the six-day war, perhaps more so Gen. Rikhye since he had six thousand troops of various nations under his command whose safety

he was responsible for. Yet in spite of the failure of the UNEF his faith in the UN and its peace-keeping efforts has in no way diminished. The same can be said of Gen. BULL also.

Perhaps it would be well to recast our minds on the efficacy of the UN peace-keeping forces now that the emphasis is more on settlement of issues on bilateral basis between nations. The UNCIP in India and Pakistan, the UN forces in Cyprus and now the withdrawal of the UNEF II from Egypt and Lebanon in the wake of Egypt-Israel peace agreement are pointers towards this approach. Yet due tribute must be paid to the UN peace-keeping forces wherever they have been deployed for carrying out a most difficult task creditably and honourably in spite of the pulls and pressures of power block politics and its continuous dependence on financial support from big and small nation members of the UN which could be vetoed or unvetoed on the whims and fancies of member nations at will.

Both the books written by the Generals are most interesting, identical in their views in many respects and brings out one salient point for a serviceman that notwithstanding the military character of a UN peace-keeping force or organisation its in the realm of diplomacy that governs its existence.

These are two absorbing and instructive books and must be read by all service officers. Who knows one day they too may be involved in such peacekeeping ventures and these books will give them a clear insight what goes behind the scenes while understanding such missions.

Finally, the reader will forgive me if I end this review on a personal note. I was the first Indian officer to hold the appointments of Chief of Logistics and Chief of Operations in the UNEF in its formulative years to put it on a sound and effective basis; later as Director of Staff duties at Army Headquarters I was also associated with its liquidation after the SUEZ war. Such is the irony of fate. Yet the role played by the Indian Army units as a part of the UNEF has been one of great achievement and true to its highest standard of military tradition and which has brought great glory to the nation.

SNA

AUSTRALIA'S MILITARY ALLIANCES

By B CHAKRAVORTY

(Published by Sterling Publishers Pvt. Ltd., New Delhi, 1977), pp. 292.
Price Rs 60/-.

AUSTRALIA in a way is a geo-political oddity; an isolated white nation located along the rim of a yellow and brown continent. Biren Chakravorty's book is a balanced, detached

study of how Australia has been trying to shape its foreign and defence policies reconciling her heritage with her geography.

The book has examined the impress of the Second World War, the Vietnam war and the Indonesia-Malaysia confrontation on Australia, as well as the various military alliances of which she is a part. The broad conclusion of the book is that the Australians are slowly recognizing the need to move away from the patron-client relationship with the United States and carve out an independent regional role for their country.

While there can be no doubt on the increased regional activity on the part of Australia, particularly during Gough Whitlam's short tenure as Prime Minister, it does not seem realistic to read into it any diminishing of the country's satellite relationship with the United States. To many outside observers it would seem that Australia is only toeing the US line by interacting with and supporting the westward looking ASEAN countries. The book unfortunately has not carried out an analysis of the structure and mission orientation of the Australian armed forces. If that had been done, it would have shown how much the Australian forces are structured to fight in co-ordination with US forces. As intelligence men say, one can never interpret treaty texts and statements with certainty, but the orientation of the security infrastructure can rarely mislead.

VK

UNFOUGHT WAR OF 1962: THE NEFA DEBACLE

BY LIEUT COLONEL JR SAIGAL

(Published by Allied Publishers Pvt. Ltd., Bombay, 1979), pp 180.
Price Rs. 30/-.

COLONEL Saigal has named 'sabotage', as the cause of the NEFA defeat and has thus injected, an element of sensationalism to focus attention—witness the national press running reviews and serialised extracts of the book.

According to the author, India had all the advantages for a win: "highly favourable terrain, superiority of the Indian Army over the Chinese in numbers, weaponry, supply system and quality of troops (all martial classes)", had ample time "for acclimatization to be physically fit and to prepare reasonably good defences", etc. The majority will however agree with General Chaudhuri that "we were woefully underequipped and undertrained for opposition at

heights, particularly for an army like the Chinese". Apparently, the author has got his facts wrong. May be, he did not wish to touch on the reasons for the army thus left 'under-equipped' and 'under-trained'. There is also, the theory of 'sabotage' and the influence of the proverbial 'foreign hands' to be invoked which is better done with India holding the advantage. Colonel Saigal on the other hand, probably missed the point that it may be alright for a politician to hint at 'sabotage' and 'foreign hands' but for a military historian, even a budding one at that has to be careful about his facts, lest, he allows albeit unwittingly, to wriggle out unnoticed what the great President Radhakrishnan calls—"we have been negligent and credulous". In other words, history should not be bending backwards to refurbish the tarnished image of fallen heroes.

The chapters on 'Growth of the Indian Army' and 'On Human Relations...' mainly deal about the officer cadre—the system is traced which had failed to evolve after independence resulting in degeneration and the predictable gutless and amateurish performance of the senior officers in 1962. The book also contains at various places a number of omissions and commissions alleged to have been committed by both junior and senior officers—named and unnamed (but identifiable) which have nothing to do with NEFA or 'security'. Whether true or false, these accusations hardly fit in with the format of a campaign study in the manner put across.

Now about the campaign proper, one would expect from the title of the book that the author knows what he is going to write about: a battle that should have been fought and not given up. It is not so. His inadequate knowledge about the happenings at the front and lack of grasp of the overall picture are soon disclosed, in making his claim to the title for his book, an empty one. The book lost its objectivity when the author started tinkering with the history of the time and glossed over the much involved origin of the NEFA battle which might have made it an unlikely proposition to be fought and won in isolation—same as, mere induction of troops independent of other factors may not tilt the balance in ones favour.

To sum up, a book which lends itself to be wrongly used with its half truths and, offered scapegoats, as balm to salve the Nation's eternal wound—the defeat of '62.

BMB

Secretary's Notes

Season's Greetings

At the close of 1979, I thank all members for the keen interest that they have continued to take in the activities of the Institution, which no doubt depends on the support it receives from you all. I will request you not only that you continue to renew your membership by paying the annual subscription well in time, but enrol at least one more member, if not more. Please remember this is your Institution and more support you give to it more strength will it derive and render valuable service.

Annual Subscription

There are several members who have not yet paid their subscription inspite of reminders sent to them. I am sure this has inadvertently escaped their attention and would be grateful if they would send me a cheque for the outstanding amount by return of post.

Changes of Address

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

NEW MEMBERS

The following new members joined the Institution :—

AHLAWAT, Captain S.P.
AHLUWALIA, Captain J.S.
AHUJA, Lieut A.K.
AMAR CHAND, Major
AMBIKE, Captain S.K.
ANAND, Captain V.K.
APARJIT, Fg Offr S.
ARORA, Captain P.R.
ARORA, Captain R K. (Life)
ARUN KUMAR, Captain T.S.
ASHOK KUMAR, 2/Lieut

ASHOK KUMAR, Lieut C P.
AUTAR SINGH, Major
BAHADUR, Captain C.R.S.
BAJWA, Sqn Ldr G.S.
BAKSHI, Captain H.S.
BALASUBRAMANIAM, Captain A.
BALASUBRAMANIAM, Captain M.I.
BALVINDER SINGH, Captain
BANERJEE, Sqn, Ldr B.
BANERJEE, Major N.K.
BANGA, Captain S.K.

BANSAL, Captain D.R.
BARDOLI, Captain P.K.
BASRAI, Major R.S.
BASSI, Fg Offr S.K.
BATRA, Major M.K.
BEANT SINGH, Captain
BEDI, Major, G.S.
BEDI, Captain T.S., SM
BELLARY, Flt Lt S.M.
BHAGWATI, Captain T.C.
BHANDARI, Captain P.P.
BHANDARI, Captain R.P.S.
BHANOT, Captain K.K.
BHARGAVA, Major V.P.
BHASIN, Captain S.B.
BHATIA, Sqn Ldr V.K.
BHATIA, Captain A.K.
BHATT, Captain K.D.
BHATTACHARYA, Captain D.K.
BHAVANI, Sqn Ldr A
BHAWANI SINGH, Captain
BHOJRAJ, Sqn Ldr A.S.
BHULLAR, Captain G.S.
BIR SINGH, Major
BRAHAM PAL, Captain
BRAR, Captain J.P.S.
CHADHA, Captain A.K.
CHADHA, Major R.K.
CHAHAL, Captain H.S.
CHANDER, Fg Offr P.
CHARANJIT SINGH, Major
CHARANJIT SINGH, Captain
CHAUDHARY, Captain K.K.
CHAUDHRI, Captain N.S.
CHAUDHRY, Captain A.K.
CHAUDHRY, Captain S.R.
CHATTERJEE, Captain S.
CHAUHAN, Sqn Ldr B.S.
CHAUHAN, Major K.S.
CHAWKSEY, Captain K.C.
CHHABA, Captain S.K.
CHHATWAL, Captain S.S.
CHHIBER, Flt Lt A.D.
CHOHAN, Captain G.S.
CHOHAN, Flt Lt S.K.
CHOPRA, Major J.S.
CHOPRA, Flt Lt V.K.
CHOUDHRI, Captain A.K.
DAGAR, Captain S.K.
DAHIA, Captain N.R.
DALAL, Flt Lt G.S.
DALAL, Captain S.M.
DALBIR SINGH, Captain
DASS, Captain G.
DALTON, Flt Lt C.A.
DANANJIT SINGH, Captain
DEBI RAM, Captain
DHADWAL, Captain M.S.
DHALIWAL, Captain S.F.S.
DHAWAN, Captain P.
DHILLON, Major D.S.
DHILLAN, Major D.S.
DIXIT, Captain R.
DOBRIYAL, Captain R.P.
DORGAN, Captain R.K.
DUBEY, Captain P.M.
DUBEY, Captain V.K.
DUGGAL, Captain J.S.
DUTTA, Major S.
GAHAT RAJ, Captain M.K.
GANDHI, Flt Lt A.P.
GANGJIIT SINGH, Major
GANGULY, Flt Lt S.C.
GHOSH, Major U.B
GHUMAN, Major B.S.
GIAN CHAND, Major
GILL, Captain G.S.
GILL, Major P.S.
GILL, Lt P.S.
GILL, Major S.P.S.
GILL, Captain S.S.
GIRENDRA SINGH, Major
GREWAL, Captain A.D.S.
GREWAL, Flt Lt D.S.
GUHA, Major N.C.
GUPTA, Captain A.P.

6

GUPTA, Captain P.K.
 GUPTA, Major S.K.
 GURMUKH SINGH, Captain
 GURNAIL SINGH, Captain
 HAIDER, Flt Lt R.K.
 HARCHARAN SINGH, Captain
 HARI KRISHNA, Brigadier
 HARISH CHANDRA, Flt Lt
 HARJIT SINGH, Captain
 HAZARIE, Sqn Ldr D.S.
 HIREMATH, Captain R.S.
 HODA, Captain S.S.
 HUNDAL, Captain P.S.
 INDERJIT SINGH, Major
 JACOB, Captain A
 JAGJIT SINGH, Captain
 JAGTAR SINGH, Major,
 JAI GANESH SINGH, Major
 JAIRATH, Major R.P., SM
 JAKHAR, Major A.S.
 JAKHAR, Captain P.R.
 JAMBUSARWALIA, Captain R.S.
 JAMWAL, Major R.S.
 JASJIT SINGH, Captain
 JASBIR SINGH, Captain
 JATHAUL, Flt Lt J.S.
 JAYAL, Major A.D.
 JAYAL, Captain N.S.
 JETELY, Major S.J.
 JOGINDER SINGH, Lt
 JOLLY, Captain G.S.
 JOHRI, Lt R
 JOSHI, Captain A.L.
 JOSHI, Major N.C.
 JOSHI, Captain V.G.
 JOSEPH JOHN, Captain
 JULKA, Major D.L.
 KAKKAR, Major R.K.
 KAPOOR, Captain S.
 KAPOOR, Captain V.
 KAPUR, Captain DEEPAK
 KARANDIKAR, Flt Lt V.S.
 KARIR, Major L.K.

KARUE, Captain V.M.
 KAUSHIK, Captain J.
 KAUSHIK, Captain M.N.
 KAZI, Flt Lt M.H.
 KELKAR, Sqn Ldr A.
 KESAR, Flt Lt A.B.
 KHATRI, Captain V.S.
 KHOKHAR, Flt Lt P.
 KHOSLA, Captain R.M.
 KHURANA, Major J.S.
 KLAIR, Captain H.S., SM
 KODANGE, Flt Lt M.H.
 KOHLI, Captain G.S.
 KUHITE, Captain V.L.
 KULWANT SINGH, Flt Lt
 KURIYAN, Brigadier P.K. Vr C
 KURNELLA, Major K.J.
 KUSHALAPPA, Captain J.C.
 KUTTY, Lt T.T.
 LIDDER, Captain J.S.
 MADAN, Captain R.K.
 MAGO, Major K.
 MAKUND SINGH, Captain
 MALHOTRA, Captain P.S.
 MALIK, Major B.K.
 MALIK, Captain S.C.
 MANIMALA, Captain S.T.
 MANGAT, Captain J.S.
 MANN, Lt D.S.
 MASANA, Sqn Ldr H.
 MATHUR, Captain V.
 MEHRA, Major R.K.
 MEHTA, Captain A.
 MEHTA, Captain S.C.
 MEHTA, Captain S.P.
 MENEZES, Lt Gen S.L., PVSM, SC
 MISHRA, Sqn Ldr A.R.
 MOHAN LAL, Captain
 MOHAN LAL, Captain
 MOHINDER SINGH, Major
 MOHENTY, Sqn Ldr N.
 MOORYANI, Captain M.S.
 MUKHERJEE, Captain S.K.

MUKHI, Captain S.C.
NAGPAL, Captain H.
NAIR, Captain N.V., SM
NAIR, Major P.S.C.
NAIR, Captain S.C.
NAMBOODRI, Flt Lt N.S.
NAMGYAL, Major P.
NARAYANASWAMI, Captain P.S.
NARINDER SINGH, Major
NASEEM, Major Z.
NAURIYAL, Captain
NAUTIYAL, Major C.M.
NEGI, Captyn R.S.
NIBHER, Major N.S.
OHRI, Captain A.
OHRI, Sqn Ldr R K.
OM PRAKASH, Captain
PADDE, Captain G.S.
PANDE, Captain N.C.
PANDE, Captain P.B.
PANT, Captain J.
PANWAR, Captain S.K.
PARAMJIT SINGH, Captain
PATHAK, Captain J.
PATHAK, Captain Y.C.
PATHANIA, Captain G.S.
PATHANIA, Major N.S.
PATHANIA, Captain R.S.
PATIL, Captain V.K.
POL, Major G.S.
PONWAR, Captain B.K.
PRADEEP KUMAR, Flt Lt
PRASAD, Captain K.M.
PREM PRAKASH Major,
PUAR, Major I.S.
PUNIA, Captain I.P.S.
PUSHKAR RAO, Major V.
SABHARWAL, Captain B.S.
SADSHIVA, Captain K.B.
SAGAR, Sqn Ldr V
SAINI, Captain K.S.
SAHNI, Captain V.K.
SAKSENA, 2/Lieut A.
SAMANT, Captain S.S.
SANDHU, Captain G.S.
SANDHU, Captain M.S.
SANDHU, Major R.S.
SANDHU, Flt Lt P.P.S.
SARIN, Major S.
SARKAR, Lieut D.K.
SARNA, Captain N.J.S.
SATHANAPATI, Captain D.
SAXENA, Captain A.K.
SAXENA, Captain O.P.
SAXENA, Captain V.
SAYAL, Major P.K.
SEHGAL, Captain A.K.
SETHI, Captain D.
SHAD, Captain J.P.
SHARMA SINGN, Captain
SHARMA, Captain A.K.
SHARMA, Captain A.N.
SHARMA, Major R.
SHARMA, Lieut R.
SHARMA, Major R.A.
SHARMA, Captain R.K.
SHARMA, Sqn Ldr S.C.
SHARMA, Captain T.C.
SHARMA, Flt Lt V.K.
SHEKHAWAT, Captain B.S.
SHEKHAWAT, Major K.D.S.
SHETTY, Captain R.
SHYAM LAL, Captain
SIDHU, Captain G.S.
SIDHU, Captain M.S.
SINGH, Captain A.D.
SINGH, Captain A.K.
SINGH, Captain D.B.
SINGH Major D.P.
SINGH, Major G.P.
SINGH, Captain H.P.
SINGH, Major H.S.P.
SINGH, Captain K.
SINGH, Major K.P.N.
SINGH, Captain P.M.
SINGH, Captain S.K.

SINGH, Lieut S.P.
 SINGH, Lieut V.K.P.
 SINHA, Captain, A.K.
 SINHA, Captain P.K.
 SNEHI, Flt Lt P.C.
 SODHI, Captain I.V.S.
 SODHI, Captain R.S.
 SOHAL, Captain M.S.
 SOOCH, Flt Lt J.S.
 SOOD, Major A.K.
 SOOD, Captain R.C.
 SROOP, Captain R.S.
 SRIKHARAN, Major T.M.
 SUCHA SINGH, Major
 SUD, Captain S.
 SUD, Major S.K.
 SUD, Sqd Ldr S.L.
 SUDAN, Captain M.
 SURAM SINGH, Captain
 SURESH CHANDRA, Major
 SUBRAMANIAM, Major R.V.
 SUR, Brigadier M.
 SURINDER SINGH, Major
 SURINDER SINGH, Captain
 TAMASKAR, Major V.G.
 TANDAN, Captain G.D.
 THAPA, Captain G.B.
 THAPA, Major P.B.
 THAPA, Captain R.B.
 THOMAS, Captain A.C.
 TRIPATHI, Captain R.N.

TUGNAIK, Captain S.K.
 TYAGI, Captain D.C.
 TYAGI, Major S.S.
 UPADHAYAY, 2/Lieut S.R.
 UPAL, Major S.K.
 VAID, Captain R.
 VARGHESE, Major P.J.
 VASUDEV, Captain B.M.
 VERMA, Captain R.S.
 VERMA, Lieut S.C.
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 WADHAWAN, Captain B.R.
 WADHWA, 2/Lieut S.K.
 WANKHADE, Captain J.
 WHIG, Brigadier M.L., MVC,
 FRGS
 WORYA, Captain B.S.
 YADAV, Flt Lt B.K.
 YADAV, Captain B.S.
 YADAV, Captain D.V.
 YADAV, Captain R.S.
 YADAV, Captain S.S.
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 YUHANNA, 2/Lieut N.
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