



AIR POWER

Journal of Air Power and Space Studies

Vol. 4 No. 4 Winter 2009 (October-December)



AIR POWER

CENTRE FOR AIR POWER STUDIES

New Delhi

AIR POWER is published quarterly by the Centre for Air Power Studies, New Delhi, established under an independent trust titled Forum for National Security Studies registered in 2002 in New Delhi.

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ISBN: 81-87966-30-0

AIR POWER Journal is published four times a year and is distributed by

KW Publishers Pvt. Ltd.

4676/21, First Floor, Ansari Road, Daryaganj, New Delhi 110 002

Telefax: 23263498 e-mail: knowledgeworld@vsnl.net

Printed and Published by Air Cmde Jasjit Singh (Retd) on behalf of the Forum for National Security Studies (the Trust running the Centre for Air Power Studies, New Delhi) and Printed by Rajkamal Electric Press, Plot No. 2, Phase IV, HSIIDC, Kundli 131028, Sonapat, Haryana and Published at P-284, Arjan Path, Subroto Park, New Delhi 110 010. Editor: Air Commodore Jasjit Singh (Retd).

RNI REGN No. DELENG/2006/18450

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Pakistan in recent years has been described in different ways, while it is not clear how it would evolve in the future. It has often been described as a failing state and other nomenclature. Perhaps Dr. **Amarjit Singh** has come closest to the reality by treating it as the most dangerous nation today, most of all for itself.



EDITOR'S NOTE

Lately there have been a great deal of assertive noises from China, including from official quarters. And yet it is very clear that it is neither prepared nor able to launch military action, leave alone war against India in spite of the fact that modernisation of the Indian armed forces is way behind schedule. This is not to imply that we can be complacent, as some are prone to be. But only to emphasise that we need to watch the evolving situation carefully and pay more attention to modernisation and filling the shortages of officers in the lower ranks in all three Services who would actually provide the cutting edge in war. And the real problem—as we saw in 1962, 1965 and in 1999—is that perceived weaknesses in the India's military capability by an adversary mostly become an invitation to aggression.

In fact, the unplanned decline of over 25 per cent of the combat force of the Indian Air Force (IAF) within a matter of five-odd years, which could be seen a decade earlier, should have received the urgent attention of the government and the people. And even a simple calculation would indicate that the shortfalls in authorised combat force levels in the Air Force and the Navy are due to lack of attention to modernisation. In the Air Force at least, it is clear that even a premature induction of the underpowered LCA and the acquisition of the 126 MRCA would not help to fill up the gaps in less than 10-15 years. And this is the reality while the air power balance is tilting

against us both in the north as well as in the west, not to talk of the strategic nexus between the two sides.

Here we run into a problem of understanding historically validated truths. We are largely weighed down by decision-making that gives priority to the lowest cost rather than quality. But this may in actual conditions prove more costly. For example, it has been reported in the media that the Finance Ministry has turned down the Defence Ministry's proposal to buy more tankers from Europe at a higher price than continuing with the purchase of the IL-78s from Uzbekistan which itself is highly dependent on Russia and some of the other former Soviet states. The European Airbus platform is a well tried and tested aircraft and no doubt more expensive than the IL-78s. But if the serviceability of the Airbus tanker is four times higher than that of the IL-78, then the decision should be made on the basis of the force available for use and not merely a notion of going for the least cost option. In war, serviceability and availability of operationally available aircraft make a big difference between victory and defeat. We may save money today, but may lose a lot in war tomorrow.

IMPLICATIONS OF CHINA'S NAVY MODERNISATION

JAYADEVA RANADE

The People's Liberation Army Navy (PLAN) celebrated its sixtieth anniversary with a well-publicised unprecedented 'coming out' party on April 23, 2009. This preceded the sixtieth anniversary of the Chinese Communist Party on October 1, an event of major importance for the Chinese leadership. The manner in which the PLAN's anniversary has been celebrated presages that the navy will play a major role in the years to come and that China's leaders feel confident of the country's position as one of the world's major powers.

Of the over 300 ships in the PLAN's inventory, 25 vessels and 31 aircraft took part in the review. This included, for the first time in public, four submarines, including the new indigenously-built Jin class nuclear-powered attack submarine equipped with 8,000-km range ballistic missiles. This submarine can target parts of the United States. China's President Hu Jintao, who reviewed the fleet, was projected as a confident leader capable of holding his own in the international community and leading the country into the coming era. China used the occasion to highlight its international stature. Foreign ships participated in the review as naval delegations from 29 countries watched. India's Navy Chief was among those who witnessed the

* **Jayadeva Ranade** is a Distinguished Fellow at the Centre for Air Power Studies and a former Additional Secretary in the Cabinet Secretariat, Government of India.

Traditionally, China has been a continental power which has remained locked in land warfare and neglected the sea. China's Communist leadership similarly favoured the PLA's ground forces with which it forged intimate bonds during the long years of guerrilla warfare on the path to power.

display. The review was a clear demonstration of China's strength and signalled that China's navy had come of age.

A good example of this new found confidence was the remark of a senior Chinese Navy officer to US Admiral Keating during the latter's visit to China recently. According to Admiral Keating, the senior Chinese Navy officer told him, ostensibly half jocularly: "As we develop our aircraft carriers why don't we reach an agreement, you and I. You take Hawaii East, we'll take Hawaii West and the Indian Ocean. We'll share information and we'll save you all the trouble of developing your naval forces west of Hawaii". The proposal, disclosed by Admiral Keating during a visit to Delhi in mid-May 2009,

reflects long-held Chinese aspirations.

Traditionally, China has been a continental power which has remained locked in land warfare and neglected the sea. China's Communist leadership similarly favoured the PLA's ground forces with which it forged intimate bonds during the long years of guerrilla warfare on the path to power. However, Deng Xiaoping, the pragmatic Chinese leader who initiated the reforms and "open door" policy at the end of 1979, anticipated the need for naval power in the future. Opinion in favour of building the navy was created through articles in the media, which, particularly since the mid-1980s, recalled the exploits of China's 15th century eunuch Admiral Zeng He. Articles by think-tanks and in the magazines at the same time recalled that the major imperialist powers all had powerful navies and dominated the seas. China, they clarified, needed a navy not to create an empire but safeguard its own territories. In a far-reaching move, Deng Xiaoping in 1982 appointed his protégé Admiral Liu Huaqing, one of the very few Chinese military officers to have actual maritime experience and have served for a while in the navy, to modernise the PLAN.

Admiral Liu Huaqing focussed first on formulating a strategy for the PLAN and then developing an indigenous ship-building capability. He was conscious of the fact that China did not have a developed navy and that neither had China's military establishment developed a strategy for the navy. He was of the view that the navy required its own strategy for war and accordingly tasked groups of officers to formulate draft strategies and doctrines specifically for the navy. Admiral Liu Huaqing defined his concept as "active defence strategy, coastal waters warfare". In the process of finalising this formulation, the term "coastal waters" needed to be defined. This was defined by the navy as the seas within 200 miles of the coastline. Admiral Liu Huaqing, with Deng Xiaoping's approval, defined this to include "the Yellow Sea, Eastern Sea (East China Sea), the Southern Sea (South China Sea), the Nansha Archipelago and Taiwan, the seas on this side and that side of Okinawa, as well as the Northern Region of the Pacific." All outside these coastal waters were the "medium and far seas". In 1985, Admiral Liu Huaqing for the first time officially enunciated the "Coastal Waters Defence Naval Strategy", thus, launching the process of modernising the PLAN.

China's strategic navy planners also recognised that the PLAN would be required to play an increasingly larger role in the future, particularly in the South China Sea and waters around China.

China's strategic navy planners also recognised that the PLAN would be required to play an increasingly larger role in the future, particularly in the South China Sea and waters around China. This, they postulated on the basis of the provisions of the "UN Convention on the Law of the Sea". Chinese calculations indicated that China's maritime space exceeded three million square kilometres, with the coastal seas and continental shelf measuring almost 273 million hectares. They looked at this maritime space as a strategic resource replacement area as land resources get depleted. Additionally, maritime trade was developing fast and they anticipated then that the volume of sea-borne trade would grow to over US\$ 1 trillion by 2020 and that the sea lanes of communication would become "lifelines of national existence and development".

China's navy has gradually transformed itself from a coastline-hugging brown water navy into one with blue water capability. Chinese strategic planners had envisaged a three-stage development.

Admiral Liu Huaqing simultaneously embarked on a mission to purchase modern vessels and obtain the latest technology for building naval fighting vessels. He sourced the Soviet Union, Germany and France. The success of Admiral Liu Huaqing's policy became evident within a decade and a half when Chinese shipyards began building frigates and destroyers. Later, they built diesel-powered submarines and still later, nuclear-powered submarines. The Jin class submarine represents the latest version of a submarine indigenously built in China and is reputed to be just below similar cutting-edge submarines built by the USA and Russia. The

Chinese Navy now, within just two decades of initiation of its modernisation plans, has the capability to target the USA and definitively delay any effort by the US, or other navy to reach Taiwan in time to assist it in the event of hostilities between China and the island nation. It remains, however, the smallest of the three Services in the PLA.

China's navy has gradually transformed itself from a coastline-hugging brown water navy into one with blue water capability. Chinese strategic planners had envisaged a three-stage development. In the first stage, the strength of the existing navy was to be augmented—mainly with purchases from the erstwhile Soviet Union and advanced West European countries—and facilities for building naval fighting ships created. The navy was to develop the capability of guarding its territories up to the first island chain. This comprises a series of islands that stretch from Japan in the north, to Taiwan, and Philippines in the south. In the second phase, the PLAN was to become a fighting arm capable of delaying attempts by the US and other navies from speeding to Taiwan's assistance in the event of hostilities, safeguarding China's coastline and Exclusive Economic Zone (EEZ) and protecting China's territories up to the second island chain. The second island chain includes Guam, Indonesia and Australia. Emphasis was, therefore,

given to construction of submarines of which China now has over 60. In the third stage, it was to acquire blue water capability and global reach by the mid-21st century. The envisaged role of the PLAN is to safeguard China's energy routes and supplies, its sea-borne commerce, and eventually help recover the claimed and currently disputed offshore territories. Regional dominance would be a prerequisite. As the PLAN grew to its current strength of 225,000 personnel, the operational doctrine of the Chinese Navy was appropriately revised and it today mandates "offshore defence", which implies authorisation of pre-emptive action. To suit its operational goals, the PLAN concurrently altered its organisation table and inventory to add a naval air arm, or PLAN Air Force and two brigades of Marines. The PLAN Air Force, incidentally, shares some types of fighter aircraft with the PLA Air Force (PLAAF).

US intelligence recently declassified assessments revealing that secret long-range patrolling by Chinese Navy submarines increased appreciably in 2008.

The PLAN has quietly been playing an ever increasing role in China's security, especially in the region. It has been used to reinforce China's stand in cases where the legality of offshore oil exploration concessions granted to foreign companies by other countries has been contested by Beijing. It has also been used to assert China's claims on the disputed Spratly and Paracels archipelagos and in offshore territorial disputes with Japan. Chinese Navy ships have fought silent battles separately with naval vessels of the Philippines and Vietnam. Beijing has asserted that it will protect its claimed territories by force, if necessary, and has enacted a maritime law to that effect. While Chinese Navy planners have been conscious of the need to protect Chinese commerce transiting the Malacca Strait and have been uneasy at US-led efforts to patrol the strait, they have so far refrained from undertaking regular patrols of these seas. This restraint would have been prompted by the need to avoid the possibility of a higher level of confrontation and raising concerns in neighbouring countries in the region. PLAN submarines and intelligence vessels have, nevertheless, been regularly patrolling the Taiwan Strait to

The deployment off Somalia was significant. It confirmed that PLAN ships could use Pakistani ports in case of need; that the PLAN was capable of undertaking offensive operations at sea; that PLAN could operate in waters far from home; and that the PLAN could maintain its ships at sea in operational mode for long stretches.

take soundings, map the sea-bed, record engine signatures, as well as monitor the various US and Japanese vessels that visit. US intelligence recently declassified assessments revealing that secret long-range patrolling by Chinese Navy submarines increased appreciably in 2008. The PLAN's submarine arm conducted twelve secret long-range patrols in 2008 compared to seven in 2007, two in 2006 and none the year earlier. These measures are intended to delay vessels of the Japanese, US and other navies from rushing to Taiwan's assistance in the event of hostilities between China and Taiwan. A former PLAN East Sea Fleet Commander and delegate to the CPPCC, Zhao Guojun, publicly stated, on the sidelines of the National People's Congress deliberations in Beijing earlier in 2009, that the PLAN had the military capacity to defend

China's territory in the South China Sea.

A few years ago, China's leadership decided to publicise its ambition of possessing a blue water navy. Accordingly, a series of articles began appearing in the official Chinese media lauding the exploits of the 15th century eunuch Admiral Zeng He. These extolled his seven voyages through the Indian Ocean and around Africa, but keeping in view international sensitivities, predictably highlighted the peaceful, mutually beneficial commercial aspects of his journeys. Incidentally, the name "Indian Ocean" has rankled Chinese leaders and military strategists for a long time and articles in China's military literature and Party newspapers periodically declare that the name Indian Ocean does not mean that it is "India's Ocean". The PLAN began undertaking voyages across the Indian Ocean on goodwill visits to Pakistan, the Gulf, Europe, Africa and India. PLAN ships similarly crossed the Pacific to pay goodwill visits to the USA. With each visit, the PLAN slowly inched toward

acquiring blue water capability. The PLAN also began conducting exercises with the Pakistan Navy and, subsequently, small-scale exercises with other navies.

China took a major step at the beginning of this year, which demonstrated that it was well on the way to acquiring a modern blue water navy with global reach. It deployed two destroyers and one supply ship of the PLAN, including one with helicopters and 800 soldiers, including Marines, aboard. The flotilla was deployed for anti-piracy operations off Somalia in the Gulf of Aden. The deployment of Somalia was significant. It confirmed that PLAN ships could use Pakistani ports in case of need; that the PLAN was capable of undertaking offensive operations at sea; that PLAN could operate in waters far from home; and that the PLAN could maintain its ships at sea in operational mode for long stretches. Another important feature became evident when the tour of duty of the PLAN ships off Somalia coincided with a joint exercise of the Chinese and Pakistan Navies and sudden dispatch to the South China Sea of a PLAN warship to enforce its territorial claim. These confirmed that the PLAN had acquired the operational and logistical capability to conduct multiple operations in different theatres. This deployment occurred after a senior officer each from the PLAAF and PLAN were appointed last year, for the first time ever, to the PLA General Staff Headquarters to enhance inter-Service coordination and compatibility in joint operations.

The hitherto hidden muscular role of the PLAN has become more visible in the past few months. This had been hinted at in China's Defence White Paper, 2006, which had announced that the PLAN would take on a more expansive role, reaching out beyond the coastline. While confrontations have occurred between Chinese and US Navy vessels, the manner in which Chinese vessels confronted the US survey ship the USNS *Impeccable* in March was clearly deliberate and more serious. US officials were quick to describe the confrontation, which occurred just days before the first summit meeting between new US President Obama and Chinese President Hu Jintao, as the "most serious" incident since

The hitherto hidden muscular role of the PLAN has become more visible in the past few months.

That these encounters were not restricted to isolated events in a limited time period has been evidenced by the latest incident that occurred on Thursday, June 11, 2009.

that involving the EP-3 aircraft in 2001 while the Chinese responded that the US Navy ship had intruded into China's EEZ. The incident predictably found an echo in the deliberations of the National People's Congress then underway in Beijing. It prompted a senior PLAN officer to again hint that China would acquire an aircraft carrier. The object of the confrontation with the USNS *Impeccable* was to demonstrate that the PLAN is capable of defending its waters and willing to confront even the USA if necessary to safeguard its interests. The latter is

a clear signal to Taiwan and other countries in the region, that have offshore disputes with China, that they should not bank on US assistance. In case the message was not adequately clear, another stand-off occurred between Chinese vessels and a US Navy survey ship in end April, barely days after the PLAN celebrated its sixtieth anniversary. This was the fifth such stand-off in recent months. The messages are a clear indication that Beijing feels it has a navy which can delay, or frustrate, the assistance that the few other more powerful navies operating in the region viz US, Russian and Japanese, can render to the neighbouring countries. US Admiral Michael Mullen told a defence conference recently in Washington that China's build-up of sea, military and air power appeared to be aimed at counter-balancing US power in the Pacific.

That these encounters were not restricted to isolated events in a limited time period has been evidenced by the latest incident that occurred on Thursday June 11, 2009. In this still unpublicised incident, described by US military officials as an "inadvertent encounter", a Chinese submarine hit an underwater sonar array being towed by the destroyer USS *John McCain*. This incident occurred in Subic Bay off the Philippines coast. The submarine and destroyer did not collide though the array was damaged. The US description of the incident as "inadvertent" is based on the assessment of US military officials that staging such an incident would be risky as the submarine's propellers could have got entangled in the array.

The infrastructural base has clearly been laid for building warships and modernising the navy adequately for China's needs. Persistent efforts continue, however, to acquire technology and purchase the latest ships and armaments from advanced countries. That the PLAN will augment its fleet strength and particularly add submarines, destroyers and frigates to its inventory, was confirmed by PLAN Commander Wu Shengli on April 16, 2009. He said that the navy would accelerate plans to build a new generation of warships, submarines, fighter aircraft and high precision long range missiles. There are reports that in the next three years (2009-12), the hardware construction of China's naval force is going to accelerate to a much higher level. Implicit in this declaration is the Chinese leadership's goal of being able to challenge the US in case the latter intrudes in areas perceived as being of China's national interest. Work on construction of aircraft carriers has been underway in Chinese shipyards and it is anticipated that the first Chinese-built aircraft carrier will be inducted into the PLAN's South China Sea Fleet by 2015. This will be followed by two others within another ten years. China's growing volume of sea-borne trade and import of almost 70 percent of its petroleum requirements by sea ensure that PLAN will receive the required allocations of funds for its plans to modernise and strengthen its fleet. Meanwhile, the PLAN has begun formulating a new doctrine to replace the current doctrine of "Active Offshore Defence". The present doctrine implies authorisation for preemptive strikes and is intended to safeguard both the island chains that China regards as part of its territory or within its area of claimed influence. The proposed new doctrine of "Far Sea Defence" will authorise and permit operations beyond the 200-nautical mile EEZ and multi-dimensional precision strikes. The PLAN presently has 27 destroyers, 48 frigates, 54 diesel attack submarines and 6 nuclear attack

The addition of aircraft carriers to the fleet strength of the PLAN will immediately and considerably enlarge the 'reach', range and scope of the operations undertaken by the PLAN. China plans to add three aircraft carriers to its fleet by 2020.

submarines. Aircraft carriers, long-range support ships and submarines capable of launching ballistic and cruise missiles are planned to be added.

The addition of aircraft carriers to the fleet strength of the PLAN will immediately and considerably enlarge the 'reach', range and scope of the operations undertaken by the PLAN. China plans to add three aircraft carriers to its fleet by 2020. Separately, PLA officers and Chinese shipbuilding corporation officials 'leaked' information to journalists in early 2009 that China may have up to four indigenously designed and built aircraft carriers. Two of these would be nuclear and two conventional. They disclosed that the *Varyag*, acquired from Russia, will be readied as a training vessel. The *Varyag* has, incidentally, been reported as having left the shipyard of the Dalian Shipbuilding Corporation in March 2009 for an unknown destination. The Dalian Shipbuilding Corporation will be the site for construction of a 70,000-80,000 tonne displacement carrier. Another aircraft carrier is to be built at the newly constructed US\$ 3.6 billion Shanghai Jiangnan Changxing Shipbuilding base. The base is located off the coast of Shanghai on Chanxing Island. This aircraft carrier will be of indigenous design and various reports suggest that China already possesses the catapult techniques necessary to operate an aircraft carrier and that the deck of China's first aircraft carrier will be modelled on the US Navy's Nimitz class aircraft carriers. Construction of this base commenced in June 2005 and has been undertaken by the Jiangnan Shipyard (Group) Company Ltd, one of China's oldest state-owned shipbuilding companies. Nan Daqing, who is closely connected with the Chinese Navy and is also General Manager of the Jiangnan Shipyard (Group) Company Ltd, disclosed during an interview on Shanghai's Dragon TV three months ago that all the tasks necessary to equip the dockyard with the capability to undertake the task allotted by the Chinese Navy of building an aircraft carrier are complete. He repeated this in another interview in April 2009 to the Japanese newspaper *Asahi Shimbun*. This is the first statement by a representative of an entity which is directly involved that China is constructing an aircraft carrier. Other reports have indicated that security by armed police personnel at all entry and exit points to Dockyard No 3, which is used by the

military, has been enhanced. Security at Dockyard No 1, which is for civilian use, is provided by company security personnel.

The other companies involved in major shipbuilding projects for the Chinese Navy are the Dalian Shipbuilding Corporation, Huangpu Shipbuilding Corporation in Guangzhou and Shanghai's Hudong Shipbuilding Company. Chinese defence blogsites reveal that for these projects, the Dalian Shipbuilding Corporation will build a steam-turbine powered large air-defence destroyer, which will be an expanded 051C destroyer. The Shanghai Jiangnan Changxing shipbuilding base will construct three general 7,000-tonne class missile destroyers whose armaments include medium and long range air defence missiles, anti-submarine missiles and anti-ship and land-attacking missiles. Four of the upgraded version of the Type 052C destroyer, to be called the Type 052D, will be built by the Huangpu Shipbuilding Corporation in Guangzhou and are slated to become the air defence core of the PLAN aircraft carrier group. Shanghai's Hudong Shipbuilding Company is to build six, or eight, 23,000 class "flush-deck" amphibious transport dock ships. The PLAN continues to augment its submarine fleet. Unconfirmed reports suggest that the Bohai Shipbuilding Heavy Industry Company, the former Huludao Shipbuilding yard, will construct the Type 095 SSN while the Wuchang Shipbuilding Industry will construct the improved version of the Type 041 submarine.

The 225,000-strong PLAN has three fleets namely, the North Sea Fleet, East Sea Fleet and South Sea Fleet. Main PLAN bases include those located at Lushun, Huludao, Qingdao, Shanghai, Zhoushan, Wenzhou, Xiamen, Guangzhou, Zhanjiang and Yulin. The South Sea Fleet is anticipatedly operationally the more important. While each fleet comprises surface ships, submarines, coastal defence and naval aviation, the South Sea Fleet, in view of its envisaged potentially larger operational role, has allocated to it both the Marine Brigades totalling approximately 10,000 personnel.

The PLA Navy's Marine Corps was reestablished by the Central Military Commission (CMC) in 1979 and placed under command of the PLAN. The first Marine Brigade was constituted in May 1980 and based in Hainan. The

China already has the largest submarine force among the Asian countries, including 8-10 nuclear powered submarines. The Type 094 or Jin class nuclear-powered missile submarines have now entered service.

second Marine Brigade is also based in Zhanjiang, Hainan. Both brigades have a strength of 6,000 personnel, but in time of emergency, up to 28,000 personnel can be called up for service. The location of the Marines in Hainan clearly indicates that their intended operational role is in the South China Sea, namely, the Spratly and Paracel Island groups and, to a lesser extent, in Taiwan. The Marines are, however, considered elite troops and part of China's Rapid Reaction Forces. They are well equipped. In training, they receive particular emphasis in parachuting, amphibious warfare exercises, establishing beach-heads to launch direct assaults against the enemy and acting as a garrison

or assault group in island chains. The Marines have enhanced the operational role of the PLAN.

China already has the largest submarine force among the Asian countries, including 8-10 nuclear powered submarines. The Type 094 or Jin class nuclear-powered missile submarines have now entered service. The rapid development of the naval base at Sanya on China's southern island Hainan, near which a submarine construction facility is located, points to this. Plans earmark an aircraft carrier for the South Sea Fleet which exercises jurisdiction over the South China Sea. China's first aircraft carrier group, which is expected to include over 36 combat aircraft, is expected to consist of four type 052D destroyers, four general missile destroyers, two Type 054A frigates, and two Type 093 nuclear submarines. Such a force will have unmatched ready striking capability in the region. A bigger and modernised Chinese Navy will be a cause for concern in the region, which will be apprehensive that this navy will be used to settle outstanding offshore territorial disputes with countries like Vietnam, the Philippines, Thailand, etc in the first instance. Later, China could try to obtain better terms for negotiations in its dispute with Japan.

The South China Sea territorial dispute has the potential to become a major security issue between China and other countries in the region. The issue is complicated by the conflicting claims over territory and the estimated vast resources. The dispute encompasses the Paracel Islands, Macclesfield Bank and the Spratly Islands archipelago, but the Spratly Islands have attracted the most attention, having six claimants. Disputes exist additionally between China and Japan over the Senkaku-Diaoyutai Islands and between Korea and Japan over the Tokdo/Takeshima Islands.

Extra attention has been focussed on the Spratly Islands group, consisting of over 400 rocks, reefs and islands spread across 800,000 sq km, because of its estimated potential as a source of oil and natural gas. Chinese surveys describe the area as “the second Persian Gulf” with Chinese specialists asserting that the South China Sea could have reserves exceeding 130 million barrels of oil and natural gas. A survey undertaken by Russia tends to confirm these Chinese findings and assesses that there are up to 6 billion barrels of oil, 60 percent of which could be natural gas, in the area. The various claimant nations have, over the years, attempted to nibble away territory and while Vietnam occupies 20 rocks and islets, China is in possession of 8, the Philippines 8, Malaysia between 3-6 and Taiwan 1. The occupying nations have in some cases constructed structures or airstrips on the islands and regularly dispatch patrols to the area. This has led to confrontations and often low level, silent conflict, resulting in the deaths of seamen. Clashes at sea have occurred mainly between China and Vietnam and in a few instances between China and the Philippines. The frequency of confrontation in the area has been increasing over the years and especially since the 1980s, in part because of contracts being awarded to offshore oil exploration companies. The Spratly Islands have a strategic importance too, as they lie between Vietnam and the Philippines and could potentially block ships transiting through the South China Sea. Aircraft and helicopters based in the Spratlys would have the range to block the Malacca and Sunda Straits, both vital choke points for shipping going from the South China Sea to the Indian Ocean.

The South China Sea is also a strategically vital passageway through which sea lanes critical for many countries transit. More than 200 ships pass through it daily. The majority of oil, natural gas, other resources and commercial cargo flow through it to China, Korea and Japan from the Middle East and South East Asian countries. Japan receives 75 percent of its energy supplies from the Middle East through sea lanes passing through the South China Sea. The area is strategically important for the US which uses the freedom of the sea lanes of communication and the safety of navigation and overflight in the area, and is intent on maintaining these. The US Navy and US Air Force use the South China Sea passageway for transit between military bases in Asia and the Indian Ocean and Persian Gulf areas. Additionally, US interests are guided by US commitment to the security interests of Japan and South Korea.

China is the region's most powerful entity involved in the dispute and has been aggressive in advancing and building its claims. Vietnam, the Philippines, Taiwan, Malaysia and Brunei are in no position, either militarily or economically, to confront China. In its latest Defence White Paper, 2009, Australia too, unlike in the past report, has focussed on the rapid rise of China's military power. As part of building its case, China has cited Sung and Qing Dynasty records of the 12th and 18th centuries respectively. These are said to describe the location of the Spratly Islands. China then published a map depicting undefined dotted lines and claiming over 75 percent of the South China Sea. These claims, however, are flimsy in international law. In 1992, China's National People's Congress enacted the "Special Territorial Sea and Contiguous Zone Act" promulgating these claims. Thereafter, its navy has confronted and periodically turned back fishermen of neighbouring countries who were transiting, or fishing, in disputed waters. It has simultaneously exerted diplomatic and other pressure to coerce oil companies like BP and Exxon to back out of offshore exploration agreements with Vietnam and built permanent structures on the islands and rocks in its occupation. China has invested larger sums in recent years. Towards the end of 2007, it announced that it would develop a "new city" in the disputed area. Later, in November 2008, China announced its intention of investing more than US\$ 29 billion in oil

exploration projects in these disputed waters. The only obstruction to China's moves was when it confronted Japan, a strong adversary, in a dispute over territory in the East China Sea. In the agreement concluded by both countries on June 18, 2008, they agreed to mutual exploration and exploitation. The agreement also asserted that all joint venture projects are to be located on the border between the two countries, as originally asserted by Japan.

While a powerful Chinese Navy undoubtedly poses a serious challenge to India, some defence analysts observe that the Chinese and Indian Navies have both made qualitative and quantitative improvements over the past decade. The PLAN has been noticed making effective use of its air and marine assets and using them in joint operational exercises. As evident from the PLAN's deployment in the Gulf of Aden, it appears to have decided on a policy of fielding adequate resources in an operational theatre and not sending merely a token presence. The deployment in the Gulf of Aden has demonstrated China's ability to send adequate forces and maintain an operational deployment for a long time. The conduct of an exercise with Pakistan and dispatch of a warship to the waters off the Philippines at the same time demonstrates that China's navy now has the capability to conduct operations simultaneously in more than one theatre. Its nuclear-powered submarines, which are equipped with long range ballistic missiles, have adequate strike range and reach. Cooperative linkages between the Chinese and Pakistani Navies are strong and PLAN vessels will be able to further extend operational 'reach' by using Pakistani ports. The Chinese and Pakistani Navies have been conducting joint exercises—probably of basic level—for some years now and they could, in the event of necessity,

The deployment in the Gulf of Aden has demonstrated China's ability to send adequate forces and maintain an operational deployment for a long time. The conduct of an exercise with Pakistan and dispatch of a warship to the waters off the Philippines at the same time demonstrates that China's navy now has the capability to conduct operations simultaneously in more than one theatre.

act in concert. China has for some years been trying to acquire influence in certain Indian Ocean littoral countries and has, nearer home, assisted in the construction of port facilities in Myanmar, Bangladesh and Pakistan. It has an interest in developing the Hambantota Port in Sri Lanka. This activity has resulted in China having ready access to a ring of ports – known as the “String of Pearls” -- in the region. A modernised and strong Chinese Navy could choke off India’s essential imports and maritime trade and mount an effective blockade of Indian ports in the event of hostilities as a preliminary step. The PLA Navy could later be used to threaten land targets and for direct intervention in case of hostilities. Analysts assess that while China’s submarine capabilities are ahead of India’s, the pace of construction of large tonnage surface battleships and an aircraft carrier in India is faster than that of China. They are of the view too that with the development of missiles, particularly the BrahMos, the technological standard of India’s ship-to-ship missiles is superior.

THE CHINESE CONCEPT OF COMPREHENSIVE NATIONAL POWER: AN OVERVIEW

P. K. GHOSH

*In measuring a country's national power, one must look at it comprehensively
and from all sides.*

—Deng Xiaoping¹

China is a sharply rising power in the political hierarchy of the world. Its perception and assessment of its present power status in relation to other nations is of considerable importance since it is closely linked to apprehensions about the actions of a powerful China in the future.

The Chinese are acutely conscious of their rising trajectory and they possess an innate desire to enhance their global status. Contextually, they seem to be able to match their growing military capacity with their economic strategy and successfully link it to the direction of their foreign policy.

Hence, the Chinese rise is being realised not through a gradual laidback process but through a carefully crafted national strategy, political will and human exertion. In such a scenario, evaluating the global hierarchy of nations for tempering the foreign policy and strategy in accordance with the evolving power equations is of prime importance to the Chinese.

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1. As cited in *Renmin Ribao* (People's Daily), February 26, 1990.

In the current scenario, with China on the threshold of great power status, their strategists have been forecasting the future international hierarchy through the measurement and comparison of Comprehensive National Power (CNP) of various nations.

Assessing national power is neither a new concept nor a particularly unique one. It has been prevalent in both Western and Eastern military thought processes since ancient times. However, the strong sense of historical importance has made the Chinese look into their own history while sharing notes with the relatively contemporary Western thought process.

In ancient times in China, the Warring States focussed on how a wise leader made strategy according to the power of his state. The famous Sun Zi warned that the outcome of war—to a large extent—depended on the correct assessment of power through calculations and intelligence estimates of enemy strengths and weaknesses.

In the current scenario, with China on the threshold of great power status, their strategists have been forecasting the future international hierarchy. The means of making such strategic assessments has been through the measurement and comparison of Comprehensive National Power (CNP) of various nations.

The aim of this exploratory article is to attempt understanding the important Chinese concept of CNP as a measurement of geo-political power and provide an overview of its efficacy, uniqueness and methodological structure. Analysis of the CNP of individual countries and their futurist predictions and subsequent consequences will be avoided to prevent a diffused enlargement of the article.

BACKGROUND

During the Cold War period, a nation's power was largely determined by the strength and capability of its military forces. Accordingly, the Soviets developed the concept of Co-Relation of Forces (COF) as a means of carrying out such measurement (the concept will be compared and discussed later

in the article). The accent of this concept was overwhelmingly military in accordance with the thought process then in existence. However, with the dismantling of the power blocks and a current transition towards a multipolar world, sheer military might no longer remains the defining factor of strength and power. Instead, elements such as economics, technological ability, etc have become increasingly critical in the competition for power and influence in the world.

Chinese strategists having taken note of Deng Xiaoping statement, "In measuring a country's national power, one must look at it comprehensively and from all sides"², have come to evolve the concept of CNP.

CNP (*zonghe guoli*) refers to the combined overall conditions and strengths of a country in numerous areas. It is the aggregate sense of all factors such as territory, availability of natural resources, military strength, economic clout, social conditions, domestic government, foreign policy and its initiatives, and, finally, the degree of wielding international influence. Thus, CNP is an evaluatory measure, done both qualitatively and quantitatively, of the current and future strengths of all these above factors. While the former is resorted to for general discussions of a country's strengths and weaknesses, the latter is used to calculate numerical values of CNP through the use of formulae and their own extensive index systems and equations. It is noteworthy that the Chinese seem to reject the usage of GNP (Gross National Product) as a means to evaluate national power, as is prevalent in the US. A closer inspection reveals that the concept of CNP and the associated analytical methods are not rooted in traditional Marxist-Leninist dogma or Western social science but are in many ways unique.

Contextually, the ongoing "debate" about CNP is also important for the RMA (Revolution in Military Affairs) researchers, because, according to

A closer inspection reveals that the concept of CNP and the associated analytical methods are not rooted in traditional Marxist-Leninist dogma or Western social science but are in many ways unique.

2. As cited in Ibid.

The notable aspect of both studies is that they have avoided mentioning China as a future “superpower” (unlike the Chinese media), preferring to label China as one of the future five equal “poles”.

Chinese analysts, foreknowledge of a nation’s CNP can determine which side will win a war by better implementation of RMA³. Thus, future CNP scores can help not only in identification of the status hierarchy and the power potential of a state but also which state is likely to implement RMA to a higher degree and, hence, be the eventual winner in an overt war.

Unfortunately, numerous Chinese authors have made predictions about future CNP, but few provide detailed accounts about the associated methodologies for measurement and evaluation.

Some of the fairly detailed accounts of calculating CNP have appeared in two books by two different institutes. While one has been published by the Academy of Military Science (AMS), it is contrasted by the other book published later by the civilian Chinese Academy of Social Sciences (CASS). It is noteworthy that both these have approached the problem within the stated ambit outlined by Deng Xiaoping and some of the authors were apparently directly involved with Deng’s estimates. While the AMS study propounds a more orthodox view (the published work of Senior Colonel Huang Shuofeng) the reformist view was presented by a team of researchers from CASS who had Gao Heng, a noted author, as their senior adviser. Seemingly, Gao helped to invent the key Chinese concept of structural multipolarity, which he published in 1986. This coincided with Deng Xiaoping’s national security adviser announcing the concept⁴.

Interestingly, both the studies are based on the hypothesis that the US is a declining power with the gap between its power and those of other growing

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3. According to Li Qingshan, “Through the analysis of belligerent countries’ Comprehensive National Power, even before a war has begun, people frequently can know the results in advance.” Li Qingshan, *Xin junshi geming yu gao jishu zhanzheng* (The new revolution in military affairs and high-technology warfare)(Beijing: Junshi kexue chubanshe, 1995), pp.191-192.
 4. See Gao Heng, *Shijie zhanlue geju zhengxiang duojihua fazhan* (The strategic world structure is developing toward multipolarity), *Guofang daxue xuebao* (National Defense University Journal), no. 2 (1986), pp.32-33.

power centres (or poles) rapidly reducing and, hence, the world is slowly moving towards multipolarity. The other notable aspect of both studies is that they have avoided mentioning China as a future “superpower” (unlike the Chinese media), preferring to label China as one of the future five equal “poles”.

The main point of divergence between the two studies arises from estimating the rate of growth of China in contrast to the decline of the US. They also differ on how to assess the military power of a state. There is also a contrast in the debate carried on in the two studies about the future strategic environment by the civilian and military mindsets in China. It is apparent that CASS and AMS have used different rates of growth and decline. **AMS growth estimates have projected China’s CNP increasing seven times faster than the CASS pace;** the CASS rate for Japan is also much slower. The CASS assessment has the US CNP decreasing 1 percent a year.⁵ The US is likely to be overtaken by Japan whose CNP is growing by 1 percent.

An analysis of the two works reveals that the AMS study projections suggest that by 2020, both the US and China will have (roughly) equal national power. Thus, in a way supporting the views propounded by Deng Xiaoping and Li Peng which assert that the world is moving towards multipolarity. This is in sharp contrast to the CASS study and, hence, the reformist view of thought. CNP scores for the present suggest that it continues to be a unipolar world, with America being the superpower. Projected CASS scores show that by 2020, Japan will be number one, followed closely by the United States. Most surprisingly, it projects China to be only number eight in the world, and not one of the major powers in the world. It predicts that China and Russia will be “half poles” because they will each have only about half the national power of Japan and America.

ORIGINS

The concept of “Comprehensive National Power” has ancient cultural roots and has “evolved from the concepts of ‘power,’ ‘actual strength’, and

5. “Geo-Political Power Calculations”, available at <http://www.fas.org/nuke/guide/china/doctrine/pills2/part08.htm>

“China’s wise ancient strategists,” Wu writes, “never advocated relying only on military power to conquer the enemy, but emphasized combining military power with the non-military power related to war in order to get the upper hand.”

‘national power.’”⁶ The studies of Herbert Goldhamer provide examples of ancient Chinese strategists who emphasised the need to conduct calculations about the future⁷.

In his book *Grand Strategy*, Wu Chunqiu, from AMS, gives examples from Sun Zi’s *The Art of War*, Wu Zi’s *The Art of War*, and Guan Zhong’s *Guan Zi*, to show how “to a certain extent, the discussion of warfare in Chinese ancient literature embodies primitive, simple, and unsophisticated national power thought.”⁸

“China’s wise ancient strategists,” Wu writes, “never advocated relying only on military

power to conquer the enemy, but emphasized combining military power with the non-military power related to war in order to get the upper hand.” Sun Zi advanced that there were “five things” and “seven stratagems” that governed the outcome of war. He felt that the results of war could be forecast in advance by weighing components, which included politics, military affairs, economics, geography, and “subjective guidance”.⁹

One of the largest and most famous geo-political coalitions in ancient Chinese history was based on power calculations similar to the assessments of CNP. In 334 BC, during the Warring States era, the strategist Su Qin proposed that the six states of the vertical pillar of the strategic rectangle that made up the Warring States, unite against the hegemonic state of Qin. Su Qin successfully persuaded all six to “unite vertically” (*he zong*) based on quantitative calculations of comparative power and prevented their destruction, one by

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6. Wang Songfen, ed., *Shijie zhuyao guojia zonghe guoli bijiao yanjiu* (Comparative studies of the comprehensive national power of the world’s major nations)(Changsha: Hunan chubanshe, 1996), p.23
 7. See Herbert Goldhamer, *The Adviser* (New York: Elsevier, 1978); and Herbert Goldhamer, *Reality and Belief in Military Affairs: A First Draft* (Santa Monica, CA: RAND Corporation, 1979).
 8. Wu Chunqiu, *Guangyi da zhanlue* (Grand strategy)(Beijing: Shishi chubanshe, 1995), p.98.
 9. Ibid.

one, from Qin's hegemonic designs. This coalition stood the stand of time for nearly a century.¹⁰

ORIGINS OF THE MODERN CONCEPT

The phrase and the modern concept of "Comprehensive National Power" came into being during the early 1980s when the idea of measuring and comparing national strengths developed. The driver for this development mainly took place as Deng Xiaoping modified Chairman Mao's Party line that "world war was unavoidable," to predicting that "world war probably can be avoided."¹⁰ The Marxist-Leninist "foundation" of Deng's new assessment of the security environment was that "the growth of the world's forces of peace exceeds the growth of the forces of war." The Cold War period signified that the United States and the Soviet Union were at a stalemate in their military struggle, but the strength of countries that were opposed to war was also increasing. The international environment was evolving and the importance of economic issues was growing. Hence, in such a scenario, military force could no longer be the sole judge and primary index to a country's strength which would be determined by numerous other factors as well. Thus, there needed to be means for measuring the sum of the "forces restricting war".

Deng wrote:

If at the end of the new century, China attains a "comparatively well off level," then there will be a major increase in the power restricting war. If China again goes through thirty to fifty years of construction, and comes close to the level of developed countries, then at that time, it will be even harder for a war to be fought.¹¹

The importance of economic issues was growing. Hence, in such a scenario, military force could no longer be the sole judge and primary index to a country's strength.

10. Zhu Liangyin and Meng Renzhong, *Deng Xiaoping zonghe guoli sixiang yanjiu* (A study on Deng Xiaoping's Comprehensive National Power thought), in Li Lin and Zhao Qinxuan, eds., *Xin shiqi junshi jingji lilun yanjiu* (Studies of new period military economic theory), (Beijing: Junshi kexue chubanshe, 1995), p. 42.

11. *Ibid.*, p. 44.

“Deng Xiaoping believes that military power is the basic means for ensuring that economic power will rise, protecting the nation’s general interests, and carrying out global strategic goals.”

Thus, Deng has been attributed the foresight to establish the theoretical foundation and basis of the concept¹². However, it is unlikely that Deng himself ever used the terms “Comprehensive National Power” which would have probably come around through analysis of his statements on the priorities of China’s national construction and the significance of this development to the growth of China’s strategic power.

Writing on the issue, Zhu Liangyin and Meng Renzhong of AMS state that Deng believed that economic strength can be a force for peace and can counter military strength. It was probably this aspect which led to economic power being considered the most important and essential factor in Comprehensive National Power calculations. However, this aspect does not undermine the importance of military power as the authors go on to state that “Deng Xiaoping believes that military power is the basic means for ensuring that economic power will rise, protecting the nation’s general interests, and carrying out global strategic goals. Therefore, while we, on the one hand, emphasize economic power as being the base of Comprehensive National Power, we must on the other, devote ourselves to the development of military power, the element with the most direct role in Comprehensive National Power.”¹³

Similarly, the importance accorded in the CNP calculation to scientific and technological research and development in the military and economic arenas was primarily due to Deng’s accent on these aspects— a probable elaboration of the Marxist thought of science being the productive force.

In debating about the origins of the term Comprehensive National Power Senior Colonel Huang Shuofeng of AMS, claims authorship of the specific phrase. Writing in his book *On Comprehensive National Power*, Huang goes on to

12. Ibid., p. 43.

13. Ibid., pp.44-46.

describe that in 1984, he was part of a group of Chinese scholars who undertook a study on China's future and likely defence strategy in 2000. It was this study group that closely analysed the "national power equations" propounded by Ray Cline and the West German professor William Fuchs. However, these models for comparing international power balance were rejected as they were found to be limited and narrow, devoid of a holistic character. Finally, the participating Chinese scholars began to create their own models and formulas for weighing and contrasting different countries' overall power. It is around this time Huang says that he "put forward the concept of 'Comprehensive National Power,' and established a 'Comprehensive National Power dynamic equation' model aimed at comprehensively assessing the comprehensive power of different countries in the world, and conducted comparative analysis of the major countries' Comprehensive National Power."¹⁴

The importance of the concept of CNP and its associated discourse to the Chinese Communist Party is revealed when conscious efforts are made to justify its creation and existence, while linking its foundation to the Marxist classical thought process. Accordingly, in his book, Huang cites Marx, Engels, and Mao as precedents for "guiding thoughts on studying Comprehensive National Power". He states that Chairman Mao contributed to the development of the concept of CNP through his "strategy of grasping the situation as a whole," which applied Marxist-Leninist theory to China's military strategy. In his writings, Mao not only emphasised the role of concrete material components, such as military and economic power, as factors that would tilt the balance of power, but also included spiritual components like political will, popular will and the influence of leaders. Both Huang and Wu Chunqiu have also praised Mao's 1956 speech, "On the Ten Relationships," which they mention as "a complete guide to strengthening Comprehensive National Power."¹⁵

Chinese scholars, today use the concept of CNP to make assessments in their particular areas. For the military strategist, CNP scores can aid in warfare, more specifically in future warfare to predict "who is capable of winning

14. Huang Shuofeng, *Zonghe guoli lun* (On Comprehensive National Power)(Beijing, 1992), p. 94.

15. Wu Chunqiu, n.8, p. 99.

“Because different countries’ national conditions are not the same and researchers’ personal goals are different, interpretations of the concept of national power vary.”

a victory in a new RMA war.”¹⁶ And, for others, it can assist in a number of way, including providing pointers towards “all directional economic war”¹⁷. However, the concept comprises various qualitative and quantitative components.

QUALITATIVE FACTORS

While the overall concept of CNP is fairly distilled, it is noteworthy that the specific components of CNP are nuanced and at times dissimilar in their composition – depending on the interpretation of the particular analyst. Some Chinese authors prefer to adopt a qualitative approach towards CNP by dividing the entire ambit into broad areas, while others prefer a quantitative analysis, with detailed definitions of each component. Undoubtedly, some factors remain common between the two efforts but inconsistencies exist. This dilemma has been commented upon by the Chinese who feel that “because different countries’ national conditions are not the same and researchers’ personal goals are different, interpretations of the concept of national power vary.”¹⁸

An overview of the qualitative approaches would make it easier to understand the quantitative methodologies later.

Economic Aspects

While military strategists have a tendency to view the entire concept of CNP from the prism of war and its associated consequences, civilian thinkers relate to the concept in a more nuanced fashion. Writers Tong Fuquan and Liu Yichang have tried to analyse the concept by accentuating the economic issues of nations. They have accordingly divided CNP into four major parts—with economics playing the prominent and crucial role which is followed by politics,

16. Li Qingshan, n. 3, p. 191.

17. Tong Fuquan and Liu Yichang, *Shijie quanfangwei jingji zhan* (The world’s all directional economic war)(Beijing: Junshi kexue chubanshe, 1991).

18. Wu Chunqiu, n. 8, p.95.

science and technology, and military affairs. Thus, they feel, “Actual economic strength is, of course, the major component part of Comprehensive National Power”¹⁹. The other three areas are not discussed as independent factors but with regard to their relationship with the overall / specific economic scenarios. The authors firmly believe that a country with strong economic power will correspondingly wield powerful political influence. However, they do admit that Japan is an exception to this rule in which case, economic influence and clout has not translated into an equally potent strength international political affairs.

A direct linkage exists between the extent of a country’s economic power and the level of its scientific and technological prowess.

Similarly, a direct linkage exists between the extent of a country’s economic power and the level of its scientific and technological prowess. The authors opine that even military power— which is seen as the primary factor for other analysts— is to be viewed within the ambit of its relation to other factors mentioned above.

Another important aspect that needs attention is the correlation between military budgets and military power. In most cases, military expenditure is both a reflection of a nation’s military strength, while providing an important indicator to the power of its economy and, most importantly, its ability to imbibe and disseminate military related technological aspects.²⁰ However, a country lacking in military power is unlikely to score high on CNP.

Strategy

The Chinese have an acute sense of history and the military thinkers such as Sun Zi gave importance to attacking the strategy of the enemy – an aspect that has found reflection in modern times by writers such as Xi Runchang of AMS. Xi explains that his particular stress on the importance of strategy does not ignore the position of the other components but is “done in order

19. Tong Fuquan and Liu Yichang, n.17, p.232.

20. It can argued that some Gulf countries, especially Saudi Arabia, have impressive military budgets but that is no reflection on their scientific capability or international clout.

Xi Runchang has accordingly proceeded to evaluate national strategies based on various aspects, the main being how a country's leadership "effectively utilizes" its strategy.

to give prominence to this important area that people often overlook."²¹ Xi, has accordingly proceeded to evaluate national strategies based on various aspects, the main being how a country's leadership "effectively utilizes" its strategy. Xi writes, "In the current information age, for any major nation in the strategic competition, whether they take action early or take action late, is extremely important...."²²

Taking the basket case of China and Russia, Xi feels that since both these countries were late entrants in the field of strategic competition and, hence, were overtaken by "ambitious" countries like America, Europe and Japan that moved quickly to implement their strategies.

Xi's compatriot from AMS, Wu Chunqiu, however, supports a slightly different point of view in which he suggests that CNP and grand strategy have an "unbreakable internal connection" of a "dual nature."²³ In a vicious circle of sorts, he feels that CNP is wielded to attain the goals of grand strategy (for which a strong CNP is required), yet, on the other hand, its development becomes one of the aims of grand strategy. Thus, in Wu's opinion, strategy cannot be a component of CNP evaluation.

Wu feels, "In the current age when peace and development have become the main trends in the world, numerous countries, to different degrees, recognize that economics are the foundation; science and technology, especially high technology, are the guide; education is the guide of the guide; national defense is the back-up force; and national policies are the key factor playing a unifying and coordinating role." Furthermore, citing the break-up of the Soviet Union, as an example, Wu explains that countries can learn from mistakes made by other

21. Xi Runchang, "Shijie xin geju zhanwang" (Prospects for the new world structure"), in Xi Runchang Shijie and Gao Heng, eds., (The new world political structure and international security), (Beijing: Junshi kexue chubanshe, 1996), p.46.

22. Ibid., p. 45.

23. Wu Chunqiu, n. 8, p. 94.

countries by analysing the development patterns of both the national strategy and the Comprehensive National Power of these particular countries.

RMA and its Utilisation

Since ancient times, Chinese strategists such as Sun Zi and Wu Zi have both propounded that victory (or defeat) in war can be predicted in advance if a comparison of certain factors that contribute to a country's strengths is done appropriately. The Chinese strategists of today also believe in this age old dictum and the present day CNP discourse is often shaped accordingly.

Li Qingshan, a People's Liberation Army (PLA) Colonel puts forth a similar argument in his book *The New Revolution in Military Affairs and High-technology Warfare*. He states "Through the analysis of belligerent countries' Comprehensive National Power, even before a war has begun, people can frequently know the results in advance."²⁴ He, however, concedes that as war develops, there will be fluctuations in the strengths and functions of the various component factors. Thus, what plays a direct role in the outcome of the war are the changes that take place in this comparison of forces during the process of war, as well as the results of diplomatic struggles, ideological struggles, and economic struggles.

Commenting on the RMA factor in CNP, he opines that RMA will not override previously existing premises for making strategic assessments and that high-technology weaponry "can change the appearance of warfare, but it cannot change the laws of victory in warfare". Thus, he links RMA and CNP by stating "...Historically, in numerous wars, the victors have been both those who have technically inferior weaponry and those who have technically superior weaponry. Technology is not the only factor determining victory or defeat in war."²⁵ However, its level of usage

High-technology weaponry "can change the appearance of warfare, but it cannot change the laws of victory in warfare."

24. Li Qingshan, *Xin junshi geming yu gao jishu zhanzheng* (The new revolution in military affairs and high-technology warfare)(Beijing: Junshi kexue chubanshe, 1995), p. 192.

25. *Ibid.*, p. 191.

is still critical in determining the outcome of war and he goes on to state that RMA warfare “is still a comprehensive test of the level of countries’ strength.”

Taking the military line of approach, Li delineates CNP into five major components or areas—politics, economics, military affairs, science and technology, and foreign affairs—each of which is interlinked and is to be viewed within the ambit of its role in war. For Li, “Warfare is the continuation of politics and reflects a country’s strategic intentions” – and RMA (and its usage) is a critical component in attaining victory since it is determined by a country’s scientific and technological development.²⁶

QUANTITATIVE FACTORS

Two prominent Chinese books propose a quantitative approach to the problem of evaluating CNP. These two studies are slightly divergent in their approaches to the common problem in that they originate from military and civilian perspectives since they are a product from AMS and CASS respectively. The two books are *Comparative Studies of the Comprehensive National Power of the World’s Major Nations*, by a team of largely civilian analysts coordinated by Wang Songfen of CASS. The other book is *On Comprehensive National Power*, by Senior Colonel Huang Shuofeng of AMS who is deemed to have worked with Deng Xiaoping.

THE CASS STUDY

The book was originally published in December 1996, and it puts forward a detailed dissection of the characteristics of the CNP component factors. The book is fairly elaborate in describing measurement methodologies in their evaluation. It also provides extensive data tables from the results of examining the CNP of 18 countries.

Based on three guiding principles, this book divides CNP into eight major areas. They comprise natural resources, domestic and foreign economics,

26. See Wang Zhenxi, “The New Wave of the World Revolution in Military Affairs,” *International Strategic Studies* 44, no. 2, April 1997, pp. 8-9.

science and technology, military affairs, government and foreign affairs capability, and social development. The three of the basic principles on which the authors relied to determine the above eight general factors include the following:

- Both material power (tangible factors such as economics, military affairs, etc.) as well as spirit power (the intangible factors, such as international relations, leverage politics, etc.) need to be included in an assessment of CNP.
- CNP is composed not only of actual power; but potential power also has a contributing role.
- The components of CNP and their roles have changed throughout history and will continue to do so in the future; therefore, new aspects may be added or dropped when evaluating different time periods.²⁷

The components of CNP and their roles have changed throughout history and will continue to do so in the future.

The CASS Indexing System

Having taken a quantitative approach to evaluating CNP, one of the major tasks that the authors from CASS faced was to evolve and create measurable and uniform standards that can evaluate all the eight factors above as applicable to various countries. This was undeniably a complex task since it not only involved the measurement indices of tangible and intangible factors but also the correlation between them. Additionally, the authors wanted to include “both indexes for total amount, and indexes for amount per person; both quantity indexes and quality indexes; both efficiency indexes and consumption indexes.”²⁸ Finally, the authors arrived at a matrix of 64 indices for the eight areas of measurement. These indices are enumerated in Table 1.

27. Wang Songfen, ed., n. 6, p. 36.

28. Ibid., p. 64.

Table 1 : The Comprehensive National Power Index Framework²⁹

Natural Resources

Manpower Resources: total population; life expectancy; the proportion of the economically active population in the total population; the number of university students per 10,000 people.

Land Resources: the area of national territory; the area of cultivatable territory; the area in forest.

Mineral Resources (reserves): iron; copper; bauxite.

Energy Resources (reserves): coal; crude oil; natural gases; water energy.

Economic Activities Capability

Actual Economic Strength (total): Gross Domestic Product (GDP); industry production capability (electric energy production, steel output, cement output, logs output); food supply capability (total grain output, degree of self-sufficiency in grain); energy supply capability (volume of energy production, volume of energy consumption, crude oil processing capability); total cotton output.

Actual Economic Strength (per person): GDP per person; industry production capability (electric energy production, steel output, cement output, logs output); food supply capability (total grain output, average calories per person); energy supply capability (volume of energy consumption).

Production Efficiency: social labour production rate; industry labour production rate, agriculture labor production rate.

Material Consumption Level: volume of energy consumption based on GDP calculations.

Structure: the proportion of the tertiary industry in the GDP.

Foreign Economic Activities Capability

Total import and export trade; total import trade, total export trade.

Total international reserves; international reserves (not including gold); gold reserves.

29. As cited in n. 5.

Science and Technology Capability

Proportion of research and development in the GDP; number of scientists and engineers; the number of scientists and engineers per 1,000 people; proportion of machinery and transportation equipment exports in total exports; proportion of high-technology intensive exports in total exports.

Social Development Level

Education Level: education expenditures per person; proportion of people studying in higher education; proportion of people studying in secondary school education.

Cultural Level: adult literacy rate; number of people per 1,000 who get a daily newspaper.

Health Care Level: health care expenditures per person; number of people doctors are responsible for; number of people nurses are responsible for.

Communications: number of people who have a telephone per 100 people.

Urbanisation: proportion of the urban population in the total population.

Military Capability

Number of military personnel; military expenditures; weapons exports; nuclear weapons (the number of nuclear launchers; the number of nuclear warheads).

Government Regulation and Control Capability

Proportion of final government consumption expenditures in the GDP; proportion of central government expenditures in the GDP; investigation through interviews asking nine questions.

Foreign Affairs Capability

Uses ten factors in a “nerve network model” to carry out a broad assessment.

Source: Wang Songfen, ed., *Shijie zhuyao guojia zonghe guoli bijiao yanjiu* (Comparative studies of the comprehensive national power of the world’s major nations)(Changsha: Hunan chubanshe, 1996), p.69.

CASS Weighted Index Methodology

The evaluation of the CNP is basically a two-stage effort in which analysts from the Office of Statistics and Analysis at the Institute of World Economics and Politics (IWEP) at CASS divide their measurement into the Basic Plan and the Weighted Plan.

At the Basic Plan stage, first the basic 64 indices are calculated and standardised using various formulae through index calculation methods, which “combine R. S. Cline’s comprehensive calculation method of assigning values and the comprehensive index calculation method used in the book *Japan’s Comprehensive National Power*.”³⁰

Later, this data is separated into calculated unit values. The hard indexes are divided into two groups, direct indexes (those directly related to GDP growth per person) and indirect indexes (those inversely related to GDP growth per person)³¹. The former set of data takes the biggest value as 100, the latter set takes the lowest value as 100 to “successively calculate the deserved value of the different countries for those indexes.”

For assessing intangible areas, the group often resorts to investigative methodologies in which a group of renowned experts are closely questioned on the subject and the results computer analysed quantitatively.

In the case of foreign affairs, which is another intangible or “soft area”, the CASS group has designed a nerve network model with ten factors related to capability in foreign affairs activities—population, territory, natural resources, military affairs, economics, science and technology, politics, ideology, system of organisation, and international image. The values so allotted are standardised later. Thus, based on these different methodologies, the numerical value of the 64 indexes, the eight major areas, and the CNP eventually is calculated.

To overcome the aberrations and distortions that may arise during the Basic Plan stage, the Weighted Plan is resorted to³². For example, countries with extensive natural resources and relatively sparse population score high on CNP even though this is not a true reflection of their international standing,

30. Wang Songfen, ed., n. 6, p. 71.

31. As cited in n. 5.

32. Wang Songfen, ed., n. 6, p. 168.

economic or national power. The main reason for this aberration is their strength in per person rates of economic capacity and high standard of living (social factors). Secondly, certain issues and factors follow time specific regimes; for example, during times of conflict or less than war situations, weapon manufacturing and enhancing military capacity would enjoy *high national priority, while at others, would be less accentuated, hence, appropriate time specific revisions have to be made periodically to ensure standardisation.*

Lastly, the number of indexes in each of the eight major areas are not equal (i.e. natural resources has 14, while foreign economic capability has two) but each index, regardless of its value or importance, is allotted the same weight eventually.³³

Hence, during the second stage of CNP measurement, the quantitative results of the Basic Plan are revised through qualitative analysis.

However, in this analysis, some guidelines and dictums are kept in mind. Primarily, that economic development forms the most important activity for most nations in peace-time, hence, its primacy in CNP calculations. Meanwhile, measuring military capacity and capability is also the one of the most important aspects of CNP along with the professional efficacy of the military in carrying out its duties in peace as well as in war.

It is noticeable that the Chinese analysts themselves face this problem as to which factor to accentuate – a form of this debate is also visible between the military studies of CNP and the civilian one.

In any case, availability of natural resources forms the “material base” of CNP measurement by CASS.³⁴

The different weighted values of factors are shown in Table 2

33. n. 5.

34. Wang Songfen, ed., n. 6, p. 169.

Table 2: Weighted Coefficients of Major Component Factors

National Power Factor	Weighted Coefficient
Total CNP	1.00
Natural resources	0.08
Economic activities capability	0.28
Foreign economic activities capability	0.13
Scientific and technological capability	0.15
Social development level	0.10
Military capability	0.10
Government regulation and control capability	0.08
Foreign affairs capability	0.08

Source: Wang Songfen, ed., *Shijie zhuyao guojia zonghe guoli bijiao yanjiu* (Comparative studies of the comprehensive national power of the world's major nations)(Changsha: Hunan chubanshe, 1996), p. 169.

In addition to the above, the different indexes of each of the constituents of major factors are also assigned weights. For examples, there are four indexes constituting the military factor. They include: the number of military personnel, military expenditures, weapons exports, and nuclear weapons (in case the country possesses them) and they are equally assigned weights of 0.25 each. Similarly, the science and technology capability factor has been divided into research and development in the Gross Domestic Product (GDP) and the index for technology personnel both have weighted coefficients of 0.30;

Based on these weighted revisions and by using the data generated for the 64 indexes as evaluated under the Basic Plan, the numerical value of the eight major areas and, finally, the calculated CNP for each nation is reached. The numerical values of CNPs were calculated for 18 nations for the years 1970, 1980, and 1990.³⁵

It is interesting to note that forecasts of CNPs of these 18 nations were also made for the years 2000 and 2010. Known as Forecasted Weighted Plan, these were based on the principles of the Weighted Plan. The calculated predictions

35. n. 5.

were done by evaluating the potential future role of that particular nation and its futuristic influence/ capability with respect to the different component factors – the weighted coefficients of which were adjusted accordingly. To give an example, with the growing significance of education, communications research and development in particular, within the ambit of science and technology, the weighted coefficients for science and technology and social development level were raised from 0.15 to 0.17 and from 0.10 to 0.12, respectively for futuristic projections. On the other hand, the weights allotted to the two economic factors and military affairs capability remained the same though those for foreign affairs capability were reduced to 0.07. In all these predictions using the new weighted coefficients, the data gathered from the Basic Plan were taken as the base.

THE AMS INDEX SYSTEM

In comparison to the methodology used by the CASS system for calculating CNP, the AMS system is slightly different though the overall aim remains essentially the same. The essence of the calculation methods is propounded by Huang Shuofeng in his book *On Comprehensive National Power*. The book provides a fairly detailed analysis of the major component factors of CNP and their numerous indexes as seen from the AMS' (or rather Huang's) perspective.

Huang feels that relying only on theoretical research for analysing CNP is grossly inadequate and advocates the usage of systems theory and mathematical methods for developing a qualitative and quantitative approach to the problem. Consequently, Huang describes CNP as a large and complex system composed of many levels or sub-systems, within which there are interlinked component factors. Overall, he divides the CNP index system into four major index sub-systems. These comprise:

- **Material Power or Hard Power Factors** : made up of the hard factors, natural resources, economics, science and technology, and national defence
- **The Spirit Power or Soft Power Factors**: also known as intellect power, it determines the effectiveness of the material form (hard) national power. It

includes politics, foreign affairs, and culture and education. Both material and spirit power reflect a country's needed strength for existence and development.

- **The Coordinated Power:** reflects the leadership mechanism's organisation, command, management, and decision-making levels;
- **The Environmental Factor:** reflects the restricting conditions of Comprehensive National Power.³⁶ **This sub-system comprises three parts:**
 - the international environment (that analyses the world architecture with in the ambit of different balances of power):
 - the natural environment (a country's natural resources, ecological conditions, etc);
 - the social environment (the political set-up, hierarchy , economic and social systems).³⁷

Commenting on the above four major index factors, Huang writes that there are no absolutes—even the hard factors contain some aspects that are soft in nature, but for the purpose of analysis, they are designated to a sub-system based on their dominant characteristic, for example, it is universally understood that national defence is a hard factor, but a few of its components like its associated ideology and military theory, fall within the ambit of being soft factors.

Each of the components of the major sub-indexes is itself a sub-sub-index, and together they all form a CNP appraisal index system. For each of these sub-sub-indexes, Huang provides detailed lists of their contents in his book. However, only a few have been elaborated below as examples and for the sake of comparison.

- Foreign Affairs Power Sub-system: Foreign political relations; foreign economic relations; foreign military relations; diplomatic activities capability; international contribution capability.

36. Huang Shuofeng, n. 14, p. 162.

37. Ibid., p. 164.

- National Defence Power Sub-system: Standing army (nuclear, conventional) and reserve forces; national defence investment; national defence science and technology and national defence industry; national defence bases and installations; strategic material reserves and logistics safeguards; national defence education and training; national defence system establishment; the national defence ideology of the people and troop morale; military theory.
- Political Power Sub-system: National strategy goals; political stability; policy level; the nation's leadership, organization, and decision-making capability; national embodiment power.
- Science and Technology Power Sub-system: Science and technology troops (scientists and engineers, technological personnel); investment in science and technology (total, proportion of the GNP); science and technology level (high science and technology, general science and technology); science and technology system; scientific and technological progress speed; scientific and technological progress contribution; scientific and technological results and applications.³⁸

While working out "The Structural Networks of Comprehensive National Power System," Huang has adopted a slightly nuanced position towards defence/ military power in that he has attempted to delineate "direct" military power from "indirect" military power. Accordingly, while direct military power includes measures of nuclear forces and conventional forces, indirect military power, on the other hand, comprises associated aspects such as total armed manpower; the professionalism of the soldier, his weapons, their efficacy, weapons acquisitions, reserve and strategic reserve capability, logistic, etc.

The AMS Dynamic Equation

According to the AMS perspective, the foundation of calculating the Comprehensive National Power of any nation rests on the dynamic equation as conceived by Huang (AMS). Importantly, in establishing his equation,

38. Ibid., pp. 169, 170, 172.

Huang also emphasises the dynamic aspects of CNP by reiterating that one of the primary characteristic of CNP is that it is continuously evolving with the passage of time. This evolution is dependent not only on changes in global geo-political structures and the international environment but also on aspects like changing regimes of science and technology, micro and macro-economics, energy and foreign policy, etc,³⁹ hence, in an effort to deal with such a dynamic aspect dealing with variations and with changing developments of CNP, Huang assessed that a type of “motion equation” was needed. That was based on the principles of the systems theory, coordinated studies, and dynamics studies. Consequently, the results generated by Colonel Huang were quite different from those arrived at by civilians working at CASS.

The growth factor and development process of CNP has been described as “the process of taking a group of factors and turning them into output, under fixed domestic and foreign environments, and natural conditions.” This process, Huang has depicted numerically by the equation that is also called Comprehensive National Power function

$$Y_t = F(x_1, x_2, \dots, x_n; t)$$

In this equation:

the CNP n component factors are x_1, x_2, \dots, x_n
the amount of their inputs is combined, and the output volume—the CNP—is represented by Y_t
t is the variable for time
 x_1, x_2, \dots, x_n are functions of t.

This equation shows the relationship between the input amount of the individual component factors and the total volume of output.

Huang’s efforts to deal with numerous interconnections and the deluge of associated data have led him to use “macro variables . . . with the biggest roles in the allocation, control, and guidance of comprehensive national output Y_t .”

Contextually, he has selected three of the four major index sub-systems from his CNP index system to be the following variables:

39. Ibid., p. 175.

- Hard variables - represented by H_t ;
- Soft variables - mentioned as S_t ;
- Coordinated variables, represented by K_t .

Hence, the new national power function can then be written as :

$$Y_t = F (H_t, S_t, K_t)$$

So that calculations can be made using this new form of the national power function, it is rewritten using Newton's third law, where $F = kma$:

$$Y_t = K_t \times (H_t)^\alpha \times (S_t)^\beta$$

In the above function:

H_t stands for the "mass" of CNP

S_t represents the "acceleration" of CNP

K_t is the coordinated coefficient

α is the "hard elasticity index"

β is the "soft elasticity index."

The two elasticity indexes also help in establishing if the particular country conditions are developed or developing and whether it is at war / facing unrest, or whether it is at peace and is stable .

In the AMS system of calculating CNP, it is obvious that the system has numerous sub-systems and sub-sub-systems; contextually the methodology for measurement like the CNP dynamic equation also has several layers of equations many of which are not explained or mentioned by the author, Huang. However, the author does provide examples of sub-equations for population growth, Gross National Product (GNP), national income growth, scientific and technological power, and national defence power.

Methods of Assessment and Measurement

In addition to the above equations and sub-equations, Huang has mentioned four different methods of measuring and evaluating CNP. The methods of assessment are:

- The index number method: This is used to compute the hard factors in the dynamic equation.
- A specialist evaluation method: This is used for assessing the soft factors in the dynamic equation.
- The weighted coefficients method: That is assigned to the coordinated factors.
- The vague judgment method: This method is used for assessing some of the undetermined factors.

Under the index number method, after the data have been generated through the different sub-equations of the CNP dynamic equation, index numbers are established for it. These index numbers are set based upon a unified ratio, in which the value of the US data from each equation is given the index number of 100. The indexes of the other countries being evaluated are then set accordingly. Later, using the new indexes, the CNP of the different countries is calculated using the national power function.⁴⁰

One of the most potent aspects of measuring the CNP of nations has been that of predicting the values for the future—this has been carried out by Huang; however, the only explanation he provides of his methods to arrive at the projected values is: “In order to forecast the future world strategic structure, we used the Comprehensive National Power developments equation model, using the ‘leading trend analysis method’ to make calculations.”⁴¹

REAPPRECIATION OF THE DYNAMIC EQUATION

In an effort to overcome some of the lacunae, Huang Shuofeng wrote his second book, titled *On the Rise and Fall of Nations*. In this book, Huang further develops his qualitative and quantitative analysis of the CNP in order to project its role in the prosperity and decline of nations.

The original dynamic equation as propounded by Huang also finds identical mention in his second book; however, he gives further details regarding the

40. n. 5.

41. Huang Shuofeng, n. 14, p. 220.

science and technology power sub-equation in his second effort.

Since the main thrust of his second book is mainly to evaluate the rise and fall of nations using the concept of CNP, Huang first calculates the 1996 scores of overall CNP and its various factors for six countries. In the reevaluation, it is discovered that his new quantitative analyses of the United States, Japan, Germany, Russia, China, and India differ from those he had derived in his earlier book seven years earlier.⁴²

It is noteworthy that the original "Comprehensive National Power dynamic equation" measures only a country's strength at a given time; it does not indicate how this power and its component factors influence the nation in its development. Unfortunately, the older version of the equation allows for the comparison of CNP for different countries, but does not illustrate the outcome of the interaction and competition between these countries.⁴³

To overcome the above constraints in the dynamic equation, the goal of the new one is to quantitatively analyse this "competitive and developing evolutionary process," in order to determine the rise and decline of nations. Accordingly, the author divides this aspect of rise and decline of nations) into two parts:

- Evaluating the individual country by itself,
- Assessing two nations that are in competition with each other.

The first situation can be used to analyse how a country's power is influenced by domestic conditions and the international environment which the author refers to as "an environment where the initiative is in one's own hands,"⁴⁴

42. n. 5.

43. Huang Shuofeng, *Guojia shengshuai lun* (On the rise and fall of nations)(Changsha: Hunan chubanshe, 1996), p. 379.

44. Ibid., p. 382.

One of the most potent aspects of measuring the CNP of nations has been that of predicting the values for the future.

Talking about the competing aspects between two countries, the potential results of such an eventuality could be categorised into four general categories.

The second part deals with a more intricate issue of how national strength is affected by the competition or interaction between two forces. The equation can also be adapted to examine an internal struggle for power between a country's old state system and a new one with a new national strategy.⁴⁵

Talking about the competing aspects between two countries, the potential results of such an eventuality could be categorised into four general categories:

- Both countries could get into a nuclear conflicts and be destroyed
- One country could dominate the other.
- One country could force another into a "fatal position."
- Both countries could coexist peacefully by promoting prosperity.

It is the last aspect that Huang states is to be regarded as the model for the "New World Order".

Table 3: A Comparison of Huang's CNP Statistics

Country	Score			Rank			As % of US Score		
	'89	2000	'96	'89	2000	'96	'89	2000	'96
United States	593	817	90	1	1	1	100%	100%	100%
Japan	368	537	67	4	4	2	62	66	74
Germany	378	558	62	3	3	3	64	68	69
France	276	385	-	5	6	-	47	47	-
England	214	281	-	7	7	-	36	34	-
Canada	137	177	-	10	10	-	23	22	-
Australia	113	148	-	11	11	-	19	18	-
USSR	387	648	-	2	2	-	65	79	-
Russia	-	-	58	-	-	4	-	-	64

45. Ibid., p. 385.

China	222	437	48	6	5	5	37	53	53
India	144	274	35	9	8	6	24	34	39
Brazil	156	268	-	8	9	-	26	33	-

Source: The scores for 1989 and 2000 are from Huang, *Zonghe guoli lun*, pp. 220-221. The scores for 1996 are from Huang, *Guojia shengshuai lun*, p. 405. Their scores as a percentage of the US score were generated by the author for comparison purposes.

HUBEI SCIENCE COMMISSION CALCULATIONS

The CASS team and Colonel Huang from AMS are not the only Chinese analysts to do research on CNP and attempt at calculating it. Numerous articles/books on international relations written by Chinese analysts attempt at predicting the CNP and the future evolution patterns of relevant nations and the futuristic security architecture of the international environment.

However, what sets the CASS and AMS studies apart from the rest is that unlike the others, that just mention the concept in generic terms and make predictions without proper explanations, these two studies provide extensive details and explanations about their assessment and calculation processes, as well as numerous data tables of their results.

Notwithstanding the above, it is important to briefly analyse the research done by some other authors. Contextually, research on the subject conducted in the early stages by Yu Hongyi and Wang Youdi of the Hubei Science Commission finds mention in the CASS study.

The formula used by them for calculating CNP was given as “function (F), dimension (D), structure (S), level (L), and four-dimensional vector comprehensive national strength (CNS) measurement formula, in which $CNS = F(FDSL)$.⁴⁶ The FDSL measurement formula based on the calculation results of the 12 countries is shown in Table 4.

46. Yu Hongyi and Wang Youdi, *Zonghe guoli cedu pingjie* (Measuring the value of comprehensive national power), *Keji jinbu yu duice* (Scientific and technological progress and ways of dealing with it) 1989, 5, in Wang Songfen, ed., n. 6, pp. 50-51.

Table 4: Hubei Science Commission CNP Calculations (1985)

Country	Function Dimension (F_p)	Structure Level (L_s)	CNP
United States	0.5049	0.9262	0.6838 (1)
Soviet Union	0.2048	0.8252	0.4111 (2)
Japan	0.1434	0.8815	0.3555 (3)
Germany	0.0854	0.8839	0.2748 (4)
England	0.0621	0.9178	0.2386 (5)
France	0.0609	0.8907	0.2329 (6)
China	0.0757	0.6409	0.2202 (7)
Canada	0.0489	0.9225	0.2123 (8)
Italy	0.0454	0.8757	0.1993 (9)
Australia	0.0207	0.9133	0.1374 (10)
India	0.0298	0.6256	0.1365 (11)
Egypt	0.0057	0.7509	0.0656 (12)

Source: Yu Hongyi and Wang Youdi, *Zonghe guoli cedu pingjie* (Measuring the value of comprehensive national power), *Keji jinbu yu duice* (Scientific and technological progress and ways of dealing with it), 1989, p.5, in Wang Songfen, ed., *Shijie zhuyao guojia zonghe guoli bijiao yanjiu*, pp. 50-51.

CICIR METHOD

Yan Xuetong from CICIR has also attempted calculating the CNP of nations. However, it is much more simplistic than the AMS or CASS methods. The explanations that are provided also prove to be inadequate.

In calculating the CNP, Yan has separated six factors which include

- manpower;
- natural resources;
- economics, politics;
- military affairs;
- history and culture.

Unfortunately, Yan refrains from providing a detailed explanation of the measurement process which he terms as “a simple index average value method . . . to conduct quantitative analysis.”⁴⁷

Yan does not seem to be interested in calculating the past CNP scores of the five countries for carrying out a trend analysis and surprisingly has refrained from predicting or forecasting the future CNPs of nations. However, he does state that the CNPs of China, Japan, and Germany are relatively tending towards becoming stronger while those of the United States, Russia, England and France are sliding towards a decline.

The study is optimistic about the future development and growth of China’s national power and feels that by the 2020s,⁴⁸ China will probably become second only to the United States.

**Table 5: Yan Xuetong’s: Simple Average Value⁴⁹
of Major Nation’s CNP**

	United States	Japan	China	Russia	Germany
Manpower	1	0.5	0.3*	0.5	0.3
Natural Resources	1	0.04	0.7	1	0.1
Politics	1	0.5	0.7	0.5	0.5
Economics**	1	0.6	0.17	0.1	0.3
Military Affairs	1	0.14	0.3	0.6	0.11
Culture	1	0.9	1	0.9	0.9
Total	1	0.44	0.53	0.6	0.35

*In general, it is believed that 200 million is most ideal for the population of a great nation. China’s population is well over that, so it has a negative effect on national power growth, added to which, China’s overall education level is lower than that of the four other countries, therefore, its index is smaller than that of the United States, Japan, and Russia.

**The economic index is based on 1993 GNP; China’s and Russia’s indexes were attained by the average values of exchange and PPP calculations.

47. Yan Xuetong, *Zhongguo guojia liyi fenxi* (Analysis of China’s national interests)(Tianjin: Tianjin renmin chubanshe, 1996), p. 88.

48. Ibid., pp.57, pp. 94-95.

49. n. 5.

Source: Yan Xuetong, *Zhongguo guojia liyi fenxi* (Analysis of China's national interests)(Tianjin: Tianjin renmin chubanshe, 1996), p. 95.

GROSS DOMESTIC PRODUCT INDEX VS CNP

Many economists and analysts consider the GDP of a state to be an excellent indicator of a nation's power and its capability, since it is defined as the total market value of all final goods and services produced in a year. However, other analysts differ and feel that it is CNP which provides a better reflection of a country's power and that GDP is just one factor to be taken into account within the holistic index of CNP. A closer examination reveals that a country's GDP and CNP rankings are not always the same but undoubtedly the two are very closely interrelated.⁵⁰

While forecasting CNP, Huang does not provide any statistics on future GDP but, on the other hand, the CASS study group (with a large number of economists) estimates the GDP and its trends first in the process of forecasting CNP for the future. In their analysis of 18 countries, they found that in a majority of cases, their predicted GDP and CNP rankings for 2010 are very similar in both categories or off by one or two positions. The only exception being Russia since it is fifteenth in the 2010 GDP rankings, but sixth in those for CNP.

COMPARISON WITH SOME FOREIGN METHODS

Having had a brief overview of the two main studies and "systems" of measurement being followed in China to measure Comprehensive National Power (as understood by the Chinese), it may be relevant to assess the Chinese views on similar efforts by foreign authors.

In general, Chinese authors have proved to be explicitly critical of foreign quantitative analysis methodologies to assess national power. Contextually, three foreign formulae for assessing CNP have been frequently mentioned, both negatively and positively. The formulae are those created by Ray Cline, William Fuchs, and the Japan Economic Planning Department, Comprehensive

50. Wang Songfen, ed., n. 6, pp. 432-433.

Planning Office (in a study entitled *Japan's Comprehensive National Power*).

In 1984, when Premier Deng Xiaoping set up a team of Chinese scholars tasked to analyse the future security environment in the world, as part of a study on China's national defence strategy for the year 2000, the scholars studied Western literature on the subject. One of the initial Western authors studied was Ray Cline and his "National Power Equation" but his formula was discarded by Colonel Huang who considered it too "static" and was indifferent to the dynamic nature of CNP and its variations over time. One of the major reasons for such rejection was that Cline did not include science and technology as a factor and that his means for judging the soft, intangible factors were neither objective nor unified .

William Fuch's formula was also studied in detail but that too was rejected because it measured only hard factors while ignoring the soft ones.

Lastly, the Chinese scholars found the 1987 Japanese study "done in order to serve the Japanese Government's established guiding principles and policy."⁵¹ They (Chinese scholars) felt that the index system propounded by this study was too narrow and unscientific, leading it to be discarded. (Tong Fuquan and Liu Yichang, *The World's All Directional Economic War*.)

However, it would be incorrect to presume that all Chinese scholars have discarded Western methodologies for measuring CNP. In fact, a lot of the Chinese methods were partly "borrowed" from Westerners.

CASS, for one of their measurement techniques (as mentioned earlier) was unique in that they not only adapted aspects of Cline's methodology but amalgamated it with features of the Japanese study.

Again, in sharp contrast to Huang's observations of Cline, Xi Runchang regards Cline's standards to be "relatively objective," including the standards for the soft factors, (mainly on aspects such as strategy). Xi went on to use for his own calculation Ray Cline's national power equation,

$$P = (C+E+M) \times (S+W).$$

In the formula,

51. Tong Fuquan and Liu Yichang, n. 17, p. 234.

It is interesting to note that the concept of evaluating national power has undergone considerable changes even

P stands for national power
 C refers to population and territory
 E is economic power
 M stands for military power
 S refers to national strategy
 W is national will.⁵²

from the time of the Cold War. Amongst the criticism reserved for most foreign methods of CNP calculation, there is one study that has not only evaded criticism and but even managed to receive praise from Chinese quarters⁵³. This study is an annual evaluation report of international competitiveness termed as the *International Competitive Power Report*. This is a yearly study, which commenced in 1996, is conducted by the World Economic Forum and the Swiss Lausanne Management Institute in Lausanne, Switzerland. It assesses far more nations for various factors than any of the Chinese studies.

SOVIET CONCEPT COF VS CHINESE CONCEPT CNS

It is interesting to note that the concept of evaluating national power has undergone considerable changes even from the time of the Cold War. The Soviet methodology to measure power was termed as *sootnosheniye sil* in Russian. These two words can be correctly translated as “correlation of forces,” (COF) “relation of forces,” or “relationship of forces” —all these conveyed the idea of a relationship or distribution of power.⁵⁴ It referred to a Soviet method of assessing world power and reflected Moscow’s view of a bipolar world. During the Cold War and in consonance with the Soviet tradition,

52. Xi Runchang, n.21, p. 44.

53. The Chinese periodical *Strategy and Management* praises the report, saying that it is “an important foundation which different countries’ government circles and business circles refer to when making policy decisions, and has extensive authoritativeness.” It noteworthy that Chinese scholars have often contributed to this study See *Zhongguo guoji jinzhengli baogao* (China’s international competitive power report), (Strategy and Management), no. 2, 1996, p.1.

54. See Raymond L. Garthoff, “The Concept of the Balance of Power in Soviet Policy-Making,” *World Politics*, October 1951, p. 87.

policy priorities and strategy were derived from Moscow's evaluation of nations' relative power in the correlation. In this manner, the correlation evaluation of forces was multidimensional. It was a broader concept than the traditional Western concept of "balance of power."

It was a qualitative and quantitative method which comprised all things that determined relative power: public opinion, political allegiance, economic prosperity, class struggle, and military might. This holistic concept the analysts contrasted unfavourably with what they saw as a Western view too focussed on counting inventory.

The Soviets were very sensitive about miscalculating COF. They felt that an underestimation of the enemy's true military capabilities could lead to "adventurism" or actions incurring unwarranted risks (an action they could ill afford); while, on the other hand, an overestimation of strength could lead to "opportunism" or a failure to seize a gain, which a correct calculation of the COF would have permitted.⁵⁵

The COF concept was supposedly dynamic because history is dynamic, but given the lack of information with regard the methodologies used, it is not possible to compare the CNS dynamism with that of COF.

Thus, we see that COF was in many ways similar to the CNP concept propounded by the Chinese though admittedly the latter is much more holistic. COF well suited the Cold War scenario whereas CNP with its military-economic foundation is much better suited for the dynamic variations of the multipolar world of today.

INDIAN CALCULATIONS

Given the growing popularity of the Chinese CNP concept as a important tool to measure the national power of a nation and, hence, to tailor strategies (and even tactics) on the basis of futuristic projections of CNP, the National

The Soviets felt that an underestimation of the enemy's true military capabilities could lead to "adventurism" or actions incurring unwarranted risks.

55. Ibid., p.92.

Security Council Secretariat (NSCS) attempted to evolve a “National Security Index (NSI)” on more or less similar lines.

Unfortunately, the precise methodologies of working out the NSI have not been revealed and are probably shrouded in secrecy as is the wont with most governmental matters; however, it is publicly revealed by NSCS that the NSI constitutes an average of five indices. These include, Human Development Index (HDI), Research and Development Index (RDI), GDP Performance Index (GDPPI), Defence Expenditure Index (DEI) and Population Index (PI).

Each of these major indices is further sub-divided into sub-indices, for example:

Human Development Index (HDI): which reflects the socio-economic conditions of a country, is based on a number of sub-indices such as Life Expectancy Index, Education Index, Per Capita Income Index, etc

Research and Development Index (RDI): this is a reflection of the technological prowess of a country and constitutes the weighted average of three separate unequal indices, namely Patents Index, Index of Research and Development (R&D) Expenditure as a percentage of GNP and Index of R&D Scientists and Engineers per million.

GDP Performance Index (GDPPI): The GDPPI is important for calculating a country’s overall economic strength and the rate at which this capability is evolving. The main index comprises the weighted average of two separate indices: the “GDP Index” and the “GDP Growth Index”.⁵⁶

The NSI suffers from numerous shortcomings, the primary one being that it is not known if the NSCS has been regularly calculating yearly NSIs for the 30 countries it had started off with. It is also not known if the NSI is used to predict a nation’s power in the years to come. The efficacy of NSI as a tool in strategic decision-making is also open to debate. Apart from that, the ambit of the calculations is all too restricted and “static” in a generic comparison to the Chinese CNP calculations. The NSI, in addition, does not take into account the

56. “Evolving A Comprehensive National Security Index” available at <http://www.financialexpress.com/news/evolving-a-comprehensive-national-security-index/73228/0>

resource abundance, environmental health and good governance aspects of a country.

CONCLUSION

The modern concept of Comprehensive National Power was evolved by Chinese analysts during the mid-1980s on an impetus that was provided by Deng Xiaoping. It was a concept that was in consonance with China's national aspirations of achieving enhanced global power status in the near future. The urgency of calculating the future trends of evolving CNP as a measure to "compete better" was probably the rationale behind it. The trend toward world multipolarity and US decline accentuated this process.

CNP scores were important to the Chinese because they could help identify the status of not only the concerned nation within the hierarchy in world politics but also of the Chinese with respect to that country. It also identified the power potential of China's allies, adversaries and rivals apart from indicating which country would be best suited to exploit the RMA in times of war and less than war situations. Thus, providing a clear indication as to which side had a clear advantage and a possible victory in war.

Two contending scientific teams, one with a military background (AMS) and the other with civilian experts (CASS), calculated the estimates of the futuristic CNP scores of the major powers for the year 2010. Both teams claimed to use sophisticated quantitative methodologies that had been developed because of the deficiencies in the techniques used by the West (and Japan) to measure future growth rates in national power.

However, the importance of the CNP calculations lies in their deciphering the future course of action for "competing" in the hierarchy of world politics and its usage for adjusting national strategies accordingly. In the Chinese context, the CNP scores seem to have been well used for "fine tuning" the

It also identified the power potential of China's allies, adversaries and rivals apart from indicating which country would be best suited to exploit the RMA in times of war and less than war situations.

national approaches – but in the case of other countries like India (which not only have their own methodologies but also come to their own conclusions by deciphering of available data), it is debatable if such information is ever templated on conceptual policy directives.

INTEGRATED PERSPECTIVE PLANNING

A.V. VAIDYA

When we talk of planning, it necessarily has to be related to the future and supposedly it necessarily also has to be related to something that is expected to happen in the future or something that one would want to make happen in the future. But, unfortunately, what is going to happen in the future is a factor quite unknown and uncertain and the entire planning can go awry if what one expects to happen does not happen. So, obviously, the very first important step in the process of planning would be to try and predict the future as accurately as one can because one's planning will be as good or as bad as one's prediction.

When it comes to defence planning or what is more appropriately referred to as security planning, we find that the emerging world scenario is quite like a kaleidoscope of constantly changing patterns with different kinds of threats emerging. And we also find that the nature of these security threats and various concerns demands a full spectrum capability from low intensity conflict to high technology conventional war and that too against the backdrop of a nuclear, biological and chemical environment. Prediction, thus, becomes a very complex and difficult process and there are far too many chances of the prediction going wrong. Whoever could predict the collapse of the erstwhile

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We must take cognisance of the potential threat in the region and develop a strategic posture, whereby we have the ability to influence the developments conducive to our national interests.

USSR? As a matter of fact, in the 1989 assessment made of the USSR by the US, they concluded that it is a very strong power. Similarly, no one could predict that the two Germanys would unite the way they did. Prediction, even short-term, leave aside long-term, is also quite a difficult proposition. The US couldn't predict correctly the course that the Iraq War would take. They thought that they would walk in and comfortably walk out but their predictions were entirely wrong.

The impact of globalisation, increasing economic interdependence and militarisation of space will also have a profound impact on the battlefield milieu. The ongoing Revolution in Military Affairs (RMA) demands increased battlefield transparency, much greater situational awareness and a variety of precision guided munitions. Technology driven Information Warfare (IW) would be another dimension. In our security assessment, therefore, ideally speaking, we must take cognisance of the potential threat in the region and develop a strategic posture, whereby we have the ability to influence the developments conducive to our national interests – in other words, controlling or shaping the future to some extent rather than waiting for something to happen and then reacting – a bit of a far flung dream for us but nevertheless achievable and, therefore, worth trying.

As quoted in many articles and presentations, India is strategically located vis-à-vis both continental Asia as well as the Indian Ocean Region. It has a landmass of 3.3 million sq km and varying topography, including high mountains, deserts, thick jungles and vast plains. The northeastern frontier also comprises steep, high ranges and dense tropical forests. To the south, there are ranges close to the sea, inland plateaus interspersed with river valleys, coastal plains, and far flung island territories such as Lakshadweep to the west and Andaman and Nicobar Islands to the east. On three sides, from Gujarat to West Bengal, it is bordered by the Arabian Sea, the Indian

Ocean and the Bay of Bengal. India is, thus, a maritime as well as continental entity with a coastline of 7,600 km and an Exclusive Economic Zone (EEZ) of over 2 million sq km. This geographical and topographical diversity, especially on its borders, also poses unique challenges to our armed forces. India's land frontiers extend across more than 15,500 km, sharing borders with seven neighbours, namely, Afghanistan, Pakistan, Bangladesh, Myanmar, China, Bhutan and Nepal.

Few countries face the range of security challenges, concerns and threats that India faces in its neighbourhood.

Few countries face the range of security challenges, concerns and threats that India faces in its neighbourhood ranging from terrorism and low intensity conflict to nuclear weapons and missiles. India's location at the centre of an arc of terrorism between North Africa and Southeast Asia, its close proximity to a key source of nuclear proliferation and the continuing acts of terrorism from across its western border require India to maintain a high level of vigilance and defence preparedness. The nature of new threats has also reinforced the need for international cooperation to combat terrorism and proliferation of Weapons of Mass Destruction (WMDs). In this respect, India could play a major role in the global response against such forces.

The present decade has witnessed significant developments on the international scene. Global relations involving various countries have undergone remarkable changes and fresh alignments have occurred necessitated by the national interests of the players. These relate to preservation of territorial integrity and sovereignty (which is a military function) and other fields driven by economic, technical and geo-political considerations. To safeguard these interests, an optimum level military capacity is a must apart from a diplomatic thrust.

The situation in almost all the countries bordering us is quite precarious. The situation along the western border of Pakistan is not likely to improve in the near future. Afghanistan is in a state of turmoil and will perhaps remain so for a long time. Despite the statements made by Pakistani Prime Minister Gilani after the recent meeting in Egypt on July 16, 2009, with Prime Minister

China poses a long-term threat to us. It is undoubtedly aiming to take on the mantle of the Asian leader.

Manmohan Singh, where they met prior to the Non-Aligned Movement (NAM) summit, Pakistan will continue to abet and promote terrorism in Jammu and Kashmir (J&K) as this is a low cost option and enables Pakistan to pursue its strategy of India's containment.

China poses a long-term threat to us. It is undoubtedly aiming to take on the mantle of the Asian leader and has been steadily strengthening its economic and military capability. It has resolved its boundary disputes with all barring India. This dispute is likely to be kept alive while it modernises. By 2020, it is likely to be in a position to assert itself and move towards its perceived national interests. It is felt that the development of the logistics network in the Tibet Autonomous Region (TAR) is well beyond the requirements of the settled population. It will facilitate a quick enhanced military build-up against India, should the need so arise. We need to continue to monitor development of military infrastructure by China in the India-China border areas and its military modernisation, including in the maritime sector. Even though China has overtly opposed the weaponisation of space, it is moving towards that direction by its proposed formation of a Space Force and development of anti-satellite weapons. This could well pose a threat and be a cause of serious concern to the development of our space programme.

Bangladesh does not pose any threat in conventional military terms to India. The threat from Bangladesh is mainly non-military at present. The main threat is from illegal cross-border infiltration, anti-India activities and support to Indian insurgent groups. The rise of 'Islamic Fundamentalism' and 'Islamisation of the State' is a serious challenge. The volatile situation in Bangladesh and instability in the region has the potential to overflow across the borders into India and we need to watch against that.

There is no direct threat from Sri Lanka to India. However, in its anxiety to overcome the might of the Liberation Tigers of Tamil Eelam (LTTE), the Sri Lanka government has hurt the feelings of Indian Tamils. The future of Tamils in Sri Lanka is presently uncertain. We need to keep a close watch on

the further developments in this state as also in our Tamil dominated areas.

Nepal *per-se* does not pose any direct military threat. Nevertheless, the spillover of Maoist insurgency into India and coordinated activities with the left wing extremists is already having a certain effect on the internal security situation in North Bengal, Bihar, UP and Uttaranchal.

Owing to its geo-strategic location, Myanmar is an important neighbour for India. It does not pose a military threat to us and traditionally relations between India and Myanmar have been cordial. However, increasing Chinese influence is not in Indian interests. A Pakistan-Myanmar-China trilateral nexus in Myanmar and in the Indian Ocean Region does not augur well for India. India must make concrete efforts to establish and maintain defence cooperation ties with Myanmar.

Developments in Afghanistan have a direct bearing on peace and security in our region. The Taliban and other like-minded fundamentalist groups continue to pose a challenge to the Afghan government and comprise a cause of concern for India.

Further west of the region, the US-led war against Iraq, its interference in Afghanistan and now in Pakistan continues to feed Islamic radicalism, aggravating fault-lines based on religion and concern in relation to the security of the 3.5 million strong Indian community resident in the Gulf states.

The internal situation in India is also getting increasingly unstable. The left wing extremists have expanded their areas of influence from states neighbouring Nepal into the interior of Jharkhand, Chhattisgarh, Orissa, Maharashtra and Andhra Pradesh. Left wing extremists now possess a considerable number of sophisticated weapons looted primarily from the security forces and have inflicted considerable damage on their apparatus. All in all, the prediction of the future is getting more and more difficult and complex, and so is the making of long-term plans.

This dynamic and fast changing nature of the global, regional and domestic security environment necessitates a constant review of our war waging capability.

The budget controlled the making of plans rather than the envisaged threats or capabilities building doing so. The allotment of the defence budget to the three Services was also done based on a fixed ratio.

This dynamic and fast changing nature of the global, regional and domestic security environment necessitates a constant review of our war waging capability. The process of Integrated Perspective Planning is supposed to do just that. It is supposed to review the gap between the capabilities required to maintain a qualitative and quantitative combat edge over our adversaries and our present capabilities. It is then supposed to identify the force structure and capabilities required to fill this gap. Post Kargil War, having realised the importance of synergy, the issue of jointness among the three Services in perspective planning has assumed great importance.

In our armed forces, no long-term perspective planning in any coordinated manner was done earlier. Each Service made its plan in isolation without consulting the other Services and processed it separately with the MoD. The Ministry of Defence (MoD) too didn't bother to do any kind of integration. This drawback was highlighted in many high level committees and conferences but nothing concrete was ever done about this aspect.

The other drawback was that the plans made by the individual Services were not capability-based. They were replacement or number-based, meaning that if "X" number of aircraft were likely to get phased out during the existing plan, then the same number of replacements were planned for induction.

The next drawback was that the Services were asked to restrict their plan to an expenditure of roughly 8 per cent more than what they were allotted in the previous plan. Thus, the budget controlled the making of plans rather than the envisaged threats or capabilities building doing so. The allotment of the defence budget to the three Services was also done based on a fixed ratio of roughly 45, 23 and 18 per cent to the Army, Air Force and Navy respectively and the remaining going to other organisations. No prioritisation was done between the capability requirements of the three Services and the budget adjusted accordingly.

Thanks are due to Musharraf for his Kargil adventure. He perhaps did not realise the good he was doing to the Indian armed forces. It was post Kargil that the Kargil Review Committee (KRC) was formed. The KRC findings were tabled in the Parliament in early 2000. Following the submission of the KRC report, the Prime Minister set up a Group of Ministers (GoM), popularly known as the Arun Singh Committee, to go into the various aspects of this badly fought war by us. This Group realised that no integrated approach existed among the three Services and recommended that this folly needed to be corrected forthwith. Besides many other recommendations, they also recommended creation of the Integrated Defence Staff (IDS) and appointment of a Chief of Defence Staff (CDS). HQ IDS was, thus, created on October 1, 2001.

The Arun Singh Committee also emphasised that there is an urgent need to integrate the process of planning for achieving greater synergy in both perspective planning as also in its implementation. And this is precisely what HQ IDS does.

IDS mainly consists of four branches which look after Operations (Ops), Doctrine Organisation and Training (DOT), Intelligence (Int) and Policy Planning and Force Development (PP&FD). It is the PP&FD Branch that mainly looks after the planning process. The major duties of the PP&FD Branch are as follows:

- Policy and Planning of Force Structure Development.
- Budget Analysis and Monitoring.
- Acquisition, Procurement and Technology Management.
- Formulate the Long-Term Integrated Perspective Plan (LTIPP) and Five-Year Defence Plans.
- Propose *intra-se* and *inter-se* prioritisation of schemes of Five-Year Plans of the three Services.
- Coordinate strategic and security perspectives.
- Analyse critical deficiencies in force capabilities and assess impact on national military objectives.

In order to produce a meaningful comprehensive integrated Perspective Plan, there are a few things that need to be understood. To start with, we must understand what we mean by comprehensive security. The nation must first of all decide and know what it wants in the future and only then can any kind of planning be done. Those in power must clearly spell out the national objectives. Based on these objectives, the nation must then work out its National Security Policy. The United States, for instance, for good or bad, had the objective of shaping the Middle East and instilling democracy there. They then worked out the relevant security policy, strategy and plan to achieve that objective. Some other weaker nations may want to remain in a closed environment. Some may want to influence just their neighbourhood.

These security objectives of the nation will have to depend on the existing and futuristic strategic environment and, more importantly, on the strength of the nation. The strength of the nation will determine the power it can exert to achieve the security objectives. This strength of the nation which can be called the Comprehensive National Power (CNP), will, in turn, depend on the economic, military, politico-diplomatic and technological strength.

This national power is divided into intangible factors and tangible factors. The intangible factors are the will and mental strength of our political masters and at the fighting level, the determination and bodily capabilities of the individuals and groups that comprise the military forces, the most important one being the spiritual strength of the forces. In other words, these factors include Quality of Command and Control, State of Discipline, Troop Morale, Fighting Spirit, Quality of Training, *Esprit de Corps*, Spirit of Teamwork, etc which cannot be easily quantified. The tangible factors are Strength of Military Personnel, Quantity and Quality of Material, Quantities of various Weapons, Destructive Power, Tactical Mobility and other physical strengths. Take Israel, for instance. In its case, factors like attitude of the government and people, morale, discipline are plus factors and enhance its CNP. In our case, it is perhaps not as positive.

In our context, economy and democracy are the two major driving factors, which are guiding our inter-state relationships. Within these parameters,

military power is a natural and an important part of national power for ensuring that the interests of the people are protected, strengthened and also projected. It is a known fact that a nation will prosper if there is peace and there can be peace only if the nation is militarily strong.

The strength of national power determines the ambitions that a nation can harbour. Today, India may not be in a state for global power projection and intervention, however, we can, and we definitely need to, think beyond our borders for power projection, at least in the regional frame, and attempt to shape our periphery not with hegemonistic intentions but to ensure our national security in the future.

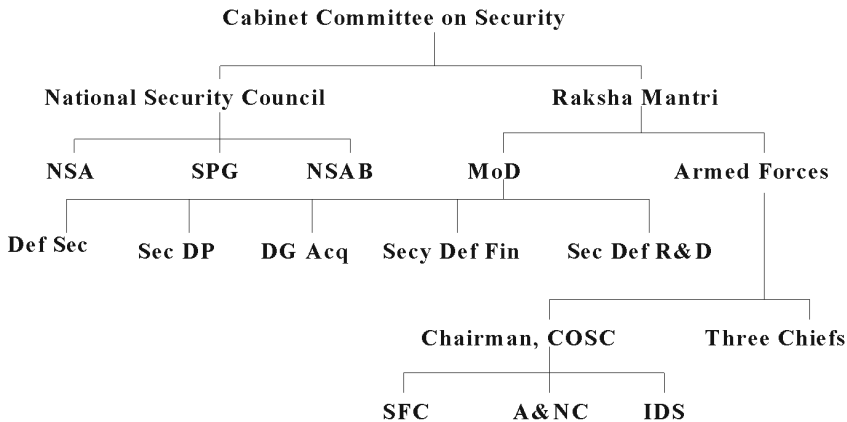
The next thing to understand before starting any planning process is the structure and functioning of our higher defence organisations. Post Kargil War, having realised the importance of jointness and integration to achieve better synergy, and on the recommendations of the KRC and subsequently the GoM, the higher defence organisation was restructured to cater for future wars, maintain parliamentary control over the military, strengthen the advisory apparatus to the government on professional military matters, and strengthen the budgetary process. However, it was ensured that changes in the working system were to be minimal. The other two important recommendations of the KRC of integrating the MoD with Service HQ in the true spirit and of appointing a CDS remain unfulfilled. The organisational chart for the higher defence organisation post Kargil at the national level is depicted in Chart 1

Right on top we have the CCS (Cabinet Committee on Security). The Chairman is the Prime Minister and the other members are the Home Minister, Defence Minister, Minister of External Affairs, Finance Minister and Vice Chairman Planning Commission. Cabinet Secretary, National Security Advisor (NSA) and any or all the Chiefs may be invited for specific issues.

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Chart 1

Higher Defence Organisation



The CCS is linked to the National Security Council (NSC) and the Raksha Mantri (RM). The NSC is also chaired by the PM, with more or less the same members. The NSC has under it the NSA, Strategic Policy Group and the National Security Advisory Board. The Strategic Policy Group consists of the three Chiefs and the various Secretaries Finance, Defence, Home, Foreign, Research and Analysis Wing (RAW), Intelligence Bureau (IB), etc. The National Security Advisory Board consists of eminent personalities like former bureaucrats, Director, Institute for Defence Studies and Analyses (IDSA), eminent scientists, academicians, retired Foreign Service people, etc.

At the operational level, the Raksha Mantri interacts with the Defence Secretary, Secretary Defence Production, DG Acquisition, Secretary Defence Finance and Secretary Defence R&D [a Defence Research and Development Organisation (DRDO) man], Chairman Chiefs of Staff Committee (COSC) and on certain occasions also with the three Chiefs. Under Chairman COSC we have the - Strategic Force Command (SFC), A&NC – Andaman and Nicobar Command and HQ IDS.

The creation of HQIDS, which principally works as the staff for the Chairman COSC, has been a very important step towards the process of integration.

At present, the Chairman COSC provides the link between the political leadership and the armed forces for the execution of all military tasks. HQ IDS primarily acts as his advisory staff. In order to accomplish its tasks while remaining within this existing system, IDS has to interact with many organisations like Service HQ, DRDO, MoD, MEA, MHA, DoS, ANC, DIPAC, SFC, etc.

Considering that we started working towards integration only a few years ago, we have achieved a great deal in a short time. This has primarily been because the government is seized of the problem post Kargil and is now more conducive and amenable to accepting changes suggested by the armed forces. A major step towards this has been the formulation of a new approach to the Long-Term Integrated Perspective Plan (LTIPP), which has been approved.

The process of formulating an LTIPP for the armed forces is a complex one and has to be collaborative since there would be a number of agencies such as CCS, NSA, MoD, MEA, MHA, MoF, Intelligence agencies, HQ IDS, Services HQ, DRDO, Defence Industry including various Public and Private Sectors, etc, contributing towards the final product. The ideal procedure laying down the modalities for the formulation of the LTIPP which has been approved by the Raksha Mantri is as follows:

Stage 1 (Articulation of a National Security Strategy). The starting point for the process of formulating an LTIPP has to be the articulation of a National Security Strategy. This would need to be a broad based document that deals with the government's overall national security objectives and interests. The National Security Strategy would be as articulated by the CCS, assisted by the NSA. This would deal with every facet of security like border, energy, economy, internal disturbances, etc.

Stage 2 (Formulation of Defence Planning Guidelines). Though the starting point for identifying future capability needs is the CCS approved National

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Security Strategy, this would often be too broad based and would only provide a general guidance. Hence, we will have to narrow it down to only those aspects of the strategy that have a direct bearing on the roles/activities that the armed forces may be called upon to perform. This document would be the Defence Planning Guidelines. Defence Planning Guidelines, articulated by the Department of Defence (DoD) in the MoD and approved by the Raksha Mantri, would articulate the types of contingencies that the armed forces may be called upon to respond to in a 15 years time horizon. The likely contingencies would have to be enumerated in their priority. The Defence Planning Guidelines would also need to lay down the likely availability of funds for defence for the same time span.

Stage 3 (Formulation of a Defence Capability Strategy). Thereafter, formulation of the Defence Capability Strategy would be a function of HQ IDS under the CDS/Chairman COSC. The strategy would identify defence capabilities required for each type of contingency enumerated in the Defence Planning Guidelines. Thereafter, with the help of Service HQ, it would assess the existing capabilities; establish the gaps in capabilities, and prioritise the filling up of these gaps. The Defence Capability Strategy would show how defence intends to provide a flexible mix of capabilities in consonance with the government's priorities.

Stage 4 (Preparation of a Defence Capability Plan). The Defence Capability Plan, also prepared by HQ IDS, would have a horizon of 15 years and would list the capabilities required with associated time-frames. This would also include the various options for achieving the capabilities envisaged, whether to develop them indigenously or look abroad, and the broad nature of each project. This, along with the likely availability of funds as indicated in the Defence Planning Guidelines, would facilitate the formulation of a meaningful and achievable LTIPP.

Stage 5 (Preparation of LTIPP). The LTIPP would flow out of the Defence Capability Plan and would essentially list out the programmes and projects

required to be taken up to achieve the capabilities listed in the Defence Capability Plan. The process of preparation and implementation of this involves:

- Preparation of the respective Long-Term Perspective Plan (LTPP) by the Army, Navy and Air Force.
- Receipt, scrutiny and analysis of the LTPP of the three Services and preparation of the LTIPP by HQ IDS. This would involve study of force levels, force structures, force accretions and inter-Service prioritisation.
- Presentation to the COSC and approval of the LTIPP by the COSC.
- Circulation of the LTIPP to each of the Secretaries of the DoD, prior to its presentation to the Defence Planning Council.
- Presentation of the salient aspects of the individual Service LTPP and the LTIPP to the Defence Planning Council headed by the RM.
- Approval of the CCS to the LTIPP with specific reference to force structures, force levels and the equipment profile of the three Services.
- Finally, acquisitions effected based on the Five-Year Acquisition Plans and the Annual Acquisition Plans which would flow from the LTIPP.

All this is a complex process and involves identifying the capability needs of the armed forces, establishing *inter-se* priorities, examining options for meeting these capabilities, managing the projects / programmes that flow out of the plan and providing life-time support. This involves high levels of accountability and by its nature would be rigorous, time consuming and resource intensive.

To summarise so far, four main documents need to be produced for making a meaningful LTIPP – National Security Strategy articulated by the NSA and approved by the CCS, Defence Planning Guidelines by the MoD and approved by the RM, Defence Capability Strategy produced by IDS and approved by the Chairman COSC and Defence Secretary, and Defence Capability Plan also produced by IDS along with Service HQ.

Let us try and see how this planning and acquisition process functions by taking an example. Let us, for instance, presume that one of the objectives set by the government is to substantially increase the import and export of trade

and energy requirements through the medium of the sea, but the geo-political situation that is likely to develop in the future may not permit this. Based on this national objective, the CCS with the help of the NSA would define a comprehensive National Security Strategy which will have to be acted upon simultaneously by the MEA, MHA, DoD and others. This could be called Step 1 i.e. formulation of the National Security Strategy.

Step 2 would be making of the Defence Planning Guidelines, articulated by the Department of Defence in the MoD and approved by the Raksha Mantri, which may state that the geo-political situation that is likely to develop in future may not permit this and one of the contingencies that may arise is blockade of the Sea Lanes of Communication (SLOC). We will, therefore, need to have adequate control over the SLOC right from Strait of Hormuz in the west to Strait of Malacca in the east and we should be able to tackle any such blockade. The government feels that it will have the necessary economic power to achieve this objective and extra funds as required would be made available at the beginning of each Five-Year Plan.

Step 3 would be the formulation of the Defence Capability Strategy by the IDS along with Service HQ. The strategy would identify defence capabilities required for ensuring that a blockade does not take place like in-flight refuelling capability, capability to airlift "X" battalions with their associated equipment, all weather day and night capable long range interceptors with air-to-air refuelling capability, "X" number of ships capable of carrying so-and-so class of helicopters, so-and-so class of ships, and so on. IDS along with Service HQ would therefore, assess the existing capabilities available with the Services as also with public and private sectors, establish the gaps in capabilities and prioritise the filling up of these gaps.

Step 4 would be preparation of a Defence Capability Plan with the help of the Service HQ, DRDO, public and private sector industries ,etc. The plan would have a horizon of 15 years and would list the exact capabilities and projects required, with associated time-frames and the force structure required. This would also include the various options for achieving the capabilities envisaged, namely, indigenous or imported.

Step 5, the last step, would be preparation of the LTIPP based on the LTPPs of the three Services which each Service would have made keeping the guidelines and the capability plans in mind and finally seeking approval from various agencies.

As mentioned earlier, till a few years ago, the three Services were making their LTPPs entirely on their own without consulting each other and these LTPPs were being sent separately and directly to the MoD for clearance. Based on these LTPPs, each Service then made its Five-Year and Annual Acquisition Plans. But the first big change that came about around 2006 was that the LTPPs were sent to IDS for scrutiny, integration and creation of a LTIPP. While creating this LTIPP, IDS attempted to integrate the LTPPs of the three Services and prioritise Service projections in order to build an optimised joint force structure based on the RM's Operational Directive. An attempt was also made to keep the development and modernisation of the three Services balanced.

The main rationale behind the preparation of the LTIPP was to realise the required "Joint Military Capabilities" to counter the envisaged external and internal threats and to fulfill the national military objectives. But while making the LTIPP, it was noticed that there were certain major constraints in doing so. Firstly, it was noticed that our combat capability vis-à-vis the adversaries has reduced over a period of time and so the main focus had to be on building up of deficiencies. For example, the number of Air Force fighter squadrons had reduced considerably from its approved strength due to phasing out of the MiG-21 and MiG-23 fleets and non-induction of the Light Combat Aircraft (LCA) due to delays involved in its production. The same was the story with the Main Battle Tanks (MBTs) of the Army.

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Classic joint force structuring and inter-Service prioritisation was not feasible.

What was possible was enhanced joint planning and a focus on areas of commonality with a view to progress towards complete integration in a phased manner.

Secondly, it was seen that we are still in the initial stages of formulating a joint military doctrine. Planning of Joint Operations has been done on a small scale to cater for limited out of area contingencies and disaster management. However, formalised structures for large scale joint planning and execution have not as yet been created. Along with the restructuring of the higher defence organisation, command, theatre and field level organisations also need to be restructured.

In view of the above, classic joint force structuring and inter-Service prioritisation was not feasible. What was possible was enhanced joint planning and a focus on areas of commonality with a view

to progress towards complete integration in a phased manner. The focus on commonality was to be in design, development, production or acquisition and usage through interoperability and integration. Some important areas of commonalities identified in the three Services' LTPPs were:

- Command, Control, Communication, Computing, Interoperability, Intelligence, Surveillance and Reconnaissance (C4I2SR).
- Integrated Air Command and Control Systems (IACCS), Air Defence (AD) weapons and sensor systems.
- Surface-to-surface missiles for both tactical and strategic roles.
- The military satellite programme under the Department of Space with the Air Force as the lead Service, which, apart from providing imagery and navigation facilities, will allow the three Services to employ and use Precision-Guided Munitions (PGMs), and Electronic Warfare (EW) systems.
- Unmanned Aerial Vehicles (UAVs).
- Light and medium lift helicopters.
- EW philosophy and equipment.
- Special Forces.
- Integrated Logistics.

The Indian armed forces with their multi-front obligations covering the aerospace, maritime and continental dimensions, need to keep pace with the uncertain and dynamic security environment. Conflicts have come closer home with the growing global dependency on the Middle East for energy and the consolidation of global terrorism in the region, with its hub centred in our neighbourhood. This turbulent situation is likely to continue in the foreseeable future. Geo-political compulsions and the fact that India would become a reckonable economic power in the next two decades, dictate that the Indian armed forces should graduate being “border-centric forces” to “expeditionary forces” having regional power status.

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Over a period of time, due to financial constraints and an inadequate technological and infrastructural base in the country, our armed forces have been unable to keep pace with the galloping technological advancements. To safeguard national interests, our armed forces need to be optimally structured, equipped and weaponised, and capable of operating effectively in a joint Services environment covering the entire spectrum of conflict in our extended neighbourhood.

In order to achieve this, Integrated Perspective Planning needs to be carried out after an objective study of the envisaged global, regional and internal environment as also the appreciated threats and their likely implications on India. The consequent deductions would lead us to our minimum inescapable capabilities that must be met.

Integrated Perspective Planning should focus on building capabilities rather than filling numerical deficiencies arising out of phase-outs; consolidate our defence potential in order to deter and dissuade our immediate neighbours; and build up forces to be in a position to exercise influence in the regional context in furtherance of national strategic interests commensurate with our national power and our standing in the world.

COUNTER-TERRORISM

RAJIV GHOSE

Terrorism is a form of warfare that relies principally on fear to deliver the message. The word terror has been derived from the Latin word *terrere*, meaning “to frighten” or literally “to make tremble”. Some have proclaimed that it is difficult to define terrorism but it is possible to do so objectively as long as we do it in terms of the quality of the act, and not in terms of the identity of the perpetrator or the nature of the cause.¹ This removes the dilemma of one man’s terrorist being another man’s freedom fighter. There can be four individually necessary conditions, whether jointly or not, but sufficient for an act to be termed as a “terrorist one”: it is committed by an individual or group; it is without the legitimate political authority of a recognised state; it is often directed towards non-combatants; its goal is to achieve something related politically; and this is pursued by fear-provoking violence.² The target of the violence often goes beyond the immediate victim. Its ultimate goal is theatrical. This holds well especially today, with television broadcasts together with the advent of cell phones. In recent times, we have witnessed bombings, hostage-taking incidents, with every new counter-measure resulting in new threats. While terrorists are unlikely to give up the car bombs and suicide

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1. Brian Michael Jenkins, “Terrorism: A Contemporary Problem with Age-old Dilemmas” in Lawrence Howard, ed., *Terrorism, Roots, Impacts and Responses* (Westport, Connecticut :Greenwood Publishing, 1992), p. 14.
2. Daniel D. Novotny, “ What is Terrorism?” in Edward V. Linder, ed., *Focus on Terrorism, Vol. 8* (New York: Nova Science Publishers, 2007), p. 23.

bombings, they are increasingly going to invest in non-traditional tactics³ and also regular hand-held weapons to gain instant notoriety and gratification.

Terrorism was predominantly politically motivated but now most prominent groups today associate religion, making it increasingly difficult to counter them. Furthermore, the target of attack is going to be critical infrastructure which would also be owned and operated by the private sector, bringing a whole new group of players into the counter-terrorism game. Also, the question is not so much whether or not there is a possibility of a terrorist incident involving nuclear weapons but whether one can afford to not be prepared, first in preventing or countering it and then in dealing with the aftermath.

May be the only way to effectively deal with terrorism is to have a thorough understanding of its present-day characteristics. The players on the counter-terrorism team need to take stock what is in their tool kit; what works and what does not; and what is the extent to which one tool works. Military power is a vital tool in the kit. For many, military force application is not warranted. This is so because traditionally, the legal community has regarded the terrorism phenomenon as a crime, best addressed through a cooperative scheme for domestic prosecution of terror offences. The use of force is not contemplated beyond circumstances permitted even by the UN Charter, unless it is in self-defence.⁴ Terrorism was, therefore, thought to threaten only small stakes; for many, the real challenge was thus to avoid over-reacting to vivid but minor acts of violence. However, things have been changing and the very survival and stability of nations are now at stake.

Can there be a role for the military in countering terrorism? For a long time, an effective counter-terrorism strategy was guided by the rule of law which was implemented through the criminal justice approach but the same

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3. The new cadre of terrorists of today is often computer savvy and well educated, bringing a whole new level of sophistication to the table. Further complicating terrorism calibrations would be the usage of the Internet and possibility of cyber attacks which may be used to extend the deadlines of an incident, but are not dealt with here in the context of military force for effect.
 4. Devika Howell, "Dangerous Evasions: Enforcing Limits on Government Action in the War on Terror" in Jenny Hockin, Colleen Lewis, eds., *Counter Terrorism and Post Democratic State* (Cheltenham: Edward Elgar Publishing, 2007), p. 120.

has been refined and broadened, and military leaders can expect an increase in domestic employment of their forces to counter terrorism. Each instance of use will be accompanied by new and possibly unprecedented challenges. Public confidence in the military can best be maintained by strict adherence to the legal underpinnings governing domestic operations of the armed forces.

Air and space power capacity for preemption and retaliation makes it a preferred instrument.⁵ Essential trends in the advancement of technology also support the value of deterrence of this dimension and importantly assist overall, the political leadership in leveraging a solution to, or mitigation of, this violent menace.

TERRORISM BACKYARDS

There have been periodic waves of different types of terror. History records one of the first manifestations of organised terrorism in the Middle East in the first century Palestine. The Zealot sect was one of the very first groups to practise systematic terror, of which there is a written account.⁶ It is interesting to note that the Zealots enjoyed popularity among the lower classes and the young. The party's religious aims were inseparable from its political objectives and its two-fold objective right from the beginning was to impose a degree of rigour in religious practice and often by force. This dynamic has been seen very often where the amalgamation of religious and political animation of the concept has been induced in a systematic manner with one of the historically remarkable being the reign in northern Iran of the Hashisihins (Assassins) who were also familiar with political violence.⁷ Towards the end of the 19th century and up to the outbreak of World War I, terrorist attacks took place in many places all over the globe. The terrorist wave of 1870-1914 ended with the assassination of Archduke Ferdinand in 1914 which was triggered

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5. With reference to the instance of the option to exercise counter-measures with surgical air strikes on the source of terrorism after the 26/11 terror attack at Mumbai.
 6. Gerard Chailand, Arnaud Blin, "Zealots and Assassins" in Gerard Chailand, Arnaud Blin, eds., trans, Edward Scheineider, Kathryn Pulver and Jesse Browner, *The History of Terrorism* (California & London: University of California Press, 2007), pp. 55-57. Knowledge about the Zealots is based on reporting published in 93-94 C.E. by Flavius Josephus in his *Jewish Antiquities*.
 7. Philippe Migaux, "The Roots of Islamic Radicalism", in *Ibid.*, p. 269.

In both the Russian revolution and the Israeli cases, the objects of terror were normally the civil administrators and the security apparatus, not the people, whose support was considered crucial.

by nationalists and provided the spark for greater hostilities and can in a way provide one of the oft-cited examples of terrorism by assassination.⁸ Terrorism has also been a key component of ambitious strategy involving several actors like a great power, Russia, a state, Serbia; and extra-territorial minorities. The case of Serbia in the years before the disaster of 1914 foreshadows the highly complex conflicts that marked the 20th century which exploited the advantages of indirect tactics and included terrorism.

The 20th century also saw a transformation of terrorism through at least two stages. The first was through the use of terror to support larger revolutionary insurgencies. The earliest success was the overthrow of the Russian government and, following a brutal civil war, establishment of Soviet Communism. The Narodnaya Volya terrorist group was guided by the booklet *Catechism of the Revolutionist* by Sergey Nechaev (1869), which taught that the true revolutionary must always be prepared to face torture or death and must give up friendship and gratitude in the single-minded pursuit of the mission.⁹ The breadth of Russian popular dissatisfaction and the weakening effects of World War I were coupled with the end of Narodnaya Volya which came quickly but the seeds planted by this group ultimately led to the Bolshevik Revolution of 1917 which ushered in the Communist era. Subsequent Communist movements employed terror tactics with varying degrees of success, most frequently against decaying colonial regimes or states only recently decolonised. Although certainly not inspired by Communism, Israeli terror tactics against the Palestinians were used effectively to support their cause and were sufficiently successful to hasten the creation of the state of Israel. Israeli success resonated deeply in the better organised and utterly committed minority Jewish population. In

8. "The Golden Age of Terrorism" in *Ibid.*, pp. 177-178.

9. Pamala L. Griset, Sue Mahan, *Terrorism in Perspective* (California : Sage, 2003), pp. 7-8.

both the Russian revolution and the Israeli cases, the objects of terror were normally the civil administrators and the security apparatus, not the people, whose support was considered crucial. The counter-arguments to use of terror in such struggles in such connotation are somewhat better tolerated when it is part of a comprehensive strategy that embraces more traditional instruments of war.¹⁰ However, in general, the less an act of terrorism resembles an act of war, the more likely it is to be condemned and, therefore, the term “terrorist” becomes a qualifier with negative connotations.

The second stage in the 20th century transformation of terrorism was the growth of state sponsorship. States which are unable to confront their enemies conventionally have provided imaginable assistance to terrorist groups in order to weaken their enemies physically or morally. State sponsorship does not necessarily ensure success, but does allow the fight to be prolonged. State-supported terrorism comes in several forms, including unwitting or inconsequential support, as in the case in many states where laws protecting civil rights also allow a form of refuge for some terrorists. Unwilling support, and an inability to take counter-action at times as in the case of Syria and Iran in support of Hamas and Hezbollah also categorises itself within this bracket; the Taliban in Pakistan being another manifestation of such phenomena. The Battle of Algiers is also worth particular review with respect to various approaches to terror tactics and the form of urban terrorism. In the early 1950s, Algerians started an insurgent movement in an effort to remove French colonial rule from that country. Repeated insurgent failures led to the adoption of terrorist methods. Terrorism against civilians, bombings, shootings and selective assassination of notable political figures figured prominently in the hostility of the FLN (*Front de Libération Nationale*— National Liberation Front). The FLN generally acknowledged that their activity was terrorism, although justifiable by their terms. Violence against lives and property was meant to “bring the war home”.¹¹ This enraged the French and resulted in the deployment of the French parachute division to Algeria. In a coordinated

10. Gerard Chailand, Arnaud Blin, “Terrorism in Time of War: From World War II to the Wars of National Liberation” in Chailand, Blin, eds., n. 6, p. 211.

11. Martha Crenshaw, *Terrorism in Context* (Pennsylvania: Penn State Press, 1995), pp. 485-486.

The growing use of religion for ideological purposes presented a different form of challenge as autocratic rulers who had characteristically come to power by a military coup or by the use of force legitimised such authoritarianism to unify people through the defence of national values.

civil-military campaign of incredible ferocity, the terrorists were claimed to have been destroyed.

The growing use of religion for ideological purposes presented a different form of challenge as autocratic rulers who had characteristically come to power by a military coup or by the use of force legitimised such authoritarianism to unify people through the defence of national values. This changed to a growing attraction towards religion as was seen in the Arab world and also beyond the Middle East and notably in Afghanistan.¹² Before the Taliban, none of any orthodox sects had made inroads in Afghanistan's traditional social structure, where tribe and ethnicity were more important than religion. The Taliban were able to succeed because the collapse of the civil society brought on by the

years of war-lordism had created a vacuum in governance.¹³

Terrorism is generally a tool of the weak; were terrorists strong enough, they would fight conventionally, which holds the promise of quicker results. Because terrorism is pursued by the weak, its infrequent success should be expected.¹⁴ Terrorism's regular failure also stems from the reprehensible methods employed. Those methods can alienate terrorists from popular support and possibly from state support. Terrorism also can arouse the ire of the opposing state, which usually has the resources to crush terrorist movements if it can muster the will. Terrorists do succeed on occasion, but the record suggests strongly that very specific conditions need to obtain first. Since the target of terrorism almost by definition has the greater resources, only weakness of will can normally keep the

12. David Martin Jones and Mike Smith, "Contemporary Political Violence – New Terror in the Global Village" in David Martin Jones, ed., *Globalisation and the New Terror: The Asia Pacific Dimension* (Cheltenham: Edward Elgar Publishing, 2006), p. 7.

13. Gabriel Palmer Fernandez, *The Encyclopedia of Religion and War* (London: Taylor & Francis, 2004), p. 423.

14. Dr Douglas V. Johnson II, Colonel John R. Martin, "Terrorism Viewed Historically", in Colonel John R. Martin, ed., *Defeating Terrorism: Strategic Issue Analyses* (Pennsylvania: DIANE, 2002), p. 3.

state from prevailing. Even with the will and resources, the target state can lose to terrorists if it lacks the ability to collect comprehensive intelligence and to act rapidly and forcefully on that intelligence. The historical record demonstrates that counter-terrorist campaigns are most successful when laws are adopted to address terrorist threats.

In India, the armed forces have been involved in tackling terrorism for more than two decades now. The dominant factor, however, has been to seek a political solution to the whole process. The lessons of history may not apply directly to India as the form of terrorism is fundamentally different from that used in the past. Although completely innocent civilian populations have been targeted previously by the Palestinians and the Irish Republican Army, the scale and manner of the November 26 attacks is unique. Foreign nationals were also attacked in numbers which had not been generally resorted to earlier and this within the precincts of a popular Indian destination which also happens to be the financial hub of the country. Further, the goal of the attacks may not be simply to inflict pain and destruction on citizens and the government, as it was in Beirut and Somalia, to acquiesce to another's aims; it could very well be an attempt towards disintegration of the country.

Military strength application has been focussed for the immediate and pervasive threats which are not on the conventional plane. The armed forces have gradually adapted themselves to this sub-conventional level. Over the recent period, it has become rapidly clear that terrorism has shifted to a more modern guerrilla nature.

In reality, we see the provocation to react strongly and an attempt may be to induce a counter-strike or counter-deployment. This has been evident from the strike on the Indian Embassy in Afghanistan on July 7, 2008, which led to the debate on whether India should deploy forces outside the geographical limits of the country to counter terrorism.¹⁵ The second attempt was on our own soil which also provoked a counter-strike. The end result is two sides fighting with different strategies and seeking to exploit vulnerabilities and centres of gravity.

15. By attacking the Indian Embassy, the militant actors hoped to draw India into the Taliban conflict on both sides of the Afghan-Pakistani border and to further aggravate tensions. "Afghanistan: Suicide Bombing at the Indian Embassy", available at www.stratfor.com.

Complexity here includes the time factor as such counter-terrorism efforts are likely to last longer than the military is planning for in the future.

Political solutions are not discounted and will remain a mainstream remedy but where terror emanates from religion-based beliefs and doctrines which seek virtually no constructive political goal, and the social goals they seek can be fulfilled only by giving in to the bargain where people in general get no dispensation whatsoever,¹⁶ it becomes increasingly difficult to give any concession. It is in this context that military force employment comes in for a closer look. It also emanates that the challenges to national

leadership and defence are becoming more complex than normally accepted. Complexity here includes the time factor as such counter-terrorism efforts are likely to last longer than the military is planning for in the future.

THE NATURE OF TERRORISM

The features of contemporary terrorism need to be listed in some measure if they are to be dealt with, and managed, in an appropriate manner:

- Terrorism today has a trans-national element. Terrorist organisations target not only the country in which they operate but also those outside. The nationalities of terrorists are varied and they come from different walks of life. Terrorism can be supported by state as well as non state actors, directly or indirectly.¹⁷
- Regular occurrence at intervals.¹⁸ Disorientation will occur when the terror attacks are not one-offs but part of a sustained effort, making the threat a permanent feature and creating a firm expectation that it will occur again.
- Upgraded and varied methods of perpetration that include bomb attacks

16. Nadin Gurr, Benjamin Cole, *The New Face of Terrorism* (London: I. B. Tauris, 2002), p. 259.

17. States are good at dealing with security threats from other states, but become less effective when dealing with challenges when posed by trans-national elements and non-state actors. Phil Williams, "Strategy for a New World: Combating Terrorism and Transnational Organised Crimes" in John Baylis, James Wirtz, Colin S. Gray, and Eliot Cohen, eds., *Strategy in the Contemporary World* (New York: Oxford University Press, 2007), p.193.

18. Peter R. Neumann, Michael Lawrence Rowan Smith, *The Strategy of Terrorism: How it Works and Why it Fails* (New York: Routledge, 2007), p. 62.

to suicide terrorist activities, hijacking to modern guerrilla tactics in urban areas.

- Increased scope of terrorist attack targets. No geographical limits, government officials to security personnel, both military and non-military, and no limit to the type of target, that is, buildings to airports and hotels, and innocent citizens. These attacks also have economic costs attached. Sometimes, targets are specially selected and, at times, indiscriminately targeted.¹⁹
- Increased participation of the young, not so affluent, technically capable and physically fit.²⁰
- For some years now, militants have been changing their target to focus more on soft targets involving strikes with Improvised Explosive Devices (IEDs), vehicle-borne IEDs, armed attacks or kidnappings and assassinations.

The psychological impact of a terror strike provokes panic and the response is infinitely large for any administration to handle in the first instance. Force and diplomacy both contribute to the containment and ultimate resolution of conflicts.

The above will give us a reflection of what to expect to combat this malaise. It may also be necessary to know the emergence and development of terrorism but in this paper, it will suffice to mention that terrorism is closely linked with political and economic order, and has historical, social, philosophical and ideological roots. Also unresolved ethnic and nationalistic issues have traditionally been the leading sources of terrorism. A common understanding will explain that terrorism as a weapon has proved to be relatively inexpensive since the impact with the slightest amount of synergy in its perpetration is huge.

The psychological impact of a terror strike provokes panic and the response is infinitely large for any administration to handle in the first instance. Force

19. Office of Technical Assessment, Congress of United States, *Technology Against Terrorism: Structuring Security* (Pennsylvania, DIANE, 1994), p21.

20. Jitka Maleckova, "Impoverished Terrorists: Stereotyped or Reality in Tore Bjorgo, ed., *Root Causes of Terrorism, Myths, Reality and Ways Forward* (New York: Routledge), pp. 34-36. Also see, Dilip K. Das, Peter C. Kratcoski, *Meeting the Global Challenge of Terrorism: Prevention Control and Recovery* (Lanham, Maryland, US: Lexington Books).

and diplomacy both contribute to the containment and ultimate resolution of conflicts. A systemic reaction follows in case inaction is perceived even when a strategic response has already been implemented. A certain requirement, thus, lies in visible action in an immediate response to a terror strike, even if it does not bring about its end.

State support to terrorism can be made in terms of three categories:²¹ Category I support entails protection, logistics, training, intelligence, or equipment provided to terrorists as a part of national policy or strategy; Category II support is when a regime does not back terrorism as an element of national policy but tolerates it; Category III support provides some terrorists a hospitable environment, growing from the presence of legal protection on privacy and freedom of movement, limits on internal surveillance and security organisations, well-developed infrastructure, and émigré communities.²²

There are several elements of value when assessing the nature of terrorism. Organising thinking in this way gets beyond analysing factors in isolation to focus on key *relationships*; in many cases, it is the nature of the relationship—rather than the absolute value of any of the factors—that truly contributes to a terrorist strike. This becomes important when developing accurate threat assessments because focussing on factors rather than relationships could lead to either high or low assessments of the threat posed by any terrorist group.

Second, focussing on such sets of matches and mismatches provides a relatively more streamlined thinking about how different methods and classes of security measures align or misalign to different and various types of threats. The search for certain mismatches between protective measures

21. Dr Steven Metz, "State Support for Terrorism", in Martin, ed., n. 14, p. 22.

22. The 1994 and 1996 Declarations on Measures to Eliminate International Terrorism of the United Nations General Assembly condemned all terrorist acts and methods regardless of political, philosophical, ideological, ethnic, or religious considerations. This was further strengthened in Resolution 1269 (October 19, 1999) in which the UN Security Council: Unequivocally condemns all acts, methods, and practices of terrorism as criminal and unjustifiable, regardless of their motivation, in all their forms and manifestations, wherever and by whomever committed, in particular those which could threaten international peace and security. Documents like the International Convention for the Suppression of Terrorist Bombings (1997), International Convention for the Suppression of the Financing of Terrorism (1999), and the Draft International Convention for the Suppression of Nuclear Terrorism (1998) focussed on specific elements of the problem.

and possible offensive actions are a traditional part of any vulnerability-based threat assessment, but combining thinking about how a specific counter-terrorist force may or may not match a potential terrorist attack of known or unknown capability with a consideration of how well passive measures do or do not match those same threats provides a more integrated approach to protective planning.

Finally, identifying mismatches between capabilities and what is known about intentions may also provide clues to the security forces about the activities to watch out for in the future. Any significant mismatch would suggest the need for more pre-attack preparation to reduce the shortfall, potentially creating additional opportunities to detect and disrupt terrorist activities. The success or failure of a past terrorist operation—or the likelihood that a future attack will succeed—can be best understood by thinking about the match or mismatch among three identified key sets of characteristics: (1) terrorist groups' capabilities and resources; (2) the requirements of the operation it attempted or is planning to attempt; and (3) the relevance and reliability of security counter-measures. For a terrorist attack to have the greatest chance of success, there needs to be a match between its capabilities and resources and the operational requirements of the attack it is seeking to carry out and a mismatch of security counter-measures and intelligence/investigative efforts with both the group and its plans.

PROSPECTIVE CONSTRAINTS ON RESPONSE WITH MILITARY POWER

Posturing of forces with intensive counter-terrorism capability would have a value. The value is that of deterrence up to the quotient of fear that can be instilled in the minds of terrorists. Politically, it will be an instrumental tool, coercive though, which may advance beyond practical utility if the application of its capability is overstretched. The boundary of this limit is not always very discernible. In our country, the situation is complex as we fight in the immediate proximity of our own citizens and within the country.

Political limitations by themselves impose constraints on the employment of military power. It is not whether or not military force application is required;

The proportionality of response can be taken forward to indiscriminate and disproportionate application of military power. As an example, attacking a country in response to a terrorist attack.

it would be the question of what type of military response is to be applied: air strike, operation by Special Forces (SF), and what would be the quantum and intensity?

The proportionality of response can be taken forward to indiscriminate and disproportionate application of military power. As an example, attacking a country in response to a terrorist attack. Second, the response is proportional to the nature and amount of force. The stricture in the latter case does not mean that the state exercising its right in *self-defence* must limit the force to minimum. It

would have the leeway to plan military operations to include the commitment of sufficient force to accomplish the task.²³ If there is resistance, then additional force can be applied which can lead to escalation and, hence, the restraint factor.

Importantly, the imperative of tailoring political goals to the limits of military capability imposes massive constraints in a democratic country. Excessive military force could split the fragile support and cooperation of the citizens, and also the allies in government support. In other words, force might not only be ineffective, but may also backfire.

Technology, though not central, will otherwise definitely be a multiplier to reach a decisive outcome of military strikes. Procurement of technology is a direct outcome of budget allocation. Restraints on defence budgets and the rate of induction of technology will determine the ability of military power to that extent. Israel's basic approach to the Hezbollah threat has been that of counter-terrorism, and in the past, Israel has also pursued technological solutions but the economic costs have been seen as counter-productive in cost-benefit terms.²⁴

A country will generally have something valuable to lose, such as its political standing and power if the desired result or goal is not achieved,

23. D. W. Bowett, *Self-Defence in International Law* (New York: Praeger, 1958), p. 269.

24. Air Cmde Jasjit Singh AVSM,VrC,VM, "The Lebanon War 2006," Air Cmde Jasjit Singh AVSM,VrC,VM, ed., *Asian Defence Review* (New Delhi: Knowledge World,2006), p. 14.

and, therefore, the perpetual dilemma of committing military force. Also, employment of armed forces does not satisfy the quest of complete victory—it provides only temporary success. The situation in Iraq, Afghanistan and the Israeli stalemate are bound to affect perceptions about superior military power.

Development of international law has been premised on the notion that all states, whatever their size and relative power, are equal and that each is sovereign within its own territory. The Charter of the United Nations international law recognised a nation's use of force against another nation as a matter of sovereign right. This right was based on the presumption that armed conflict would be between states. The use of force by one state against persons in another state is deemed to be either an act of war or, at least, a violation of the other's sovereignty.²⁵ Therefore, the issue will rest on the fact of applying military power on such persons who are citizens of another country. It may precipitate to proving or accepting the fact of whether such terrorists or terror organisations belong to the country in reference. If they are accepted as citizens, then use of force would be deemed a conflict between states.

However, violation of international norms by a state provides grounds for the wronged state to use force lawfully in order to right the wrong or to prevent future wrongs. Though states are generally not permitted to use force under international law against another state /states that harm them wrongfully, the covert or overt support of terrorists may engage state responsibility and, thus, trigger the application of military force as a counter-measure. In order to justify military force against terrorism emanating from another country and an extension of the state sponsor, the actions of the terrorists under a teleological reading of the UN Charter would ordinarily have to rise to the level of an armed attack. This would, in turn, be deemed to be an act of war. Placing responsibility for acts of terrorism is more than merely a problem of proof. Where the terrorist groups avoid responsibility for the acts and

25. David M. Ackerman, "Terrorism: International Law and Use of Force", in Diana Miller, ed., *Terrorism: are We Ready* (New York: Nova Science, 2002), p. 143.

Because there is a common element to terrorism, counter-terrorism has a foundation on which to base strategies and subsequently apply tactics for mitigation.

uncertainty exists as to the extent to which states protect or support terrorist groups, the country in question cannot legally entirely be bounded to such non-state actors.

Overall inconsistent community reaction to use of force to counter terrorism and unclear legal justifications for military action by victim states contribute in undermining any clearly accepted or permitted use of military force as a counter-measure. It becomes a virtual legal consideration to use or refrain from applying this nature of force. However, there are exceptions, as Professor Ian Brownlie has categorised,²⁶ to the restrictions on the use of force, and selective mention includes acts of self-defence and measures to protect the lives of a state's nationals.

While terrorism and our western neighbour receive widespread attention, most of the threats to national security can be identified as domestic where external adversaries thrive on discord within the country. Despite our military might and capability, there is a generalist nature of employing military force and, as a consequence, with notable and rare exceptions, the military tends to be provided with inadequate time for planning operations.

APPLICATION OF MILITARY POWER FOR EFFECT

Since the intention of all terrorists is to instill fear into the population at large, there is a common motivation to all the criminal acts they perpetrate. Because there is a common element to terrorism, counter-terrorism has a foundation on which to base strategies and subsequently apply tactics for mitigation. Anything that can be done to reduce fear and anxiety among the general population is an effective defence against terrorism and military strength happens to be one of them. The availability or presence of military force, with the option to utilise this power, reduces the fear in general.

26. Ian Brownlie, *International Law and the Use of Force by States* (Oxford: Clarendon Press, 1963), pp. 432-433.

It has been argued that military force has rarely been the primary reason that ended terrorist groups. The result of data analysis since the year 1968 seems to be stark. Terror organisations which decided to adopt non-violent tactics and join the political process comprise 43 per cent and local law-enforcement agencies' arrests or killing of key members of the groups by the comprises 40 percent. Victory by such outfits accounts for 10 per cent. Military force has rarely been the primary reason for the end of terrorist groups and accounts for 7 per cent.²⁷

What emanates on analysis will not always possess the attractiveness of numbers and percentage. For example, the movement for the creation of Khalistan was one of the most virulent terrorist campaigns in the world. Launched in the early 1980s, this movement consumed 21,469 lives before it was comprehensively defeated in 1993. The campaign that eventually crushed this menace, as dramatic as it was significant in its strategic inventiveness, has received scant attention. It is true that the defeat was unambiguously the result of counter-terrorist measures implemented by the security forces but the role of the army in the final phases of this campaign was crucial.²⁸

It has also been argued that most terrorist groups are small²⁹ and that military forces are most effective against large groups.³⁰ It may be difficult today to account for terrorist outfits having the small number of 100 or fewer members. Also, even if such groups do exist, do they have isolated operations?

Also, while considering a terror organisation consisting of several dozen activists, a severe and effective military blow aimed at the 'underbelly', such as arrest or elimination of the leadership and destruction of operational infrastructure, is at times capable of achieving the aim. This was the case in the 1970s when the end of the "Red Brigades" and "Bader-Meinhoff" was heralded.³¹ But when terror organisations happen to be popular, with

27. Seth G. Jones and Martin C. Libicki, *How Terrorist Groups End* (Santa Monica: RAND, 2008), pp. 18-19..

28. K.P.S. Gill, "Endgame in Punjab: 1988-93," in K. P. S.Gill, Ajai Sahni, *Terror Containment: Perspectives on India; Internal Security* (Delhi: Gyan Books, 2001), pp.23-25.

29. Fewer than 100 members, as taken in the evaluation

30. Jones and Libicki, n. 27, pp. 31-32.

31. Boaz Ganor, *The Counter Terrorism Puzzle* (Edison, New Jersey: Transaction Publishers, 2005), p. 40.

Terrorists do not merely kill people; they also threaten the democratic way of life by placing themselves outside the society and the law.

thousands of supporters and manpower reserves, military action may, at most, reduce the phenomenon and its resultant damage.

Terrorists do not merely kill people; they also threaten the democratic way of life³² by placing themselves outside the society and the law. In its modern manifestations, terror is the totalitarian form of war. It shatters conventions of conflict, social and political codes. It breaches moral limits beyond which no further limitation seems possible. In essence, the terrorists do not play by any rules so they tend to get away as they do not act within the scope of lawful existence and disallow any democratic form of existence. So, despite being violators of humanity, they situate themselves somewhere outside the society and its democratic ways. The Indian Ministry of Defence defines terrorism as “involvement in violence” with a “view to overawing the sovereignty and integrity of the nation.”³³ Therefore, there arises a case of using military power as part of national power to protect our society, its integrity and democratic way of life, and the sovereignty to do so.

Domestic enforcement agencies deal with terrorist acts within the gambit of national laws. Various attempts have been made to expand the scope of defining terrorist acts so that definitive actions can be taken to counter them, including the recent one in the Unlawful Activities (Prevention) Amendment Act, 2008.³⁴ Notwithstanding versions, inconsistencies and lack of clear-cut definition of terrorism,³⁵ we agree that in the face of terrorist attacks and threats, there is an urgent need to first act in the interest of national security

32. Jean Bethke Elshtain, “How to Fight a Just War”, in Ken Booth and Tim Dunne, eds., *Worlds in Collusion: Terror and the Future of Global Order* (Basingstoke: Plaggrave Macmillan, 2002), pp. 263-269.

33. Joint Services Glossary of Military Terms, p. 119.

34. *Further to Amendment of the Unlawful Activities (Prevention) Act, 1967*, through Bill No 76 of 2008 presented in Parliament on December 16, 2008, and passed during the session, *The Times of India*, New Delhi, December 17, 2008, p. 1.

35. Scholars have long maintained that it is neither useful nor possible to define terrorism. Christopher L. Blakesley, *Terror and Anti-Terrorism: A Normative Practical Assessment* (New York: Transnational Publishers, 2006), p. 45.

and then respond subsequently through the legal paradigm³⁶ for future goals. It is also argued that the terrorists protect themselves by exploiting various lacunae in as many laws to their advantage and, therefore, these provide them the opportunity to get away without any redemption of justice. Justice forms the bulwark for national security which depends as much on the work of diplomats as on the achievements of soldiers.³⁷ Therefore, it may well become necessary to undertake an immediate response against terrorism as acts jeopardising national security.

The political dilemma of a defeat and losing international standing lies in adopting the victory-denial approach.³⁸ It rests on the belief in the superiority of defence over offence. The terrorist organisation should be deterred, and if deterrence fails, then defensive fighting capabilities of protracted resistance should be initiated wherein the intention to wage such acts erodes, because the cost may well exceed any anticipated benefit. It requires military action and heavy security measures to prevent radical elements from carrying out their attacks. Consequently, the successful strategy so far in Jammu and Kashmir has been that of continued military presence which has tested the tolerance limits of many a terrorist.

Thomas Schelling distinguishes between “brute force” and “compellence.” Brute force is aimed at forcing a military solution; compellence is aimed at using the threat of force.³⁹ Attempts to coerce Saddam Hussein to comply with UN resolutions were termed a failure till coercive diplomacy in the form of military intervention stepped in. Coercive diplomacy consists of diplomatic

36. In response to the massacre of Israeli athletes at the Munich Olympics, the UN called for a legal suppression by its members of violent acts of terrorists through the ratification of the Convention for the Prevention and Punishment of Certain Acts of International Terrorism. Ben Golder and George Williams, “What Is ‘Terrorism? Problems of Legal Definition”, *University of New South Wales Law Journal*, vol. 27, issue 2; 2004; pp. 270-295. Available at :<http://search.informit/document/113455569204345;res=IELHSS>>

37. Brahma Chellany, *Securing India's Future in the New Millennium* (Delhi: Orient Blackswan, 1999), p. xix

38. Reflections of traditional and modern People's War doctrine as propagated by Mao and Sun Tsu. The traditional defensive strategic approach is associated with the teachings and theories of Mo Zi (470-390 B.C.) where he devised defensive fighting techniques in the event that peaceful resolution of conflicts failed. Ulric Killion, *A Modern Chinese Journey to the West* (New York: Nova Publishers, 2006), p. 225.

39. Thomas A. Schelling *Arms and Influence* (New Haven: Yale University Press, 1966), pp. 2-3.

There will also be instances, as in the past, where air and space power will be the preferred instrument of choice in the fight against terrorism.

means reinforced with instruments of power. Coercion in the form of threats of military intervention forces an adversary to cease unacceptable activities. The serious threat of terrorism has to be dealt with using a comprehensive strategy, leveraging intelligence, diplomacy and military assets to defeat terrorists.⁴⁰ This has been termed as “smart power,” the full range of tools in which military power provides for the combination. Diplomacy is a smart choice but sometimes military power becomes necessary.

Finally, military tools have increased in precision and lethality, especially with the growing use of precision stand-off weapons and imagery to monitor terrorist movement. These capabilities limit the footprint of other forces and also reduce operating costs involving sending forces to potentially hostile areas.

AIR AND SPACE POWER FOR COUNTER-TERRORISM

Choices about the use of force often produce unexpected effects at any level of war: tactical, operational and strategic. As an example, looking at the norm for employment of air power— an effort to achieve objectives quickly— limited air strikes often constitute the dominant part of the early phases of an operation. This selection is driven in part by the rapid response. In some instances, air and space power will also be the instruments in our counter-terrorism arsenal, though they should rarely be used independently henceforth. Air (and also space power) already plays the covert and intelligence gathering role. There will also be instances, as in the past, where air and space power will be the preferred instrument of choice in the fight against terrorism. Moreover, policies on terrorism and counter-terrorism are changing in ways that will significantly affect the future contribution of air and space-based assets that would contribute significantly to bolster the security of societies against external threats, peace-making and peace-keeping.

40. Hillary Clinton, US Secretary of State, during the confirmation hearing before the Senate Foreign Relations Committee, *The Times of India*, New Delhi, January 15, 2009, p. 22.

Air power in the service of counter-terrorism will include, and also go beyond, the surveillance and punishment of terror sponsors. Deterrence and response will likely evolve in the direction of a more comprehensive approach, emphasising the monitoring and attack of key nodes in terrorist networks and the forcible apprehension of terrorist suspects, with or without the cooperation of local authorities.⁴¹ Future demands on air power may be driven as much by requirements for intercepting and extracting suspects with the need to attack terrorist training camps, and to strike regimes supporting the export of terrorism.

Air and space power will help make terrorism an inherently amorphous phenomenon. The ability to make terrorism more transparent will help build the case for coordinated response. It can also serve force protection in an increasingly risk-prone environment.⁴² The ability to identify and target terrorist related activity, and help expose terrorism and its sponsors for policy-makers and international opinion will be key contributions of air and space-based assets. Space-based sensors, surveillance with Unmanned Aerial Vehicles (UAVs) and Signal Intelligence (SIGINT) will facilitate the application of air power and other instruments in the fight against terrorism. Gaining leverage in addressing terrorism will be a key strategic and technical challenge. Future requirements for counter-terrorism will be part of a broader need to tailor air and space power to challenges posed by non-state actors, including networks of individuals.

Terrorism is increasingly becoming worldwide an urban phenomenon. Much terrorism and counter-terrorism action will focus on urban areas, with strong political and operational constraints. One explanation for this is that the political fate of most modern societies is determined by what happens in cities. Terrorists seeking to influence political conditions have many incentives to attack urban targets. Terrorists with transcendental objectives will, similarly, find symbolic and vulnerable targets in urban

41. "Regional Taliban Chief Dies in Airstrike," The precision strike did not destroy any other building and nearby structures only had minor external damage, according to a military statement. *Asian Age*, (New Delhi), February 17, 2008, p. 8.

42. Ian O. Lesser, *Countering the New Terrorism* (Santa Monica: RAND, 1999), p. 134.

The viability of air power as an instrument in such settings may depend on the capacity for discriminate targeting and the use of less than lethal technologies.

settings. The use of air power in a counter-terrorist mode faces the more general problem of operating in an urban environment⁴³ Terrorists and their facilities will be difficult to locate and target. Operations against them or to rescue hostages will pose severe challenges for the use of air power, not least the risk of placing uninvolved civilians in harm's way. However, the viability of air power as an instrument in such settings may depend on the capacity for discriminate targeting and the use of less than lethal technologies. Military tools of targeting have increased in precision and this capability reduces the footprint of other forces and minimises the cost of sustaining a long drawn engagement.⁴⁴

Air power's pervasiveness and speed are advantages in the face of trans-national and trans-regional terrorism. In an era in which terrorist acts may take place across geographical limits and where sponsors cross national and regional lines, counter- terrorism strategies will become 'horizontal' in character. Where terrorists and their sponsors can be identified and attacked with purpose, the expanse of sight and reach of air and space-based assets will be valuable to national decision-makers.

Air and space power will have a synergistic effect with other counter-terrorism instruments. Air and space power can be used in concert with covert action, diplomacy, economic instruments, and joint operations. The notion of "parallel warfare," developed in relation to attacks on infrastructure in war, will also be relevant to counter-terrorism operations. Operations using a range of instruments can be designed to act, in parallel, on terrorist supporters, terrorist infrastructure and networks, and the terrorists themselves.

43. The difficult Israeli experience in Beirut and south Lebanon is instructive.

44. Paul R. Pillar, *Negotiating Peace: War Termination as a Bargaining Process* (Princeton, NJ: Princeton University Press, 1983), pp. 97-110.

A SOLUTION MATRIX

An effective response to terrorism will ineluctably⁴⁵ be predicated on a strategy that effectively combines the tactical elements of systematically destroying and weakening the terrorists (kill or capture approach) alongside the equally critical broader strategic imperative of breaking the cycle of terrorist recruitment and replenishment that has so far sustained terror efforts. Such an approach would require a priority knit of political, economic, diplomatic, and developmental sides inherent to the successful implementation to the dominant military side of the equation.

Success lies in untangling lines of authority and the ability to prioritise inter-agency operations and de-conflicting overlapping responsibilities in a timely and efficient manner. Clarifying these expectations and processes is a critical step towards tackling this contemporary threat. Facilitating this would go beyond the Ministry of Defence and Ministry of Home Affairs, and may require the sole authority of the Prime Minister to task, de-conflict and synchronise with the measured employment of the military which is one of the operational arms of the counter-terrorism mechanism.⁴⁶ Even the best strategy will prove inadequate if military, para-military and civil efforts are not engaged meaningfully.

An equally critical dimension of this process will be aligning the training of military, para-military, internal security agencies and intelligence counterparts ensuring that training to combat terrorism leads to operational effectiveness. The approach in training should be in complete harmony. In other words, align these training programmes with indigenous capabilities and have a common approach to counter-terrorism. May be it would be less beneficial to follow the democratic path in tackling terror.

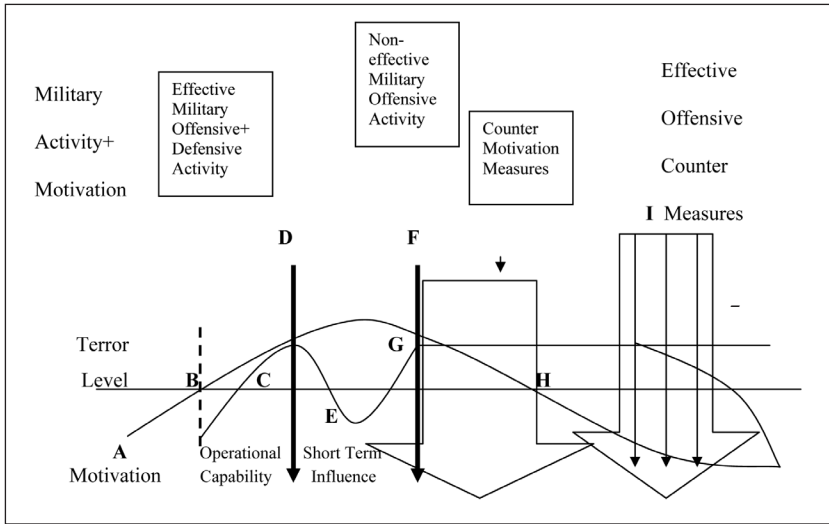
Whatever be the combination of tools in 'smart power,' a modelled strategy approach could indicate the success-failure assessment thereby enabling a

45. The ineluctable principle was first defined by Field Marshal Sir Gerald Templer in Malaya. "The shooting side is only 25% of the trouble and the other 75% lies in getting the people of the country behind us." Quoted in John Cloake. *Templer: Tiger of Malaya – The Life of Field Marshal Sir Gerald Templer* (London: Harrap, 1985), p. 262.

46. Other agencies have been considered as either operational or functional arms in the process of countering terrorism.

structured path to countering terrorism. An adapted model (Fig. 1) illustrates the dilemma and represents a suggested combination between the means to reduce the operational capability and motivation of terror organisations.

Fig. 1



Adapted Source: Boaz Ganor, "The Terrorism Equation," in *The Counter Terrorism Puzzle* (Edison, New Jersey: Transaction Publishers, 2005), pp. 41-44.

The figure starts out with the motivation of a group of people to achieve any perceived aim (A). At first, their motivation level is lower than the threshold needed in order to decide to perpetrate terrorist attacks but, subsequently, for one reason or another, the group decides to employ violent means against innocent civilians, that is, terrorism, in order to achieve its aims. This is when motivation rises above the minimum threshold for perpetrating terrorist attacks (B). At this point, the group of people who have banded together into an organisation begins to attempt and gain capabilities that will enable it to act on its motivation to perpetrate terrorist attacks. When these capabilities exceed the minimum required for committing terrorist acts (when they cross the 'terror level' line), the organisation is liable to perpetrate attacks (C). At this point, the nation coping with terrorism takes effective offensive activity

against the terror organisation (D). Such activity diminishes the organisation's operational capability needed to commit terrorist acts. Sometimes, defensive activity can also reduce the terrorist organisation's operational capability – for example, the fence India has built along the international border and then subsequently along the Line of Control (LoC). The influence of the offensive activity is, however, a short-term one, and after a certain period of time, the organisation works to repair the damage or loss of operational capability (E). Then the capability line begins to go up once again, until it crosses the terrorism threshold. At the same time, as stated, the offensive activity raises the organisation's motivation to continue perpetrating, perhaps even to escalate, terrorist activity in retaliation and in response to the country's actions. The rise in motivation increases to a level after some time to a point higher than it was prior to the nation's offensive activity.

When the nation carries out non-effective offensive activity against a terrorist organisation (F), the organisation's operational capability is not damaged at all, and the motivation to carry out revenge attacks only increases. The motivation curve is seen to rise due to non-effective military activity and a sober decline till the counter-motivation measures step in due to the natural effects on the morale of the terrorists because of sustained offensive operations against them.

Planning and carrying out effective offensive counter-terrorism activity is a complex task but this difficulty is negligible compared with that of carrying out activity to counter an organisation's motivation for terrorism. Taking steps to reduce the motivation for terrorism is essential when countering terrorism. The counter-motivation measures become vital. While the offensive counter-terrorist activities have immediate, tangible results, counter-motivational activities will make themselves felt in the long

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term. The motivation level then starts dropping significantly (G). This drop in motivation comprises not necessarily the feelings of the terrorists but primarily those of the people and organisations supporting them. Steps taken to counter motivation must be directed towards the population in order to isolate the terrorists and make it easier to undertake offensive measures against the organisation's hard core. We can now expect a decline in the level of motivation to below the terror threshold (H). The decline in motivation, however, does not impinge on the level of capability to commit terrorist attacks. Any factor that causes a temporary rise in motivation – offensive activity by the nation, inter-organisation or intra-organisational relationship, external pressures, etc— without restricting operational capability, will lead to a terrorist attack or a series of attacks. Therefore, the combination needed is counter-motivation activity with repeated offensive activity against the organisation's hard core in such a way that the organisation is not able to recover and improve its operational capability between one blow and the next strike (I).

The effort must also rest on eliminating/reducing the non-effective military activity which will in effect flatten the rise of motivation and operational capability curve, and provide more for effectiveness of military offensive and defensive activity. Eradication of non-effective military offensive activity and merging of effective military activity with counter-motivation measures will also weed away the necessity to look for short-term influence. The process will also mask the effects of terror, keeping the level of violence, and loss of life and property at bay. This would in effect provide the government a certain degree of leeway and the time required to formulate additional measures to counter terrorism.

OTHER RELEVANT MEASURES

At some point, the terrorists require a supportive population. That support can be broad-based or can be provided by a committed minority. Increasingly, in the late 20th century and beyond, media coverage has been a major factor in either sustaining popular support for terrorists or in separating them from it, and additionally to garner adverse observations against the security forces. State support may not be essential to the success of the efforts of terrorist organisations but can help provide a popular base through the control of state media organs. State support must be eliminated as an ideal measure, although this will require specialised approaches. Countries that willingly provide direct support to those who attack us should expect to see themselves bracing for limited conventional conflict in case they resist with regular armed forces any punitive action that may be executed on sanctuaries in their soil. For other countries providing unwitting or indirect support, concentrated application of international pressure through diplomatic efforts may be enough.

Terrorists must be separated from popular support, a much more difficult matter, especially since terrorists manifest religious motives which are widely shared. Serious efforts to address the underlying motivations for terrorism without outright capitulation to their demands must be addressed without making compromises. These efforts have to be accompanied by an information campaign highlighting the repugnance of terrorist methods and their ineffectual or counter-productive effect. For this, the will to fight terrorism must be maintained. This will hinge on several issues. With willingness to accept losses if vital interests are involved, tactical success is periodically demonstrated and operational and strategic success can be expected eventually. Casualties and tactical failures can be accepted if regular successes by law enforcement agencies and the military are honestly portrayed and widely broadcast. Continuing information operations should be conducted to affirm justice with transparent intentions and the reasonableness of military and other actions. The public should not be manipulated, but made to believe in the country's efforts in counter-terrorism.

The heart of the problem then lies in the minds of the uncommitted population, with ideologies still in the formative stage, and in which military force application in absolute terms has no space to operate.

Intelligence capabilities must be expanded first, followed quickly by elimination of any excessive concerns for the due process in law that might impede direct action against, and capture and prosecution of, terrorists. In a democratic country like India, any such expansion of police powers and military involvement in police matters must be accompanied by adequate safeguards on civil rights. Terrorists are neither legitimate soldiers nor common criminals, so special provisions are required to be tailored rather than a generalist approach to legal pinning. The dilemma rests on the requirement to act against terrorists as a national

security risk without destroying the essential rule of law. Certain dilemmas make democracies like India simultaneously vulnerable and resilient and, therefore, make these tasks not any less difficult but multi-dimensional ones which urge a sophisticated approach focussing on the inherent weaknesses of terrorist organisations which can lead to their eventual destruction, both domestically and those being exported from outside the country's geographical boundaries. If the will is maintained, intrusions on civil liberties balanced against the need to gather intelligence and vigorous action taken on security measures against the terrorists which are inclusive of reducing the popular support base and suffocating financial sources for these organisations, then the light at the end of the tunnel is not too distant.

SOLUTION DILEMMA THEORY

The conception of terrorism implies a centre of gravity against which a sustained effort has to be directed. If our western neighbours continue to export terrorism in a shadowy and covert manner, we will not be able to cope militarily with the resulting flood of people being recruited and the resource harnessing that is being done. The phrase is often quoted that one man's terrorist is another man's freedom fighter, and reflects the fact that terrorism

is an approach sometimes taken by the weak against the strong to induce change. The heart of the problem then lies in the minds of the uncommitted population, with ideologies still in the formative stage, and in which military force application in absolute terms has no space to operate. If we can combine steady progress on the military front with political and social containment, thereby, restricting the size and shape of terrorist organisations, then there will be a fair chance to grind them down to a fixed operative level which can be contained. To do this, it may become an eventual necessity to cover a majority of the operatives if not all, with specific linkages.

To avoid sending the wrong message to future foes, military actions must be decisive in achieving operational and strategic goals. To precede this, rapidity is always preferred at all levels of the country's leadership, but decisiveness is the most essential requirement. Failure to achieve such results, as is too often risked when quick action is overvalued or commitments are too limited, would diminish a country's image as a power to be respected. The *carrot and stick* theory will work where countries see the justice of the cause but they may not make it their cause. Also, public support for military action is at levels that parallel the public reaction after the Parliament or Mumbai attacks. Belief in military action becomes appropriate, the consequences supported, with a general willingness to endure the negative consequences from the aggressive actions for countering terror. Support will become fickle, as most Indians will really not be involved, and opinions on the military action will vary; the favourable vibes will diminish unless the military continually shows progress in every action and operation, which would keep the nation connected to its armed forces.

CONCLUSION

Terrorism rarely succeeds in achieving its political goals. Terrorists rarely have the resources to succeed in a fight against a state which understands the

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reprehensible methods which frequently inspire resolve within the target state. Those same methods also separate terrorists from crucial popular support. A study of history alone cannot provide a predictable way of finding a solution to the evolving terror problem, but historical insights suggest that:

- Laws governing domestic and international actions against terrorism must be adopted for comprehensive intelligence collection and for prompt action on that intelligence.
- Appropriate safeguards of civil liberties and human rights must be provided while applying military force, where applicable
- Terrorists must be separated from their popular support base. Separating them from state support is an important element of this effort, but not always necessarily critical because of the time and complexities involved when sanctuaries exist outside the geographical boundaries of the nation.

The military component should not be discounted as a legitimate and effective means for eradicating terror attacks, reducing their damage, and hurting such organisations till their elimination. Concomitantly, we must assess the nation's capability to prevent terrorist organisations from achieving their interests and goals over the long-term. All of this will enable us to determine the relationship between the military and political aspects of countering terrorism. We would realise that while total protection against terror attacks is impractical, commitment towards the safety of the citizens of the country requires a comprehensive approach which not only includes a list of the political aims but would rather be a combination of administrative and military responses out of which the latter element presently requires a more structured application, given the increased lethality with which the terror strikes are being executed. A firm balance of the humane approach is required in the application of force but any tendency to opt for a 'soft' approach may tend to spell disaster. Terrorism not being only a military problem will have other aspects to the solution matrix, and there is no short cut to it. Military power applied legitimately will create the conditions and influence the inclinations to renounce the path of terror.

CTBT EXHUMED: NEED INDIA WORRY?

MANPREET SETHI

In 1999, the Comprehensive Test Ban Treaty (CTBT), an international agreement meant to proscribe nuclear testing¹ went comatose. The then Republican-dominated Senate orchestrated a major legislative defeat by refusing to ratify this instrument that had been concluded in 1996.² That one decision of the US Senate effectively buried the treaty, and the Bush Administration, over two terms, made no effort to reverse the decision. President Obama, however, had made his intentions of reviving the treaty clear throughout his election campaign. In a landmark speech at Prague on April 5, 2009, he declared that his Administration would “immediately and aggressively pursue US ratification of the CTBT.”

As Obama’s Administration now exhumes the treaty and dusts it for Senate ratification, the domestic process of securing two-thirds majority in the US Senate is not yet a given. Of course, if the President was to set his heart on it, then the 59 Democrats currently in control of the Senate would need only 8 Republicans to vote it into ratification, provided all the Democrats voted

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1. From July 1945 to September 1992, the USA had conducted 1,054 nuclear tests. The Soviet Union had conducted 715 tests up to 1990 when it announced a moratorium. France is believed to have conducted 204 tests, the UK 45 tests and China 41 tests.
2. Then Senator Joseph Biden, now Vice President of the USA had declared, “This is the most serious mistake the Senate has ever made”.

along party lines. However, the numbers do not appear to add up as of now.³ Several formulations have appeared on the permutations and combinations that could make the ratification possible.⁴ The situation, nevertheless, remains unclear, though a few factors do raise the prospects of US ratification and these are discussed in the body of this paper.

Meanwhile, the forthcoming nuclear Non-Proliferation Treaty (NPT) Review Conference (RevCon) in May 2010 (a few months from now) and the desire of the new US Administration to showcase good nuclear behaviour, provides a context and urgency to the vote on the CTBT. In any case, it may be highlighted that so far, of the 44 countries whose ratification is mandatory as per Article XIV of the treaty for its entry into force, 9 are still holding out—China, Egypt, India, Indonesia, Iran, Israel, North Korea and Pakistan. Of these, the US actually holds the controls because if the American ratification was to come through, it would bring tremendous pressure on the others and they would most likely follow suit.

Given the heightened prospects of the CTBT springing back to life some time in the near future, which could be as early as next year (if the US wanted to make a point at the RevCon) or some time in the latter half of the four years of the Obama Presidency (if the executive felt the need to allow enough time to schedule and conduct hearings to build domestic opinion, as well as craft an international consensus), the time is certainly ripe for India to examine various aspects of the treaty in order to arrive at a considered decision on how New Delhi should deal with the possibility of the CTBT coming into force.

Since the treaty's rejection by India in 1996, and the manner in which the subject of testing surfaced in the context of the Indo-US civilian nuclear agreement, the CTBT has become an emotive issue associated in public perception with surrender of national sovereignty. Therefore, a national

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3. A Congressionally mandated bipartisan expert panel chaired by William Perry reported in early May 2009 that its members were divided over whether the US Senate should ratify the CTBT. See *America's Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Washington DC: United States Institute of Peace Press, 2009).
 4. For a good analysis of the kind of "political capital" that the President would have to invest, in order to avoid a repeat of Senate's rejection of ratification, see Jofi Joseph, "Renew the Drive for CTBT Ratification", in *Washington Quarterly*, vol. 32, no.2, April 2009, pp. 79-90.

consensus on the treaty needs to be built through a debate pitched at the level of national security that must steer clear of partisan politics – a difficult proposition, to say the least. India must objectively examine the ramifications on its strategic deterrent and work out a national acceptability quotient of the CTBT. This paper performs this critical task by looking at three important dimensions of the issue: Obama’s motivations for reviving the CTBT and their relevance, if any, for India; India’s core concerns on the treaty; and, whether India should sign the treaty, and with what conditions and safeguards.

India must objectively examine the ramifications on its strategic deterrent and work out a national acceptability quotient of the CTBT.

REASONS FOR REVIVAL OF THE CTBT

“Treaties never die, even when defeated and returned to the executive calendar of the Senate. Therefore, we will have another chance to debate the CTBT.” These prophetic words were spoken by the Republican Senator Pete Domenici who was personally in favour of the CTBT but toed the party line and voted against it on October 18, 1999. The Senate rejected the treaty on a 51-48 vote, far short of the 67 votes needed for its ratification. Two major concerns were then voiced in opposition to the treaty – one, that there was no way to guarantee that the US would never need to test in the future in order to maintain a safe and reliable nuclear arsenal, especially as the warheads aged⁵; secondly, there was no effective mechanism to detect tests, especially of the low yield variety. In the past decade, the situation has substantially altered on both counts. This provides one rationale for revival of the treaty in the US. At the same time, two other factors also propel a reconsideration of the CTBT – one, the need to impose testing constraints on emerging or prospective nations with nuclear weapon capabilities, or in other words, more specifically to find a way to cap Iran’s alleged nuclear ambitions; and second, the requirement

5. Most of the nuclear warheads in the US arsenal were produced in the late 1970s and 1980s, with W-88 submarine launched warheads of 1988 being of most recent vintage. The warheads were then anticipated to have life-times of 20-25 years, which is today believed to be a gross underestimation.

One of the major reasons cited by the opponents of the CTBT in 1999 was the inability of the US to maintain the reliability of its ageing nuclear warheads in the absence of some fresh testing in the future.

to contextualise the CTBT in the larger framework of nuclear disarmament, a commitment that the new US President is willing to make. The following sections examine these four motivations for revival of the CTBT in some detail.

Adequacy of the Stockpile Stewardship Programme

One of the major reasons cited by the opponents of the CTBT in 1999 was the inability of the US to maintain the reliability of its ageing nuclear warheads in the absence of some fresh testing in the future. The supporters, though, argued that the treaty did not adversely impact US national security because the nuclear weapons labs had adequate ability for the surveillance, assessment and refurbishment of the nuclear weapons through the Stockpile Stewardship Programme (SSP) established in 1994, and which removed the need for physical testing.⁶ The purpose of the SSP was to equip and enable the weapon labs to “conduct an extensive series of non-nuclear tests on both production-line and stockpiled warheads to determine if there are any problems with the warheads themselves, their components, or their production procedures.”⁷ It enabled virtual nuclear testing to ensure continued viability of US nuclear weapons, to train a new generation of weapon scientists, and to refine weapon designs and production processes in order to maintain a trained and capable work force that could respond to circumstances quickly, if necessary. In fact, the rejection of the CTBT provided an opportunity to leverage greater funding for these science-based programmes at the US nuclear weapon labs. It was also stated then by Domenici that “if the potential for stockpile stewardship during the next decade can be realized,” it may become possible to reconsider the CTBT.

6. For more on the SSP, see Francis Slakey and Benn Tannenbaum, “What About the Nukes?” at <http://www.spectrum.ieee.org>, 2008.
 7. Robert Nelson, “3 Reasons why the US Senate Should Ratify the Test Ban Treaty”, *Bulletin of Atomic Scientists*, vol. 65, no.2, March/ April 2009, p. 57.

Exactly a decade from then, the CTBT might be presented before the Senate yet again. Much has changed in the US nuclear weapons complex and its nuclear thinking since then. The country has gone through yet another debate on the issue of nuclear testing in the context of the Congressional approval for financing a new nuclear warhead during the Bush Administration. With a view to renewing the stockpile in order to enhance the reliability of the warhead against possible degradation of the weapon's core plutonium components or the pits, and in order to strengthen the safety of the weapons through addition of new features to make them less dangerous in case of their falling into terrorist hands, the idea of the Reliable Replacement Warhead (RRW) had surfaced.

In 2005, the RRW programme was initiated when the Congress allocated \$9 million to explore how to lengthen the life of existing nuclear warheads without diminishing their explosive power. The objective of the programme was "to improve the reliability, longevity and certifiability of existing weapons and their components,"⁸ besides also enhancing their safety and security. It was also endowed with a more "benign" purpose of providing research and engineering problems to the "unchallenged" nuclear workforce in labs that were also to be refurbished as part of the RRW programme. In fact, the National Nuclear Security Administration (NNSA) had then argued that the programme would be useful for revitalising the existing "decrepit" nuclear infrastructure, which it claimed had suffered under "decades of neglect, intense Congressional scrutiny and legal enforcement actions in the late 1980s and 1990s." In an October 2006 report, the NNSA stated that a revamped complex would "improve the capability to design, develop, certify, and complete production of new or adapted warheads in the event of new military requirements."⁹ It has also been argued that the new warheads would be simpler and cheaper to construct and maintain using modern manufacturing techniques.

In order to make the RRW possible, the Departments of Defence and Energy commissioned a design competition between the nuclear weapon

8. Jonathan Medalia, "Nuclear Weapons: The Reliable Replacement Warhead Program", *Congressional Research Service*, May 24, 2005, p.6

9. Wade Boese, "New US Warhead Design Selected", *Arms Control Today*, April 2007.

John Holdren has stated on the basis of a study that he conducted in 1999 for President Clinton at the National Academy of Sciences that the “safety and effectiveness of the current nuclear stockpile could be maintained indefinitely without developing new warheads.”

labs in 2006. The Lawrence Livermore National Laboratory in California and the Los Alamos National Laboratory in New Mexico submitted competing designs for a new warhead. A period of review followed during which, in January 2007, Bush even hinted at the possibility of a hybrid of the two designs to arrive at one that would be more robust and resistant to accidental or unauthorised use. But, in March 2007, the NNSA chose the Livermore Laboratory design since it invoked greater confidence of being certified *without nuclear testing*. While announcing the choice of the new design that would replace the W76 warhead for

submarine-launched ballistic missiles, NNSA’s acting administrator, Thomas D’Agostino explained that the RRW programme would use a warhead design that had been tested in the 1980s. It would be packaged with new features such as insensitive high explosives less liable to explode by accident, as well as locking devices that would prevent the warhead from being used even if it fell into the hands of terrorists.¹⁰

Therefore, the retention of the moratorium on testing was apparently a factor in the selection of the RRW, and while providing funding between 2004-07, often reluctantly, the Congress insisted that the warhead be developed without any testing. From 2008 onwards, the Congress has even refused to fund the RRW. Meanwhile, in 2006, JASON, an independent panel of scientists and engineers that has long advised the US government on nuclear weapons issues, concluded on the basis of data received from weapon labs that the core plutonium components in US warheads could last from 85-100 years, and perhaps even beyond. More recently too, John Holdren, advisor to the President, has stated on the basis of a study that he conducted in 1999 for President Clinton at the National Academy of Sciences that the “safety and effectiveness of the current nuclear stockpile could

10. Walter Pincus, “Nuclear Warhead Plan Draws Opposition”, *Washington Post*, March 4, 2007.

be maintained indefinitely without developing new warheads but by monitoring the situation and making modifications if necessary.”¹¹

Yet, there are contrarian voices too, the most influential being that of the current US Secretary of Defence, Robert Gates. He believes that even with diligent inspection and maintenance, America’s current arsenal would become unreliable over time and, hence, the need to design and build new warheads. Echoing the same thought, the December 2008 Interim Report on the Strategic Posture of the

US recommended on the CTBT that “before submission [to the US Senate for ratification], the Department of Energy and Department of Defense should receive from the labs and STRATCOM clear statements describing the future capability and flexibility required to minimize the risks of maintaining a credible, safe and reliable nuclear deterrent without nuclear explosive testing.”¹²

Two other recent reports add to the confusion over the CTBT. An Independent Task Force Report prepared by the Council on Foreign Relations and entitled “US Nuclear Weapons Policy” favours ratification of the CTBT.¹³ Meanwhile, another Report of the Congressional Commission on the Strategic Posture of the US, entitled *America’s Strategic Posture*, conveys a divide amongst the bipartisan group on whether the US should ratify the treaty.¹⁴ In the light of these differing viewpoints, any decision taken by the US President will have to carefully assess the technical pros and cons of the treaty as well as the political climate at home and abroad. Given President Obama’s expressed desire to start the US towards a Nuclear Weapon Free World (NFWF), it is more likely than not that he would push for the ratification of the CTBT as

Any decision taken by the US President will have to carefully assess the technical pros and cons of the treaty as well as the political climate at home and abroad.

11. Interview of Holdren by Marin Butcher, AAAS website, www.aaas.org, March 2009.

12. *America’s Strategic Posture*, Interim Report of the Congress and Commission on the Strategic Posture of the US, December 2008, p. 11.

13. William Perry and Brent Scowcroft, *US Nuclear Weapons Policy: Independent Task Force Report No. 62* (New York: Council on Foreign Relations, 2009).

14. See n. 3

Given that nuclear deterrence is an exercise in manipulation of perceptions, and if the role of nuclear weapons is deterrence alone, then the technical issues being raised in the US debate on ratification of the CTBT are of as limited relevance to the US as to India.

one means of illustrating his commitment to the cause. More on this will begin to unveil in the next few months.

As far as India is concerned, the debate over the reliability of the arsenal because of its degradation with age is an irrelevant issue, given that most of the warheads are of recent vintage. The reliability of the weapons in terms of yield, and their safety against an accident is based on the limited number of tests that the country has conducted. There are two schools of thought on whether India can build a credible arsenal (with optimum yield to weight ratios or weapons of the megaton variety) on the basis of the five tests of 1998. While technical issues

can best be addressed by weapon scientists and the government must engage with them, for the purpose of this paper, three non-technical aspects that have a strong bearing on deterrence must be highlighted. One, India is believed to have the capability of increasing or decreasing the yield of the weapon between 20-200 kilotonnes (kt); secondly, given the densities of population in India's adversaries and better knowledge of targeting on how to cause more damage than that suffered by Hiroshima and Nagasaki, the existing types of weapons should suffice to cause "unacceptable damage"; thirdly, deterrence is only partially derived from the warhead and its yield. A large part of its credibility depends on a number of other factors such as the range, reliability and penetrability of the delivery mechanisms and the survivability of the command and control as well as the political will to retaliate. This issue is further detailed in a later section of the paper. Suffice here to say that given that nuclear deterrence is an exercise in manipulation of perceptions, and if the role of nuclear weapons is deterrence alone, then the technical issues being raised in the US debate on ratification of the CTBT are of as limited relevance to the US as to India.

Maturing of Verification Technologies

The CTBT was concluded as a verifiable treaty. This was to be enabled through the development of an International Monitoring System (IMS) crafted as a worldwide network of monitoring stations that would detect signatures of a nuclear explosion such as seismic waves (ground vibrations), low frequency sound waves in the atmosphere (atmospheric vibrations) or oceans (hydroacoustics or water vibrations), or radioactive products generated at the time of a nuclear explosion. The IMS has been under development since 1999 and when complete will consist of 337 worldwide facilities and an international data analysis centre in Vienna. By May 2009, nearly 75 per cent of the monitoring stations had been certified as operational. Their capability is to be supplemented with thousands of regional seismic stations across the globe. The National Academy of Sciences is confident of the ability of the IMS to detect underground nuclear explosions as small as 0.1 kt anywhere in the world. Experts point to the fact that the North Korean nuclear test of October 2006 which had a yield of only about 0.5 kt was picked up by 21 IMS seismic stations.

However, a new debate has emerged in the US now on the definition of what constitutes a nuclear test and, hence, proscribed under the CTBT. This is brought out in the report of the *Congressional Commission on the Strategic Posture of the US*, concluded in early May 2009. Commission Chairman, William Perry, argues that the most important condition to be met prior to ratification is that “the US should seek clarification—and a clear understanding—on what tests are banned by this treaty, since there seems to be some ambiguity and confusion on that point.” According to the report, there is a difference in the understanding of the United States and that of Russia and China on what constitutes “any nuclear weapon test explosion or other nuclear explosion” banned by the treaty.¹⁵ “From the time of the agreement, there has been a

A new debate has emerged in the US now on the definition of what constitutes a nuclear test and, hence, proscribed under the CTBT.

15. As quoted in Elaine M. Grossman, “Strategic Posture Panel Reveals Split Over Nuclear Test Pact Ratification”, *Global Security Newswire*, May 7, 2009.

Given the close nuclear and missile relationship between China and Pakistan, the new weapons becoming available to Pakistan cannot be ruled out.

dispute about what that means precisely, and there have been differences between ourselves and Russia with respect to it, and even earlier going back to the Soviet Union," according to the Vice-Chairman of the Commission, James Schlesinger. In the understanding put forth in 1999, the US took the position that all explosions that had more than zero nuclear yield stood banned, including extremely low-yield nuclear experiments, as also hydronuclear experiments. However, Schlesinger believes that the US view that such experiments would be banned "was not agreed to by other participants" in the treaty negotiations. Therefore, it was the Commissioners' unanimous recommendation that "the Administration must be able to assure the Senate and the American public that there is an agreed understanding with the other nuclear-weapon states about the specific testing activities banned and permitted under the treaty."

Clarity on this issue is of great importance to India since China, which is in possession of a technical sophistication superior to that of India, could use the ambiguous language to develop new types of nuclear weapons through hydronuclear testing. Also, given the close nuclear and missile relationship between China and Pakistan, the new weapons becoming available to Pakistan cannot be ruled out. This argument, however, is not to suggest that the CTBT is a bad idea *in toto*, but to highlight the kind of clarifications that must be obtained on the issue. India cannot afford to accept any ambiguity on this issue and must, therefore, act on an informed scientific view on the precise types of virtual testing acceptable under the CTBT and an assessment of its own capability in this regard.

Increasing Dangers of Nuclear Proliferation

The US mood to accede to the CTBT is also driven by the mounting dangers of more countries becoming nuclear weapons capable in the future. This is a result of mainly two developments and the American inability to make a

major breakthrough in either case. The first of these is the inability of the international community to consensually deal with the issue of nuclear weapons proliferation to new states. The inability of the Six-Party Talks to get the Democratic People's Republic of Korea (DPRK) to disarm its nuclear capability and return to the NPT fold, as also the lack of consensus on how to deal with Iran's nuclear ambitions, and the possible precedents these cases set for other nations is a major preoccupation.

The second, and largely inter-related factor, is the growing attraction of nuclear power as a source of electricity. Countries wanting to reap the benefits of this in any big way, in the light of the increasing vulnerabilities of dependence on volatile imported oil and gas and the growing environmental concerns, would be keen to acquire the capability to enrich their own uranium to power the reactors. This technology, however, can quickly graduate to enrich uranium for weapons and, hence, the theoretical possibility of every country that can operate enrichment plants being able to develop nuclear weapons too. This is obviously a disconcerting thought for non-proliferation and its self-appointed champion, the US that is grappling with the nuclear programmes of states of proliferation concern and the possibility of lax controls or willful compliance of some nations resulting in non-state actors acquiring the capability to conduct nuclear terrorism.

Therefore, in order to rein in nuclear proliferation, the US could consider the trade-off of its right to test in exchange for more stringent controls on nuclear technology under the NPT. In any case, the US has a strong conventional force with global reach, besides the most sophisticated nuclear arsenal and the means to maintain it through the SSP. Therefore, the bargain should appear attractive from the American point of view.

In the case of India, proliferation is a major concern given that the country lies in a region where sophisticated nuclear proliferation networks have operated and where the danger of the paths of these networks crossing with

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those of terrorist organisations is palpable. The availability of fissile material with more countries raises the possibility of lax controls somewhere leading to the material becoming available to determined and motivated non-state actors. Also, the increasing possibility of some states with nuclear weapons succumbing to the persuasion of extremist tendencies raises the danger of nuclear weapons use since classical deterrence may not apply in such a case.

Of course, one could well argue that imposition of a ban on testing would not stop potential proliferators from making simple fission bombs without testing, nor reduce chances of nuclear terrorism engineered through the clandestine acquisition of nuclear material or weapons. However, the CTBT would certainly make it harder for the countries to make nuclear weapons of the size and weight that could be effectively deliverable through rudimentary missiles. It would also reinforce the international consensus against non-proliferation and thereby reinforce the many mechanisms crafted to deal with the dangers in a more united, and, hence, more effective fashion.

Showcase Good Conduct at NPT RevCon and Redefine American Image

The ratification of the CTBT by the USA would offer a useful opportunity to showcase US good conduct at the NPT meeting next year. Since 1995 when the NPT secured its indefinite and unconditional extension, the two RevCons in 2000 and 2005 have proved to be non-events. No worthwhile issues were resolved or even taken up during these conferences and the level of dissatisfaction and frustration of the Non-Nuclear Weapon States (NNWS) with their inability to get the Nuclear Weapon States (NWS) to commit to any measures that would reduce the salience of nuclear weapons as a currency of power has only grown. Meanwhile, during this period, the US Nuclear Posture Review of 2002 explicitly recommended reducing the preparedness

time for conduct of a nuclear test, and the US withdrew from the Anti-Ballistic Missile (ABM) Treaty in 2003. The Bush Administration also withheld funding for the CTBT Organisation (CTBTO), the international secretariat responsible for facilitating the treaty's entry into force.¹⁶

At this juncture then, new life being breathed into the CTBT through a gesture from the US would go a long way in indicating a reversal of course and a renewal of the US commitment to multilateral rule-based mechanisms. This would also indirectly signal faith in the NPT and the larger non-proliferation regime. In fact, this would also significantly smoothen the way for any new non-proliferation measures that the US would like to push through the NPT RevCon, especially those regarding restrictions on export of Enrichment and Reprocessing (ENR) technologies to countries that do not already have them.

It would also indicate US support for the commitment made by Obama in his Prague speech that en route to nuclear disarmament, the US would reduce the role of nuclear weapons in national security strategy. In that context, the CTBT ratification has rather graphically been described by one analyst at a "down payment on the Obama pledge to work toward a nuclear-free world."¹⁷

While the fate of the NPT is largely immaterial to India as a non-signatory, its collapse would, however, render a blow to the cause of non-proliferation which should be a matter of concern to the country for the reasons highlighted in the section on dangers of proliferation. Meanwhile, the CTBT as a step towards a world free of nuclear weapons is certainly welcome for India. It would not only halt horizontal nuclear proliferation, but also halt modernisation of strategic capabilities and the concomitant development and deployment of new types of nuclear weapons, including those with improved explosive power or miniaturised versions for missile deployment.

16. The arrears total \$40 million and are a pittance compared to the annual spending of \$ 6.5 billion on the SSP in 2008.

17. Joseph, n. 4, p. 82.

INDIA'S CORE CONCERNS

In 1996, when the CTBT was rustled through the UN General Assembly instead of being passed through the Conference on Disarmament (CD) for fear of its being jettisoned by India since the CD works on the basis of consensus, New Delhi had opposed it for two ostensible reasons. The first of these was the absence of any linkage with universal nuclear disarmament, a long-standing Indian objective. India perceived that instead of being a step towards the eventual elimination of nuclear weapons, the treaty that emerged only appeared to drive nuclear testing into laboratories. Modernisation of existing arsenals was likely to continue through computer modelling and simulation by those among the NWS that had such technological capability. For others not so equipped, their level of capability was being frozen at current levels. Overall, there appeared to be little willingness on the part of the NWS to *actually give up* their nuclear arsenals. In fact, before the 1999 vote, the Clinton Administration proposed six safeguards to its ratification of the CTBT with a clear objective of protecting the US nuclear deterrent.¹⁸

The second reason for India's non-acceptance of the CTBT was that it did not meet the country's security concerns considering that nuclear weapons had made themselves apparent in India's neighbourhood, from 1964 with China and from 1987 with Pakistan. In the light of India's threat perceptions where both adversaries had a close nuclear and missile relationship, and the growing propensity of Pakistan to use its nuclear weapons as a shield for indulging in provocative sub-conventional conflict against India, New Delhi could not have afforded to tie its hands with the CTBT, thereby denying itself a nuclear deterrent. Therefore, unless the CTBT was able to address the security issue in any comprehensive way, it was not considered to be

18. The six safeguards were: A. conduct a Science-Based Stockpile Stewardship programme to ensure a safe, secure and reliable nuclear arsenal; B. maintain modern nuclear laboratory facilities and programmes; C. maintain the capability to resume nuclear test activities; D. improve treaty monitoring via a comprehensive R & D programme; E. assess through a vigorous intelligence programme the status of nuclear programmes worldwide; F. understand that the President, in consultation with Congress, would be prepared to withdraw from the treaty if the Secretaries of Defence and Energy inform the President that they could no longer certify a high level of confidence in the safety or reliability of a nuclear weapon type deemed critical to the US deterrent force. As reproduced in CFR Task Force Report, n. 13, p. 104.

in India's national interest. In fact, the Background Paper, "Evolution of India's Nuclear Policy" that was tabled in Parliament on May 27, 1998, stated in the context of the CTBT, "our perception then was that subscribing to the CTBT would severely limit India's nuclear potential at an unacceptably low level. Our reservations deepened as the CTBT did not also carry forward the nuclear disarmament process."¹⁹

In 1998, India tested and declared itself a state with nuclear weapons. The last decade since then has been spent in operationalising the deterrent by way of articulating a nuclear doctrine, building the arsenal and the requisite delivery capabilities, institutionalising a robust and redundant command and control structure, etc. In other words, the frame of reference for the consideration of the CTBT by India has altered. Therefore, the Indian decision on the CTBT must now take into account the kind of nuclear force structure it aspires to build and whether that would require any further testing. This consideration must be juxtaposed with the growing interest in moving towards the gradual elimination of nuclear weapons. Together, the two developments provide the present context for the reconsideration of the CTBT in India.

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IMPACT ON STRATEGIC CAPABILITY

The CTBT is meant to prevent further horizontal nuclear proliferation by disallowing nuclear tests and to restrain countries with existing nuclear arsenals from developing more sophisticated designs through fresh tests. Subscribing to the treaty would, therefore, amount to India's surrender of its right to conduct any more tests and, hence, largely end up freezing its nuclear weapons design and yield to the present capability derived from the five tests. However, it must not be overlooked that the freeze would also apply to its adversaries, China and Pakistan. Is it such a bad idea, then, for India to accept the CTBT?

19. "Evolution of India's Nuclear Policy" Paper laid on the table of the House on May 27, 1998. Available at <http://www.indianembassy.org>.

Dr A.P.J. Kalam had also stated in 1998 that the tests had “enhanced our design and simulation capability... We believe that subscribing to the CTBT will not affect our status as a nuclear weapon state.”

The question requires a deeper examination of not only the capabilities of the adversaries but also India’s concept of nuclear deterrence and its ability to impose it with the type of nuclear weapons it has or will manage to build on the basis of the tests carried out so far. According to some Indian weapon scientists, the tests have managed to provide a sufficient enough database for refinement of weapons through computer simulations and modelling as well as sub-critical testing. The Department of Atomic Energy (DAE) Chairman at the time of the Indian tests, Dr R. Chidambaram, and presently the Principal Scientific Adviser to the Prime Minister (PM), has assured the country on more than one occasion that no further tests are required.²⁰ He had also expressed confidence in India’s ability to conduct sub-critical tests. Similarly, Dr A.P.J. Kalam had also stated in 1998 that the tests had “enhanced our design and simulation capability... We believe that subscribing to the CTBT will not affect our status as a nuclear weapon state.”²¹ The Background Paper accordingly stated, “The data provided by these tests is critical to validate our capabilities in the design of nuclear weapons of different yields for different applications and different delivery systems. Further, these tests have significantly enhanced the capabilities of our scientists and engineers in computer simulation of new designs and enabled them to undertake sub-critical experiments in future, if considered necessary.” It was on the basis of their advice that then the Prime Minister had immediately announced a voluntary moratorium on testing that has since been upheld by every government.

Therefore, the view is that future testing may only be necessary if a radically new material were to be tested. But if it was only a matter of upscaling or reducing the yield of the weapon, it could be done based on present capability.

20. Interview conducted by Nirmala George with Dr R. Chidambaram, <<http://www.meadev.gov.in>>

21. “Kalam Proposes, Fernandes Opposes”, *The Times of India*, September 22, 1998.

Of course, one could always argue that more tests would be desirable to enhance the reliability of the weapon. Some contend that “perfect weaponisation” requires at least 100 nuclear tests. However, the silver lining in the mind game of deterrence is the unlikelihood of the adversary to try testing the true strength of the declared capability since the risks are too high.

As mentioned earlier, the tests conducted in May 1998 are deemed to have provided India the capability to build weapons between 20–200 kt. The trend internationally is coalescing around 120 kt as optimum yield weapons, which certainly is within India’s capability. Even so, it must be highlighted that even the low yields of 15-20 kt that were used in Hiroshima and Nagasaki were of such high destructive nature that they have scarred the human mind enough to restrain such inhuman action since. This, when the nuclear weapons were dropped from a height that was less than optimum (or the damage to Hiroshima would have been far greater); and on a target not well chosen (since Nagasaki’s topography saved it from a lot more destruction). Therefore, if the weapon is employed with far greater intelligence and clever planning, even the low yield, especially in the region that India inhabits, could well cause damage that no civilised state could deem acceptable. In fact, the nature of India’s likely targets (mega cities with high density of population) negates the need for very high yield or even very many low yield weapons.

If the basic purpose of the CTBT is to proscribe the development of more lethal weapons or halt modernisation of arsenals with more sophisticated thermonuclear designs, then India has nothing to lose in terms of its strategic capability since, as has been established in the above paragraphs, India does not need these for nuclear deterrence. Even if frozen at current capability, India has a viable enough nuclear deterrent, whose credibility can be further enhanced through intelligent development and use. At the same time, India does not suffer from an ageing arsenal. Rather, most of

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Even in the case of the retention of the option of testing by rejecting the CTBT, it is highly unlikely that the country would indulge in a fresh round of testing unless provoked into doing so by such an act being carried out by an adversary.

its weaponry is freshly minted and it has the capability to maintain the safety and reliability of the arsenal without further nuclear testing.

However, one technical question that must be answered by the country's weapon scientists is whether India would be able to develop MIRVing capability without testing because this requires the ability to develop smaller, lightweight warheads necessary to place multiple warheads on a single ballistic missile? This issue is of importance given the development of missile defence in the region. However, this is a two-edged sword. Just as India needs this capability to defeat the missile defence of its adversaries, they too need the same against an

Indian Ballistic Missile Defence (BMD). China is believed to have developed the MIRVing capability, though it is not yet known to have operationalised any such missiles. The availability of the sophistication with China, nevertheless, always raises the prospect, based on past experience, of the same being handed over to Pakistan. India, under such circumstances, would be at a disadvantage and, hence, the scientists must debate this question. However, yet another manner of considering this question is that in case India does not have this capability, it is certainly unlikely to conduct a fresh round of testing in order to acquire it. Therefore, it will have to explore other options of enhancing the robustness of its BMD, or reducing its reliance on BMD in favour of enhancing deterrence through other means. These issues need to be seriously examined by those in the nuclear decision-making loop in order to make suitable trade-offs.

Finally, the last question is whether given India's voluntary moratorium on testing that has sustained over the last decade, is there anything that India would do differently in the future if it were to ratify the CTBT as against what it would do without ratifying the CTBT. The most likely answer to this seems to be: "nothing". Even in the case of the retention of the option of testing by rejecting the CTBT, it is highly unlikely that the country would indulge in a

fresh round of testing unless provoked into doing so by such an act being carried out by an adversary.

Therefore, if there is going to be no difference in behaviour, whether with or without the signature on the CTBT, then the decision could well rest on two assessments: one, what could possibly be the benefits of subscribing to the treaty; and two, how India could mitigate, or hedge, the risks of accepting the obligations under the treaty. Both these issues are discussed at length in the third and final section of the paper. Before moving on, however, it would be useful to examine how the CTBT is likely to connect with disarmament, the second ground on which India had rejected the treaty in 1996.

India highlighted that “the conclusion of a CTBT is an indispensable measure to put an end to the nuclear arms race and to achieve the complete elimination of these weapons.”

Linkage with Disarmament

India has long argued that the CTBT must not be seen as an end in itself but as a means to get to a state where the nuclear weapons begin to become irrelevant. Therefore, it establishes a clear and direct link between the treaty and nuclear disarmament. In fact, it was in 1978 that India had made a proposal on a defined programme of nuclear disarmament and a ban on nuclear testing was amongst the four recommended steps.²² This linkage was reiterated several times through the years. Another significant incident was in 1994 on the eve of the adoption of the negotiating mandate for the Adhoc Committee entrusted with the task of negotiating the CTBT. At the time, India once again highlighted its understanding that “the conclusion of a CTBT is an indispensable measure to put an end to the nuclear arms race and to achieve the complete elimination of these weapons.”²³ This

22. This proposal was made by then Prime Minister Morarji Desai to the Special Session of the UNGA on June 9, 1978. For details of the proposal, see Arundhati Ghose, “Negotiating the CTBT: India’s Security Concerns and Nuclear Disarmament”, *Journal of International Affairs*, vol. 51, no. 1, Summer 1997.

23. *Ibid.*

was reiterated more recently by Shyam Saran, Special Envoy of the Prime Minister, when he said that for India “it was not acceptable to legitimise, in any way, a permanent division between nuclear weapon states and non-nuclear weapon states.”²⁴

It is a different matter that this stance has not been supported by very many other states. In fact, for the US, the NPT, CTBT and Fissile Material Cut-off Treaty (FMCT) are stand-alone treaties to check nuclear proliferation. During the late 1990s, the CTBT for the US was a means of bringing Russia and China into a verifiable control regime. Meanwhile, for the UK, France and others, it was a non-proliferation measure aimed at other NNWS. Today, with Obama’s expressed desire to move towards an NFWF, there may be hope for a change in thinking. While it is no longer feasible to amend treaty language to reflect the linkage with nuclear disarmament (as India had lobbied for through the negotiations), it is nevertheless possible to provide nuclear indications of credible movement towards the path of universal nuclear disarmament.

SHOULD INDIA SIGN?

Given the above discussion on the many issues revolving around the CTBT, this last section of the paper considers the crucial question of whether India should sign the treaty and under what conditions. It should be clarified, however, that this question is being considered in a scenario where the USA and China, as also the other hold-out nations have already ratified the CTBT. It was stated by Atal Behari Vajpayee during his term as Prime Minister that India will not stand in the way of the treaty’s entry into force. This remains a valid position for the simple reason that even after the ratification of the US and China, India need not rush to sign the treaty but can promise not to obstruct its entry into force once other hold-outs have signed on. Such a position would allow India to hedge against the possibility of a situation where a country like North Korea (that has no fear of international sanctions or opprobrium) holds

24. Address on “Indo-US Civil Nuclear Agreement: Expectations and Consequences”, at Brookings Institution, Washington, March 23, 2009. Full text available at <http://www.mea.gov.in/speech>.

back its signature, thereby providing a test site for a country like Pakistan even if the latter might have signed the treaty itself. Therefore, India's acceptance of the CTBT must cater for such eventualities, however far-fetched they might seem.

In the considered judgment of this paper, India should consider its signature on the CTBT on the following terms:

- One basic requirement for India's acceptance of the CTBT would have to be its universal, non-discriminatory nature. In this context, it may be recalled that there have been reports that the P-5 had made a secret agreement at the time of the treaty's conclusion that would have granted them special rights on nuclear testing. During the Congressional hearings at the time of the vote on ratification of the treaty in the US Senate in 1999, it was revealed that the P-5 had secretly negotiated some agreements among themselves. Little else is known about the contents of these agreements. In case they do exist, and thence reinforce the discrimination between states, then it would be impossible for India to accept the CTBT. The basic precondition for the Indian signature to the treaty has to be the extension of equal rights to all states. Any whiff of discrimination under the treaty would make it completely unacceptable to India, as also several other countries, and must be studiously avoided. In fact, such a possibility would rapidly erode the existing consensus on non-proliferation and have adverse effects on the fate of the NPT too.
- Clarity on the definition of what exactly constitutes nuclear testing. The treaty text states that it bans "any nuclear weapon test explosion or other nuclear explosion." The ambiguity on this has already been brought out earlier in the paper. India must seek total clarity on the subject, and in case of no consensus on definitions, New Delhi must let its interpretation be known at the time of the signature on the CTBT. In this context, it would be imperative to look out for any possible agreement that the P-5 might reach on the issue, without consultation with the other nuclear weapon

One basic requirement for India's acceptance of the CTBT would have to be its universal, non-discriminatory nature.

states. For instance, the recommendations put forth by the Final Report of the Congressional Commission on the Strategic Posture of the US include “the Administration must be able to assure the Senate and the American public that there is an agreed understanding with the other nuclear weapon states about the specific testing activities banned and permitted under the treaty... Equity must be demonstrated by an agreement of the P-5.” In the light of the recent exceptionalisation of India by the Nuclear Suppliers Group (NSG) and acknowledgment of India as a nation with “advanced nuclear technology,” this earlier formulation will have to take the new reality into account.

- Attachment of necessary provisos to its signature. As in the case of the US, certain safeguards can be proposed by the Administration to be included in the Senate resolution that ratifies the treaty.²⁵ While the Indian political system has no provision for ratification by the legislature, the executive can certainly attach its own list of safeguards or riders that allow it to hedge against the risks accepted in the treaty. Some of these could be such as:
 - India’s adherence to the treaty would automatically end on the conduct of tests by any other nation.
 - India would conduct a periodic review of the national security consequences of its continued adherence to the treaty and might reconsider its subscription in case supreme national interest demands otherwise.
 - India would maintain the capability to resume nuclear test activities.This list of stipulations is only illustrative and not exhaustive.
- Link to disarmament – that the treaty establishes a clear link with disarmament, if not through an amendment of treaty language, then through visible indications of movement towards a world free of nuclear weapons.

What would India stand to gain by this subscription? The first, though intangible, benefit would be the flow of goodwill and reinforcement of its non-proliferation credentials. As a state with nuclear weapons and having gained

25. In 1999, President Clinton had proposed six safeguards that have been listed out in footnote 18 of this paper.

the NSG waiver even in the face of stringent opposition by some NSG members who perceived this exceptionalisation as a reward to India, the accession to the CTBT would allay some of the misperceived objections. As one Indian analyst had put it in 2000, "Signing the CTBT and giving the US (and the rest of the world community) some of the reassurances on our nuclear weapons programme will put the seal of international acceptance on India's emergence as a mature and stable nation-state, destined for a place in the first tier of nations."²⁶

Secondly, this would not amount to any loss of strategic autonomy given India's nuclear doctrine, based as it is on the concept of credible minimum deterrence and assured retaliation to cause unacceptable punishment.

India's existing nuclear capability equips the nation to impose the nature of deterrence that it has chosen for itself.

Thirdly, the CTBT would help to put a halt to further improvements in the nuclear weapons of its adversaries. The treaty will help to create a worldwide nuclear status quo. Parties to the CTBT would be unable to conduct nuclear explosive tests to improve the existing weapons or develop stronger ones. Of course, this would mean that the Indian nuclear deterrent would always remain stronger vis-a-vis Pakistan but weaker against China. However, it must be understood that a nuclear deterrent is not the direct function of only the yield or number of nuclear weapons. Rather, it is the sum total of other components as well such as the range and reliability of delivery mechanisms, the robustness of the command and control systems and the perception in the enemy's mind about the survivability of the arsenal. Therefore, the relative Chinese nuclear superiority could be met with improvements in the other components of nuclear deterrence.

Nuclear deterrent is not the direct function of only the yield or number of nuclear weapons. Rather, it is the sum total of other components as well such as the range and reliability of delivery mechanisms, the robustness of the command and control systems and the perception in the enemy's mind about the survivability of the arsenal.

26. Prem Shankar Jha, "Significance of the CTBT", *The Hindu*, January 10, 2000.

Fourthly, the treaty would help to rein in horizontal proliferation and, thus, help reduce overall threats to international security from the dangers of accidental or miscalculated launch or nuclear terrorism.

Fifthly, the signature will also give a boost to Indo-US relations and help alleviate the traditional concerns of the Democrats with a nuclear India. This would help in resolving some of the pending issues on the Indo-US civilian nuclear agreement such as the grant of reprocessing rights on imported fuel.

Finally, the CTBT would help in the pursuit of an NWFV, a situation that is best suited to India's security interests.

CONCLUSION

As the situation appears today, the CTBT might be exhumed by the present US Administration and presented to the Senate for ratification. There are no clear indications on whether this would be successful given the doubts that have still been raised on the efficacy of the treaty and its benefits to the US. The Obama Administration would not take a chance of going to the Senate unless it was sure to secure the ratification. This could take time if elaborate hearings are scheduled to slowly build the necessary consensus on the issue. The US could likely start the process before the start of the RevCon next year and schedule a vote later into the four-year presidency.

This probable schedule provides India with some time to seriously examine all aspects of the CTBT and be prepared to handle its possible ratification, as and when it may appear on the horizon. In the absence of any movement on the issue by the USA and China, there is little that India need do on the treaty. However, in case the US ratification does come about, India need not worry that the treaty would in any way degrade its strategic capability. Technically, India has the wherewithal to impose deterrence. The decision to sign or reject the treaty would have to be a purely political one and as highlighted earlier, India has enough to gain and little to lose if it can make sure that it signs the right kind of a treaty and with the right conditions or safeguards attached to it. The time until the US ratification must be well spent in identifying what these provisos specific to India should be.

MILITARY-MEDIA RELATIONS: CAN THE MEDIA BE A FORCE MULTIPLIER?

P. K. MALLICK

Information is power, especially in this information age. The media moulds national and international opinion and can be a potent force multiplier.

Kargil Review Committee Report,
From Surprise to Reckoning

One of the most dramatic developments in contemporary warfare is the emergence of the news media as a powerful instrument of war. While the "Fourth Estate" does transmit news, it is important to national security because of its influence. This is because winning modern wars is as much dependent on carrying domestic and international public opinion as it is on defeating the enemy on the battlefield. Soldiers understand fighting, journalists understand communicating, yet neither knows that the political impact of combat depends on how the fighting is communicated. Thus, both sides need one another. Today's military commanders stand to gain more than ever before from working together with the media and shaping their output.

The media provides the military with a global stage to send its message and execute its mission. It also has great potential as a force multiplier, a source of intelligence and a resource for conducting Psychological Operations (Psy Ops).

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The importance of the media in India's first television war can be gauged by the fact that the Kargil Committee Report devoted a separate section to this issue. The report noted that while the coverage was satisfactory, it was apparent that the media lacked training in military matters and the armed forces lacked the training to facilitate the task of the media.

The Indian Army Doctrine states that the seven forms of Information Warfare(IW) are Command and Control Warfare, Intelligence-Based Warfare, Electronic Warfare, Psychological Warfare, Cyber Warfare, Economic Information Warfare and Network-Centric Warfare. It also states that Psychological Warfare is achieved through mass media such as newspapers, radio and television broadcasts and distribution of leaflets. However, the association of the media with psychological operations, deception operations and perception management activities risks the loss of credibility of the military's media activities popularly known as Public Affairs (PA) in the Western countries. In the Indian context, it is called Public Information(PI). In all doctrines of the Western armed forces, it is emphatically stated that PA activities will not be used for Psy Ops or deception purposes. There is a serious dichotomy here. The importance of Information Warfare (IW), with the media as a force multiplier, has to be understood and it has to be correctly used as a weapon of decision making, a weapon of success.

In this essay, the impact of the new media, military-media relations, use of the media as a force multiplier, role of the media in Counter Insurgency (CI) Ops and the doctrine dichotomy of PI and IW will be discussed.

MEDIA TODAY

Professionalism is grossly lacking. There are hardly any experts. The media likes to discuss persons rather than issues. Short memory of the reader is being exploited to the best by the media. Systematic reorientation of the media is taking place with focus on consumerism and immunisation of the reader.

- Arun Shourie

Today, the media, though multinational in organisation, must increasingly focus on regional niche markets. News is a business, and polls and focus groups inform editors that the priorities of the public are local news first, foreign news last. CNN, Fox News and others have begun regional production to feed “foreign” news to the markets where it is not foreign. Gone are the days when Rajiv Gandhi had to listen to BBC to learn about the assassination of Mrs Indira Gandhi. With the advent of English and regional news channels, very few people see these foreign TV channels as their TRP ratings would testify.

Because the Press is fragmented, competitive, sometimes ignorant of military realities and constantly caught between the demands of the market and those of journalistic ethics, the quality of coverage of military events is inevitably uneven at best. Today, the situation is aggravated by the fact that newsrooms are no longer “old-boys networks,” inclined to accept some of the military’s more traditional ways as part of the journalistic landscape. The tendency of unprepared reporters, charging from crisis to crisis, unaware of the issues at stake or of how the military functions, is to frame complex matters in simplistic ways. Frontline reporting will be mostly by twenty something reporters who are neither bound by the traditional parameters of restraint exhibited by elder journalists of yore, nor can they afford to miss the deadlines. With enormous pressures, their attention span will be short. Therefore, if one cannot quickly and credibly put across one’s viewpoint, one ends up losing half the battle even before it begins. We are experiencing the advent of parachute journalism—the practice of dropping into a trouble spot whoever happens to be in the newsroom with directions to provide an immediate story regardless of his or her background or experience. The advent of soundbite journalism, 30-second news stories and two column

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newspaper stories also contributes to the lack of context and background of news reporting.

The recent application of military Subject Matter Experts (SMEs) has added a new dimension. The media uses retired military officers as SMEs to comment on, or assess and interpret, military information. These pundits often surmise what they think the armed forces' course of action for an operation will be, how the Indian armed forces might react to a situation, and criticise what they perceive to be flaws in current courses of action. In essence, this gives the public and our enemy a look inside the military mind of our armed forces. To their credit, all the SMEs on Indian TV have given the view of the armed forces as retired experts, objectively and in an appropriate manner. However, the risk is always there, that when on live feed, answering some critical question, one may inadvertently reveal some information which may be of some intelligence value to the enemy.

Today, commanders at all levels can count on operating "24/7" on a global stage before a live camera that never blinks. Politicians, bureaucrats and military leaders cannot wish away the media. And yet, enormous benefits can accrue to the military if it learns to use media as a force multiplier. The military must do all it can to engage, educate and ultimately influence the media to ensure that the media reports the story in the proper context. A single image can convey a lot. One picture of Sqn Ldr Ahuja's three-year-old son saluting his father's dead body or of Mrs Kalia saluting her husband's dead body with tremendous stoic demeanour moved the entire nation during the Kargil operations.

NEW MEDIA

Journalists...“streamed” or broadcast their reports...as they covered the movement of troops and the rocketing of villages....Such information was [once] the stuff of military intelligence....Now it has become the stuff of everyday journalism. The camera and the computer have become weapons of war.

—Marvin Kalb, Harvard University, on the Israeli-Hezbollah War of 2006

We are in the era of E-mail, Blogs, Blackberries, Instant Messaging, Digital Cameras, Internet, Cell Phones, Hand-Held Video Cameras, Talk Radio, 24 Hours News Broadcasts and Satellite Television. Traditional media outlets leverage new and social media, taking advantage of the web 2.0 workspace. Journalists can file directly from the field, anywhere on the globe, using cell phones, the Internet and remote-area network data systems transmitting compressed video signals. Satellite, microwave and fibre-optics systems are becoming miniaturised and increasingly mobile. Reporters have access to commercial satellite images that can reveal such things as troop deployments. Anyone can access maps.google.com on the Internet and see the type of maps/images that are available free online. The capability of the news media to photograph a battle area during times of war and thereby reveal the location of one's own ground units, ships and air bases could be detrimental to national security. The advances in technology cut both ways. Photographs have always been posed, cropped, staged and altered but digitisation makes manipulation much easier. Satellite imagery can be easily modified. Video image scan also be modified. Manufactured videos and misleading stories can be posted on the Internet. Reuters admitted that the photograph of a bombed Beirut with dark smoke rings rising that was shown during the Lebanon War was doctored.

Politicians, bureaucrats and military leaders cannot wish away the media. And yet, enormous benefits can accrue to the military if it learns to use the media as a force multiplier.

Major newspapers or TV channels oversee dozens of internal blogs, many of which are moderated by selected editors who previously wrote exclusively for the printed version. News organisations actively engage their audiences through RSS feeds, blogs and online reporting features. CNN regularly uses YouTube videos and blogs as a primary sources of information. Like blogs, YouTube can empower individuals to achieve strategic political and military effects. Thus, the use of Improvised Explosive Devices (IEDs) by insurgents shifts from a military tactical weapon to a strategic information weapon when the IED detonator is accompanied by a videographer. The Israeli-Hezbollah

War of 2006 provides recent, glaring evidence of how the current information environment has impacted the way warfare is conducted today.

Three of the top five most visited sites in use today are social networking and video sharing sites including Facebook, Myspace and YouTube. There is a traffic jam of conversations facilitated by e-mail, Facebook, Myspace, YouTube, Flickr, Digg, Wikipedia, LinkedIn, Twitter and other social networking tools that facilitate discussion, debate and exchange of ideas on a global scale. The popularity of new web tools and services is remarkable. MySpace established in 2003, had 80 million members and hosted six million web pages within three years. By 2008, the number of messages transmitted on Facebook exceeded those sent by e-mail. More and more social networking applications are being developed for cell phones. Already, half the world's population has access to a cellular phone. One can only ignore these issues while handling the media at own peril.

During the 2008 terrorist attacks in Mumbai, people on the scene sent Twitter updates (limited to 140 characters). We can see how Twitter is changing the complete gamut of the Iranian Presidential election issue. The Internet has not penetrated large areas of the world, specially in the poor areas of underdeveloped countries. Cell phones, however, are increasingly available worldwide and can have a potentially potent capability to affect national security and military issues. Cell phones currently contain the technology to text, provide News, Video, Sound, Voice, Radio and Internet. Fifty-nine percent of mobile phones are in the developing world. There are over 450 million users in China, whereas India has about 200 million cell phone users. However, the percentage growth of the mobile market is 97 percent for India and the corresponding figure for China is 17 percent.

USE OF NEW MEDIA IN RECENT CONFLICTS

Superiority in the physical environment is of little value unless it can be translated into an advantage in the information environment.

-- Professor Sir Lawrence Freedman,
The Transformation of Strategic Affairs

Lebanon. During the 33-day war in Lebanon, Hezbollah demonstrated a refined capability to leverage new media to create positive informational effects. New media such as digital photography, videos, cellular networks and the Internet were used by all the parties: the Press, Israeli and Lebanese civilians, Israel Defence Forces (IDF) and Hezbollah. In this conflict, both Hezbollah and the IDF sought to shape the information environment, and to counter each other's messaging capabilities and content through defensive and offensive information initiatives. The IDF's "countering" campaign was largely offensive and kinetic, seeking to physically destroy Hezbollah's capacity to communicate. By contrast, Hezbollah's strategy was more "defensive," seeking to limit the IDF's ability to use Hezbollah's new media capabilities against itself. Maj. Avital Leibovich, the head of the IDF's foreign Press branch on the digital media campaign said, "The blogosphere and new media are another war zone, We have to be relevant there."

Gaza. In the recent Gaza conflict, the IDF has even joined the blogging revolution, with IDF spokesperson.com, and the official IDF site has launched its own section devoted to "Operation Cast Lead" complete with a banner graphic and photo and video updates from the combat zone. But it was the decision by Israel's New York Consulate to conduct a Press conference through Twitter that indicated just how far Israel would go in its efforts to shape the information environment.

Hackers on the other side of the conflict have had success, too, taking down the noted Israeli commentary site DEBKAFfile along with some other targets. Hamas, which runs the government in Gaza, runs a smaller scale effort to get its message out, offering its website in eight different languages. The English version is located in the UK and features plenty of pictures and news accounts about "Jewish Nazism," "Zionist disinformation," and "the Israeli holocaust in Gaza.". Hamas backers late last year launched their own YouTube clone, AqsaTube, which featured weapons training videos, among other material; Al-Aqsa TV (which denied any relation to the AqsaTube site), the main TV station in Gaza, was apparently bombed by Israel after Israeli operatives had broke into Al-Aqsa transmissions

Western armies rarely lose in combat to the Taliban fighters in Afghanistan. But in the communications battle, the militants appear to hold the edge. The gap has grown especially wide in the Afghan war zone.

regularly with messages of their own. It's a high-tech communications war being fought by both sides, though the electronic "war" is largely about shaping public perception instead of doing direct damage to the other side.

AfPak. With overwhelming firepower, Western armies rarely lose in combat to the Taliban fighters in Afghanistan. But in the communications battle, the militants appear to hold the edge. The gap has grown especially wide in the Afghan war zone. The Taliban leadership began using the media as a promotion tool during the 1990s. Taliban warlords renovated printing presses; launched new publications in Dari, Pashto, Arabic and English; maintained Voice of Sharia, a radio station, for dissemination of Taliban ideas and statements. Using FM transmitters, the Internet and threatening notes known as "night letters", the Taliban, operating from the border region of Pakistan and Afghanistan have proved effective at either cowering down citizens or winning them over to their message of *jehad*. By early 2009, Afghan and Pakistan Taliban factions were operating hundreds of radio programmes, distributing audio cassettes and delivering night letters to instill fear and obedience among their targeted populations. Media outreach has been especially dominant in Pakistan's Swat Valley, where dozens of stations broadcast nightly dictates on "un-Islamic" activities. Maulana Qazi Fazlullah, nicknamed "Radio Mullah," is widely seen as being among the most effective users of radio transmission; Pakistanis listen to his daily dictates if not out of interest, then out of dread. "Nobody likes it, but everybody is afraid because he summons the people and he lets them know that they are targets," one Pakistani told the BBC in February 2009.

Council on Foreign Relations (CFR) Senior Fellow Stephen Biddle says the media is part of the Taliban's broader operational fabric and militants often plan attacks for the biggest public relations punch (Al Qaeda also uses the tactic in Iraq). For instance, if the Taliban leadership wants to convey a

message that the Afghan government is unable to protect the population, Taliban commanders might plan an ambush, arrange for the attack to be photographed, and distribute the footage online, via cell phone videos, or to international media outlets. "The whole purpose of the military activity," Biddle says, is "to create video." Michael Devas, a former US Deputy Assistant Secretary of Defence, said that in Afghanistan, US forces carry out an operation "and within 26 minutes – we have timed it – the Taliban comes out with its version of what took place in the operation, which immediately finds its way on the tickers in the BBC at the bottom of the screen". The Taliban has been extremely proficient at propaganda and the USA must run now to catch up. US special representative Richard Holbrooke told journalists in March 2009 that "the information issue, sometimes called psychological operations or strategic communication" has become a "major, major gap to be filled" before US-led forces can regain the upper hand. As part of its new strategy for the Afghan War, the White House has called for an overhaul of "strategic communications" in Afghanistan "to improve the image of the United States and its allies" and "to counter the propaganda that is key to the enemy's terror campaign."

Training. The new media has revolutionised the lessons learned process. Once upon a time, platoon leaders would submit lessons learned to CALL(Centre of Army Lessons Learned) or the War Colleges and wait for the vertical structure to process those lessons. Today, tactical leaders trade and debate Tactics, Techniques and Procedures (TTP) on platoonleader.org or companycommand.com or in Small Wars Journal blog site. That's the good news. The bad news is that the enemy's lessons learned process is also now horizontal and powered by the Internet. What effect all this has on insurgent and terror groups is as fascinating a question as how this will affect our own military institutions. Lieutenant General William B. Caldwell, IV, Commanding General of the *Combined Arms Centre* has made it a requirement for students of the Command and General Staff College to blog. Given his experience in Iraq, he feels strongly that the next generation of military leaders needs to be comfortable in this space.

The military must embrace the new media; there is really no choice. Its power and dynamism dictate that the military should accord it the attention and focus it deserves.

Whatever the full implications might be, the military must embrace the new media; there is really no choice. Its power and dynamism dictate that the military should accord it the attention and focus it deserves. Even a brief survey of the new media's nature and impact leaves military leaders with the following points worthy of consideration:

- The new media has the capacity to be nearly ubiquitous. With only a few notable exceptions (e.g. Chechnya and Western China), there is little escape from its span and grip.
- Like the old media, the new media can also be enlisted to serve specific masters, though perhaps with greater difficulty.
- Properly understood, the new media can be a source of great power and influence.
- The new media holds a tremendous upside for education and for broadcasting the military's message.
- The new media forces us to modify habits and to think consciously about the practical and constitutional obligations inherent in becoming our own version of gatekeepers and agenda-setters.
- The new media is affecting modern conflict in significant ways not yet fully understood.

MILITARY VS MEDIA

The Military View? *Four hostile newspapers are more to be feared than a thousand bayonets.*

— Napoleon

The Media View? *War is a drug.....it is peddled by myth makers, historians, war correspondents, filmmakers, novelists and the state.....*

— Chris Hedges (*War is a Force That Gives Us Meaning*)

A Clash of Cultures

The Military Respects	The Media Respects
Authority and Order	No authority
Tradition and Hierarchy	Bad news
Cooperation and teamwork	Competition
Specialisation	Generalisation
Institutions and Country	Individualism and Human Interest
Loyalty and Duty	Dog eat dog
Honour and Courage	Dog eat cat
If the military makes a mistake – people die	If the media makes a mistake – publish a correction

Despite these key differences, the military and the Press do share certain commonalities. Both aspire to a high level of professionalism and both focus on serving the public, albeit in very different ways. The military exists to defend and protect the country and its territories, while the media exists to keep the public informed; both roles are considered critical to a healthy democracy. The newsman and the military officer consider many of the same qualities to be important in their respective professions: initiative, responsibility, professionalism, dedication, efficiency, teamwork, delegation of authority, self-discipline, forward planning and flexibility. Both professions are highly structured and unique and rely on teamwork to get the job done. The requirement to make decisions under the pressure of time, often frustrated by inadequate information, is shared by the military and the news media. Both are probably more time oriented than most other professions and this dictates the way they do business.

INTELLIGENCE AND OPERATIONAL SECURITY

Commercial reconnaissance satellite will make it almost impossible for combatants to hide from the media, and with all sides watching the video screen, instant broadcasts from the battle zone threaten to alter the actual dynamics and strategies in war.

--- Alvin and Heidi Toffler

The media has become an important source of intelligence. In fact, it could become the sole source available, capable of providing real-time input for a whole set of operational considerations.

Valuable intelligence information is available in open source media. If we take advantage of this fact, so does the enemy. All information has a time value associated with it. If information is not received and processed before this time, it is of no value to the military. Commanders must assess the risk posed by the media with respect to operational security versus the benefit it provides in order to determine the level of media access. Commanders must then mitigate the risk caused by modern media coverage of the conflict while simultaneously maintaining public support. This is a complex and difficult task, but risk management has to be carried out.

Military operations rooms today, equipped with TV screens, provide operational and tactical intelligence even before the traditional intelligence channels reports come in. The media has become an important source of intelligence. In fact, it could become the sole source available, capable of providing real-time input for a whole set of operational considerations like: deployment, equipment, weapon systems, training, morale, will to fight, combat readiness, assessment of manoeuvre effectiveness and impact of fire support. At less than five-metre resolution, troop formations and aircraft placement will be distinctly visible on commercial TV screens. Troop movement will be monitored by adversaries, dispassionate observers and military analysts. The large flanking movements planned under strict secrecy, similar to what occurred in the Gulf War, would be exposed to viewers around the world.

The most viable solution to assure operational security will include the practice of security at the source, a clear set of ground rules accepted and understood by the media, and honest interaction between the military and the media covering the operation. Military experts predict that the time might come when the military commanders will seek the media's forecast as a planning factor to serve future operations.

Operational Security (OPSEC) and the New Media. The recent Lebanon War reveals some of the OPSEC challenges that are inherent to the contemporary operating environment. On the one hand, there is the challenge of OPSEC for those modern military forces that are drawn from “communication” societies, meaning those awash with instant and readily available communication means, and where the culture of 24/7 connectivity has become a socially accepted norm and expectation and the recognition that the soldier no longer has the ability to control all aspects of OPSEC as in the past. There is the seeming dichotomy between maintaining OPSEC within military units and telling the proactive and positive stories about military operations quickly, accurately and credibly. The new media has enabled individuals with strategic information capabilities such that controlling information is well outside the ability of military commanders. Contractors, Non-Governmental Organisations (NGOs), and local community members (among others) with cell phones can report real-time information on military operations immediately to any number of sources. It has become critical to consider OPSEC in the planning process in order to mitigate the risk posed by the ubiquity of the new media. People appear to have trouble distinguishing between the private and public domains (reference postings to MySpace or Facebook social networks) . A balance must be struck between OPSEC requirements and the use of the new media to tell the good news stories. There is a requirement of a balance by proffering the four “E’s”:

- Encourage soldiers to tell their story.
- Educate them on the ramifications of messages and the use of the new media.
- Empower them by underwriting honest mistakes.
- Equip them with the proper regulations and policy.

There should be little doubt that the media can influence military operations or at least the political leadership’s decisions regarding military operations.

MEDIA AS FORCE MULTIPLIER

Power of the Media. There should be little doubt that the media can influence military operations or at least the political leadership's decisions regarding military operations. Who can forget how the media made a spectacle of showing 50-60 families of the passengers of the hijacked IA flight IC- 814 on the TV time and again. It created undue pressure on the government to look after the interests of these families vis-à-vis the national interests.

The information war is not confined to the military's command, control and intelligence systems. This war is also waged in the public domain, in news reports that are presented on television, radio and in print. National will, the foundation of any nation's power, is directly and critically influenced by the manner in which public information is presented. Thus, it is in the interest of the government, including the military, to possess strategies to effectively manage public information, whilst not infringing on the media's imperative for independent reporting.

Writing after the withdrawal of most Coalition forces from Fallujah in Iraq in favour of indigenous Iraqi units, Ralph Peters offered this assessment of the power of the media in determining military outcomes: "The [US] Marines in Fallujah weren't beaten by the terrorists and insurgents, who were being eliminated effectively and accurately. They were beaten by al-Jazeera. . . . The media [are] often referred to off-handedly as a strategic factor. But we still don't fully appreciate [their] fatal power. . . . In Fallujah, we allowed a bonanza of hundreds of terrorists and insurgents to escape us—despite promising that we would bring them to justice. We stopped because we were worried about what already hostile populations might think of us. The global media disrupted the US and Coalition chains of command. . . . We could have won militarily. Instead, we surrendered politically and called it a success. Our enemies won the information war. We literally didn't know what hit us."

The Media as a Multiplier Effect in Lebanon. The media as a force multiplier was effectively used by Hezbollah in the recent Israel-Lebanon conflict. By showcasing the damage in Lebanon and portraying the Israeli attacks against civilians as inhumane, Hezbollah was able to generate sympathy

for its actions among the Lebanese domestic audience and also internationally. Hezbollah understood, as Al Qaeda's number two leader has observed, that "more than half of the Islamists' battle is taking place in the battlefield of the media." By portraying the conflict as a pan-Islamic fight against Israel, Hezbollah was able to galvanise support from the Shia Iranians and Sunni Syrians.

Distinction Between Media Reaction and Public Opinion. There is an important distinction between media reaction and public opinion. Concern over

public opinion is legitimate because the armed forces are responsible to the people. However, concern over media reaction is questionable. We do not have to surrender public opinion to the influence of the media. While we must acknowledge the media's potential influence, the military must guard against letting excessive concern over public reaction and media coverage of an event drive our actions. If committing troops to a troubled region is in the country's best interests but counter to public opinion or if a commander's decision to court-martial a soldier is necessary for good order and discipline but certain to draw public criticism, the army cannot let such concerns stand in the way of doing what is right and necessary. The armed forces must strike a balance between the past practice of ignoring the media and the growing tendency to be consumed by it.

Force Multiplier. The phrase "force multiplier" is used in military terminology as equivalent to something that adds synergy; an overall contributor to the effort where the sum of the parts is more than the whole. A force multiplier enhances the total effect of constituents. Examples are the Airborne Warning and Control System (AWACS) and Command Information Decision Support System (CIDSS). Due to media coverage, the need to perform under constant media glare makes matters more stressful for any commander. Some amount of stress can act as a catalyst for greater performance of commanders on the battlefield and, thus, act as a force multiplier. In the context of information

Concern over public opinion is legitimate because the armed forces are responsible to the people. However, concern over media reaction is questionable.

warfare, the media can be viewed as a veritable “force multiplier” with as much of a potential for altering the course war as any military force multiplier with a more tangible, more visible material existence.

Enormous benefits can accrue to the military (thereby the nation) if we learn to use the media as a force multiplier, it Using the media is an operational function and as a force multiplier provides a very effective and near instantaneous communications method not only to report on what the armed forces are doing but also as a propaganda catalyst to create uncertainty in the mind of the enemy. Leaders must be proactive and innovative in dealing with the media. The media coverage not only develops public awareness and the support of military units, it has the side benefit of enhancing their morale by informing their families and friends of the activities of the troops. If used prudently, the media is indeed a force multiplier as it builds public opinion. The media coverage of the Kargil operations is a shining example of how public opinion was formed and the entire nation rose to the challenge.

However, the media is extremely sensitive to the issue of media management and being used as a force multiplier. Mr Shekhar Gupta, editor in chief of The Indian Express group of newspapers, in an ARTRAC seminar on Media and National Security held at the Indian Institute of Mass Communication, New Delhi, on September 27-28, 2000, stated, “Please do not treat the media as a force multiplier. The media is not a part of the armed forces. Never use the term media management. It is self-defeating as culturally and genetically, the media is unmanageable.”

MEDIA DOCTRINE

Once you have all the forces moving and events have been taken care of by the commanders ---- turn your attention to television because you can win or lose the war if you do not handle the story right.

— Gen Collin Powell

In our armed forces, we have neither a joint doctrine on the media nor does any of the three Services have one. There is an urgent need to issue directions

from the Ministry of Defence on interaction with the media. We have the archaic Official Secrets Act 1923 and Special Army Order 3/S2001/MI on Security of Service Information Communication to the Press and Publication by Army Personnel/Organisations. In the Western countries, media operations have been clubbed under Public Affairs(PA). On the same lines, the Additional Directorate General of Public Information (ADGPI) has been created at Army Headquarters.

PA and IO have significantly different and occasionally contradictory doctrines and policies concerning misinformation, information and deception.

British Joint Warfare Publication 0-01.1 defines media Operations as, "That line of activity developed to ensure timely, accurate and effective provision of Public Relations (PR) policy within the operational environment, whilst maintaining Operational Security. Media Ops are not a subordinate subset of Info Ops but are closely related activity. Media Ops and Info Ops staff must have clear visibility of each other's plans and operations to generate synergy. However, they must be seen to be separate and distinct, to avoid giving the false impression that the media are being manipulated, deceived or used for misinformation purposes."

According to US Joint Publication 3-13 Information Operations (IO), February 13, 2006, there are three military functions, Public Affairs (PA), Civil Military Operations (CMO), and Defence Support to Public Diplomacy, specified as related capabilities for Information Operations (IO). PA should not be considered an IO discipline or an IO Psy Ops tool. PA activities will not be used as a military deception capability or to provide disinformation to internal or external audiences.

Public Affairs (PA) is a command function and responsibility. The commander can communicate through a command spokesperson, but the success or failure of that spokesperson and the commander's public affairs programme hinges on his or her support and direct involvement. No matter how good the Public Affairs Officer (PAO) is, he can never fully substitute for the commander in either the public's or the soldier's eyes.

Dichotomy. PA and IO have significantly different and occasionally contradictory doctrine and policies concerning misinformation, information and deception. Current Western IW doctrine permits offensive action, deception and psychological operations undertaken to deny, degrade, destroy or deceive the enemy. There is a debate between the PA, IO, and Psy Ops communities about how to create a synergy that leverages the effects of all three into a coordinated, synchronised, comprehensive communications effort. To do so, they had to answer three questions: what, if any, role remains for PA? Where should PA fall within the organisation? How can PA be made more effective? In theory, the idea of merging PA, IO, and Psy Ops appears to make sense. However, in practice, the goals of these three functions are quite different. PA is charged with informing the public with factual, truthful information, while IO and Psy Ops seek to influence their audiences to change perceptions or behaviour. The challenge is to coordinate PA, IO, and Psy Ops functions so that each maintains its own integrity while maintaining credibility with the media. A problem arises, however, when PA and IO are aligned too closely. The basis of information used for IO purposes might be truthful, but it might also be manipulated to achieve an outcome. And, if the altered information cannot be substantiated with verifiable facts, credibility comes into question.

Doctrinally, IO and Psy Ops functions have been aligned with operations within a headquarters. PA has always been an independent special staff section that reports directly to the commander. PA is the voice of the commander and a conduit of information between the command and internal (command information) and external audiences, including but not limited to the media. The function of PA is to provide factual, timely information, not to affect public opinion by leading grassroots efforts or engaging in lobbying. PA does not exist to create news or overtly influence public opinion; it exists to provide factual information so that its audience can make informed opinions. Since the media will be the observer of some IW events, the victim of others and a knowing or unknowing agent in still others, the management of media impact should be included as one phase in the IO planning process. To avoid

a crisis of credibility and to maintain the command's integrity, the Public Affairs Officers (PAO) should always report directly to the commander and be free from outside influence. Rather than create new structures to combine PAO, IO, and Psy Ops, it is best to adhere to established, proven doctrine. While the PAO maintains integrity by reporting directly to the commander, IO and Psy Ops should remain in the realm of the operations.

Deception. As the British Chief of the Defence Staff noted during the Falklands War, "I do not see it as deceiving the Press or the public; I see it as deceiving the enemy. What I'm trying to do is win. Anything I can do to help me win is fair as far as I'm concerned."

Manipulation and deception are the tools of the IW trade. Public affairs officers are directed to attempt no deception yet they must remain involved in the overall IW campaign plan and coordination effort which expressly supports deception. It is significant that the 'right to lie' is not allowed under current public affairs doctrine, while it is left ambiguous for information operations. Truth is, of course, an abstract and relative notion — so-called 'facts' are often only a slice of the whole picture and can be subject to a variety of interpretations. Who will decide and implement the subtle deception operation like what Yudhistir told Guru Dronacharya in the battlefield of Kurukshetra at the behest of Lord Krishna, *Aswathama hathahat, narova kunjavora?*

Psy Ops. Indian Army doctrine says, "Psychological warfare is achieved through mass media such as newspapers, radio and television broadcasts and distribution of leaflets. The prevailing state of information technology allows effective psychological warfare to be conducted in a very subtle manner." Psychological operations are planned to convey selected information and indicators to foreign governments, organisations, groups and individuals in order to influence their emotions, motives, objective reasoning, and behaviour. If we are not using the media, how are we conducting psychological operations? By integrating PA with Psy Ops and using the same delivery means, the media, we muddy the information waters. While PA and Psy Ops principles may be conflicting, to some leaders, effects are all that matter. This view is supported

The military needs to be proud of its values and prepared to underwrite the risk that it will expose too much in the service of transparency; this risk is counter-balanced with an implicit trust that its values and the truth will eventually prevail.

by Brigadier General Mark Kimmitt, former Deputy Director of plans for CJTF Iraq. He says “Are we trying to inform? Yes. Do we offer perspective? Yes. Do we offer military judgment? Yes. Must we tell the truth to stay credible? Yes. Is there a battlefield value in deceiving the enemy? Yes. Do we intentionally deceive the American people? No. There is a gray area. Tactical and operational deception is proper and legal on the battlefield...in a worldwide media environment how do you prevent that deception from spilling out from the battlefield and inadvertently deceiving the American people?”

Bridging the IO-PA Firewall. Western doctrine forbids the use of PA as a military deception capability, or to provide disinformation to internal or external audiences. It specifically states that PA

and Psy Ops activities must remain separate and distinct in the minds of the public and the media and in practice. To add to the confusion, the doctrine also states that PA should not be considered an IO discipline or an IO tool. PA activities are complementary to yet distinct from IO. We must find a way to bridge the doctrinal firewall separating IO and PA without violating the rules governing both. This firewall is essential to ensuring that Psy Ops, deception operations, EW and Computer Network Operations (CNO) do not migrate into PA and discredit the PA effort. PA should concentrate solely on the coordination and dissemination of factual information, without any interaction with IO or Psy Ops functions. IO/Psy Ops planners should carefully monitor what the media reports, and plan their efforts accordingly.

The military needs to be proud of its values and prepared to underwrite the risk that it will expose too much in the service of transparency; this risk is counter-balanced with an implicit trust that its values and the truth will eventually prevail. Truth and transparency are strengths and not hindrances. Successful relationships between the military and media are based on

credibility and trust that is built over time. Withholding or manipulating information or creating the impression that the command PA is unnecessarily withholding or manipulating information that should or could be provided to the media, reduces the command PA's credibility and operational capacity. Providing information is only effective in the end if the information is truthful and squares with the realities faced by its recipients. The challenge is getting the truth out first and in an appealing package, before the enemy does. Timing is critical. Furthermore, the current global media gravitate toward information that is packaged for ease of dissemination and consumption; the media will favour a timely, complete story.

Information is almost as powerful as bullets and bombs. Winning this war is as much about winning the trust and confidence of the people. Commanders must tailor IO to achieve desired effects with critical audiences and help ground commanders achieve success in tactical operations. However, they must take care not to use the news media to effect change in people. This is not the media's purpose; however, in today's global information market, there is a growing temptation to do just that. The important lesson here is that in attempting to win the information battle, the military must ensure it does not lose the strategic war. In trying to win people's trust and confidence, it must not lose the people—whether they are the ones it is trying to affect or whether they are the ones it must rely on for support.

MEDIA IN CI OPS

Counter-Insurgency Operations (CI Ops) by nature demand winning the information war rather than killing the militants. To conduct successful CI Ops, the army must win over the media. Perhaps of greatest importance is the local media because they tell the story to the local public. Some have described the media itself as a centre of gravity in these operations. The media have a vital role in societies directly and indirectly involved in counter-insurgency. In CI Ops, information is almost as powerful as bullets and bombs. Winning this war is as much about winning the trust and confidence of the people.

One cannot wage war under present conditions without the support of public opinion.

Terrorists have historically relied very heavily on organised media, including newspapers, periodicals, television and radio to communicate their motives and aims in what they hope to be positive ways. In order to secure favourable publicity, terrorist groups have frequently attempted to form good relationships with the Press that are often cultivated and nurtured over a period of years. Recently in Lalgargh of West Bengal, the Maoists used the TV media very skillfully. In insurgencies, by using the media selectively, terrorists are able not only to instill fear and insecurity amongst the people but also create doubts in the minds of the security forces about the efficacy of their CI Ops. This, in turn, makes the people and the military lose faith in the government.

Local Press. Vernacular media is more important than all other media since they are the opinion makers for the local people. We can only ignore them at our peril. The local/vernacular Press has always been the target of the militant groups. Facing the gun, there is little choice for them except to publish distorted and doctored stories to please their masters. Stringers controlled by militant outfits, put out colourful and contorted reports which are a travesty of the truth. Disinformation, false reports and rumours are floated by the militants and their agents to suit their designs. In Punjab, the local private media capitulated completely to the terrorist diktat, leaving the government media as the only source of information. The only private group which stood up to the terrorists was the Punjab Kesari Group. For this, the group paid a very high price in blood. Vernacular media in Kashmir Valley is totally partial, and do not think twice before publishing malicious reports against the Army, in particular, and the security forces and the nation in general. Quite a few are on the payroll of interested parties. This media is the mouthpiece of militant organisations and defiantly abuses the freedom of the Press. We not only allow them to print but offer them newsprint at subsidised rates and send in government advertisements for their survival. It is in the arena of CI Ops that poor media relations have really hurt the armed forces, the government and the country at large. The media has to be addressed at the national, state and local levels in a synergy. One wonders

what the effect would be on the CI Ops if the soldiers sacrificing their lives in Kashmir got the same coverage as those who fought in Kargil.

MEDIA IN PEACE-TIME

It appears we have appointed our worst generals to command forces, and our most gifted and brilliant to edit newspapers! In fact, I discovered by reading newspapers that these editors/geniuses plainly saw all my strategic defects from the start, yet failed to inform me until it was too late. Accordingly, I'm readily willing to yield my command to these obviously superior intellects, and I'll, in turn, do my best for the Cause by writing editorials—after the fact.

—Robert E. Lee, 1863

Military life demands strict discipline, absolute integrity, *esprit de corps*, selfless service, a formal rank structure, and physical and moral courage. The value of these is readily apparent during war. However, during peace-time, people outside the military often criticise these same attributes. The same media members who agree that different rules, principles, and expectations apply during combat are the first to question them during peace-time. Apparently, the media and the public think the Services should do things differently during combat than during peace-time. The problem is a failure to understand the age-old maxim that warriors must train and live as they will fight. War has been described as hell. Unfortunately, most of these principles and values are not natural attributes. They are skills and beliefs that require inculcation through intense training. They cannot be turned on and off or bought on the Internet. Until the media understands why the military requires certain standards and behaviour, they will continue to write stories that misinterpret, misconstrue or miss the point entirely.

CRITICAL ISSUES

One cannot wage war under present conditions without the support of public opinion, which is tremendously molded by the press and other forms of propaganda.

—Gen Douglas MacArthur

Media Briefing by Senior Officers. The Army officers' tendency to speak bluntly has caused trouble. Gen Rodrigues came under fire for quite innocuous remarks, which were completely taken out of context by the Press. This is why Gen V. P. Malik, in his first Press briefing on Kargil, cautiously remarked "I am not going into semantics. You are going to misquote me tomorrow." It is this apprehension of being misquoted, or being punished for occasional slip-ups, which percolates the armed forces, leading to mundane and dull briefings. The Army has landed into controversy because of its lack of aptitude, but in most of the cases, it cannot defend itself due to organisational and operational constraints. As a major general who taught the media course in the US Army War College said, "If we don't tell our side of the story, shame on us. Reporters are like alligators. You don't have to love them, you don't have to like them but you do have to feed them."

The military is still in a zero-defect mentality where there is no reward for risk takers. After all, what are the gains to engaging the media when engaging the media can certainly have an immediate detrimental effect on one's career? Today's senior military leaders need to invest time and resources in transforming this media-adverse culture. The military cannot continue to have senior leaders setting the example by shying away from the media as their way of conducting public affairs. Following of an age old saying *Jo Boley, Kunda Khole* (he who speaks has to take action) must be discouraged.

Understanding the Media. The military also needs to understand the factors that go into making news like media deadlines, competition, etc. We should know how the media functions, who does what kind of story, when you are disseminating information, whom are you talking to? Are you talking to an editor/chief of bureau/special correspondent/reporter? Editors write editorials or edit page articles. If we want something to appear in a newspaper we must call a correspondent and speak to him/her. If we call a person from the audiovisual media, we not only have to give him a story but also visuals to illustrate the story. Most importantly, the military needs to find the right balance between local and foreign media. Depending on the situation, one may be more important than the other.

Media Interaction with Junior Officers and Men. The Army, as always, does a magnificent job and the public should know it. Soldiers will invariably do the right things. Providing media access to them cements the bond between the society they come from and the military they support. Soldiers are ingenious and intelligent and their professionalism is obvious to anyone who comes in contact with them. However, there is a tendency in the media to quote them on operational or strategic issues. Officers and other ranks at a lower level will never be aware of the total perspective and, hence, their observations could convey a distorted version of the real, larger story. In such cases, the media would be better advised to restrict themselves to human interest stories and get the overall perspective from qualified persons at the appropriate headquarters.

Reporter vs Patriot, There is a sensitive issue of journalists being patriots first and reporters second. When it came to the very strong dilemma between the truth and the national interests, the examples of the British in Falklands and the Americans during the Gulf War may be kept in mind. There is a big difference between the right to do something and the right thing to do. The media understands the stark realities of war and follows Ernie Ply's observation, "You feel small in the presence of dead men, and you don't ask silly questions". In Kargil, the media rose to the occasion.

Present Media Organisation. Our present Public Relations (PR) organisation is archaic, multi-tiered, slow, and lacks synergy. It is perpetually in reactive mode, unable to meet media timelines and militant propaganda in CI Ops. There is no dedicated spokesperson at each formation headquarters level. Units operating in remote areas are unable to give out their version to the media in time. The present PR organisation needs complete reorganisation. The Kargil Review Committee Report states, "Defence Public Relations are routinely handled by the Ministry of Defence through regular Information Service cadres. This organisation is not equipped to handle media relations during war or proxy war. The briefing function during the Kargil crisis was taken over by a triad of senior military and civil spokesmen. Army Headquarters set up an Information and Psychological Warfare Cell under

There is a need to designate an official Army spokesman at the level of Command, Corps, Division and Independent Brigade Headquarters.

an officer of the rank of Major General with direct access to the Army Chief. This enabled the Army Headquarters both to monitor and disseminate information in a better calibrated manner than would have been the case otherwise.”

RECOMMENDATIONS

Proactive Approach. We must have a proactive approach to leverage the media. There is a requirement of every stakeholder, be it Ministry of External Affairs or Ministry of Defence, Ministry of Information and Broadcasting or the armed forces, to remain in the same wavelength. Proper planning at the government level is essential to achieve synergy. The planning and operations should be coordinated at all levels. Devolution of the information dissemination system should be the key to the military’s interaction with the media. At present, there is little interaction between the staff and the media at the Command, Corps and Division level. Any Press release which has to be issued is required to be cleared by successively higher authorities. Even at formation/unit level, one is not clear as to whose staff function it is to deal with the media—General Staff (GS) Branch or Adjutant’s (A) Branch. Thus, when it comes to ceremonial occasions such as raising days, it is the A Branch which issues Press releases, and when it is an operational matter, it is the GS Branch. There is, therefore, a need to designate an official Army spokesman at the level of Command, Corps, Division and Independent Brigade Headquarters. These spokesmen will act as a single window agency for military-media interaction.

The commanding officers of units involved in CI Ops/ Aid to Civil Authorities should be allowed to interact with the media. In case of any untoward incidents during operations or otherwise, the Commanding Officers(COs) should be allowed to give out the factual data to local media so that the version of the insurgents is not the only one published. It is high time we trust our COs. After more than 20 years of service, a CO is competent

and responsible enough to deliver the goods. There will be a problem of openness. Subordinate officers at times will shoot off their mouth. Higher commanders have to take this in stride. The choice is simple: either to have a few spokespersons who talk out of turn or everyone keeps shut and the media reports without Army's version.

Develop New Public Affairs Measures of Effectiveness (MOE). The old ways of measuring public affairs success are no longer valid. It is simply not enough to know how many Press releases were sent or how many minutes of air time we obtain on a major TV network. Telling the story of our soldiers is still important; but, if it is to be an operational function, public affairs must be subject to other MOEs. Media activities should be judged not by rebuttals, but by how many stories the Army has been able to put in the media. The civic actions, the operations, the liaison done with various agencies of the government including Non-Governmental Organisations (NGOs), etc should be highlighted regularly. Though difficult, the local and vernacular media have to be addressed continuously because we must remember that in CI Ops, it is the local people who comprise the centre of gravity. There is no harm in fixing a minimum number of PR campaigns that a formation headquarters must undertake per week or month. Suitable mid-course corrections can be made thereafter.

Increased Use of the Internet. The Internet is recommended to be used extensively. Not only is the Internet an effective way to communicate directly with domestic and international audiences, it offers a method to counter propaganda, influence enemy opinions and obtain intelligence. Using the Internet provides the armed forces with a powerful tool to convey information quickly and efficiently on the nature and scope of our mission. Civilian journalists use the Internet every day to monitor the competition. So should the military. We do have sites on the Internet. These should be professionally managed, regularly updated, provide images and Press releases or rebuttals or clarification on any issue. In the Internet age, when anyone with a computer and modem can become a war correspondent, methods must be developed for winning the public information campaign in both traditional

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media and cyberspace. Unfortunately, the tactics, techniques and procedures for conducting a cyber public information campaign are yet to be developed.

Training. Implementation of the Kargil Review Committee recommendations should be monitored. It states, "Media should avail of the opportunity of upgraded war correspondents' course at the Army War College so that there is a cadre of trained war correspondents at any time. Simultaneously, media relations and the technique and implications of information war and perception management must form a distinct and important module at all levels of military training. It also must be recognised that the media has to be serviced at many levels— national, local and international."

We should encourage young journalists into the Territorial Army to serve with battalions in active areas. Let them gain first-hand knowledge of counter-insurgency operations. While filing reports, they will be better equipped to project the military. Similarly, we should get officers attached during their study leave with the electronic and print media. This will bestow insight into the functioning as well as the compulsions of the media. As officers on study leave continue to draw their pay and perks, to accommodate them as part of on-the-job training should not pose a problem for either.

Dedicated Radio and TV Channels. The Kargil Review Committee recommendations on the establishment of dedicated radio and TV channels to entertain and inform our armed forces deployed all year round in very difficult and inhospitable terrain should be implemented.

CONCLUSION

Some of the most important combat of tomorrow will take place on the media battlefield.

— Alvin and Heidi Toffler

The media's right to a free Press conflicts with the military's concern for operational security. It is time for the military to accept the media as part of the battlefield of the 21st century and to understand and prepare for the media as it does for other battlefield elements.

Information management in real-time is the challenge of our age. We need to have a fresh look at our functioning in the information age. It is essential here to remember that whoever speaks the first word with credibility is always considered right and reactive responses can at best enable us to defend the issues but can seldom replace the proactive winning approach.

We must resolve some of the tricky issues now and not wait for a crisis to develop. Much as we wish to give the media the opportunity to report from the battlefield, the resources and security criteria may not allow us to send everybody. Whom do we choose? Do we go strictly by TRP ratings or return some favour to those who have been objective in defence reporting amongst NDTV, CNN IBN, TIMES TV, STAR, Headlines Today in English? The same dilemma will be there for the foreign media, Hindi, regional language TV, print media of English, Hindi, vernacular and regional languages. In future, do we follow pooled/embedded/accredited media in the battlefield?

The media resents the term "force multiplier". Is the media a "force multiplier"? It may not be, if it is considered as an available tool or resource to manage information. But the connotation changes if we achieve mutual understanding and help the media with information relevant to public interest. The media then gives us an opportunity to 'encash the cheque', and releases synergy due to its reach and penetration. It persuades the people to commit themselves to a cause for which the defence Services are employed.

The dilemma between public affairs or media operations as part of Psy Ops and deception operations needs to be resolved. Public affairs is responsible for informing the public with factual, truthful information, while IW, Psy Ops and deception operations seek to influence their audience to change their perceptions or behaviour, using the same media. The mishandling of information, whether intentional or accidental, could spell success or failure for the credibility of the PA effort as well as the entire mission.

To conclude, one is tempted to quote extensively from a speech given by Joe Galloway, senior writer, *US News & World Report* on October 22, 1996, at the Commandant's Lecture Series, Air War College, Maxwell AFB, Ala. Excerpts are given below.

I was asked to give you my reflections on the Military-Media Relationship. I will confess, right up front, that I am partial to the Infantry; always have been. Some might find that puzzling if not perverse; that a civilian reporter, given a choice, would choose the hardest and least glamorous part of any war as the part he wishes to cover. But there is method in that madness, and I would recommend it to my younger colleagues who may one day be called on to cover war. There, in the mud, is where war is most visible and easiest understood. There no one will lie to you; no one will try to put a spin on the truth. Those for whom death waits around the next bend or across the next rice paddy field have no time and little taste for the games that are played with such relish in the rear. No one ever lied to me within the sound of the guns.

I am here to argue for more openness, more contact, more freedom between your profession and mine. In this one instance, I believe, familiarity would breed not contempt but trust and respect.

Some of you seated here today—the best and brightest of our nation's defenders—are convinced that the Press is your enemy. In any similar gathering of reporters, there would, no doubt, be some who believe the same thing of you. This is a national tragedy—and one that each of us has an obligation and a duty to do everything we can to repair and heal. There is more than enough blame and fault to go around, but that is not the point. But there is still that underlying suspicion: Your peers tell you that I, and people like me, are YOUR enemy. My peers tell me that you, and people like you, are MY enemy. The correct answer to both groups is: Bullshit!

Some day, some of you in this room will wear stars and carry the heavy responsibility of high command. Inevitably, the day will come when you must lead your young Lieutenants and Captains into the horror that is war. When that day comes, or in the days before it comes, the phone will likely ring and some public affairs puke will be on the line asking you how many media pukers

you want to take with you.

When that day comes, the right answer is: yes sir, yes sir, I'll take three bags full, but send me the brightest and best ones you have. Then farm them out with your Lieutenants and Captains and let them go to war together. The experience of war will create bonds between them that cannot be broken; the young reporters will learn to love the soldiers and airmen just as you and your Lieutenants have learned; and in the end, 99 percent of the coverage that flows from this experience will be entirely positive.

I thank you and all those like you for sharing your world with me. You have shared the last two sips of water in your canteen on a hot jungle trail; you've shared the only cup of hot coffee in a hundred miles on a cold desert morning in the Euphrates Valley; and always you have shared what is in your hearts. Your world, your profession, has given me the best friends of my life and both the greatest happiness and greatest sorrow I have ever known.

I would leave you with these lines from Rudyard Kipling in which he tried to explain his relationship with the British Army. They explain something of what I feel:

I've eaten your bread and salt,
I've drunk your water and wine;
The deaths you've died I've watched beside,
And the lives that you've led were mine.

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THE MOST DANGEROUS NATION

AMARJIT SINGH

Of the three original “axis of evil” nations from George W. Bush’s vocabulary¹, there are still one-and-a-half in the lurch. Iraq’s been taken down and North Korea closed its Yangbyon reactor after the disarmament agreement in February 2007² and then destroyed a vital cooling tower at Yangbyon in June 2008³. Subsequently, the USA formally removed North Korea from the list of terrorist states, which was substantial progress at the time⁴. But now that North Korea is back to its antics of aiming to test a satellite that the USA is getting ready to shoot down, North Korea is still at least half a problem if not a full blown one. It is quite remarkable how underdeveloped nations with unremarkable technologies and low quality of life, such as Afghanistan and North Korea, can have a big nation like the USA spinning in confusion. It is important to recall that the axis of evil nations were dubbed as such because of their trajectory toward making nuclear weapons for unholy ends and their long history of anti-USA rantings. But, so far, Kim Jong Il’s rockets can’t hit

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targets accurately, let alone reach the USA; to use a figure of speech, he barely has one-and-a-half nuclear bombs; his real strength is his vitriolic rhetoric, not the battlefield⁵.

Similarly, Iran's bark is worse than its bite, being propped by Communist China, testing missiles that can't yet carry nuclear warheads, and calling the USA "Satan's nation," thumbing its nose at the USA each time. Like Iraq, Iran can't make most of its soldiers march in line – that's how useless they might be from a military perspective, though not altogether benign given their nurturing of Hezbollah, threat to "eliminate" Israel, and propensity to acquire nuclear weapons. Their missile threat against Israel possibly deterred a 2006 Israeli invasion of Syria⁶, so Iran can pack a punch. However, the axis-of-evil nations aren't in the league of China and Russia to directly threaten the USA yet, but it would be unrealistic to allow them to attain that capability. Nevertheless, a sharp nation in sheep's clothing that is not among the "axis of evil" nations but poses a threat to the United States is Pakistan, which has a professional army, pretends to be a friend of the United States, harbours and exports terrorists, has nuclear bombs that can fall into the hands of terrorists, is racked by internal strife, and is ready to implode any year now, projecting evil to the world through its Taliban protégés and Inter-Services Intelligence (ISI)-supported terrorist outfits. The denial of human rights by the Taliban to its own people, such as denial of education for girls, is most abhorrent. Even though Pakistan has apparently taken a formal stand against the Taliban, the populace is divided in its opinion of its Muslim Taliban brethren, and, therefore, there is a perpetual fear of Pakistan folding up and imploding.

The situation in Pakistan, far from improving, has only been going from bad to worse. Pashtun tribesmen from the northwest regions have holed up in Karachi and barred outsiders from entering large neighbourhoods. The mayor of Karachi openly says he is afraid to enter those neighbourhoods, even with

5. His one million strong army has obsolete weapons, but the one big threat North Korea makes is the reduction of Seoul to rubble along with the possible use of an atomic bomb on Seoul.

6. Mahdi Darius Nazemroaya, "Israel's Nuclear Missile Threat Against Iran," *Global Research*, <http://www.globalresearch.ca/index.php?context=va&aid=7838>, January 19, 2008.

police escort. Militancy has been increasing in all Pakistani cities on a daily basis. Even Lahore is more tense and troubled than ever before. Terror runs without a leash in South Punjab. What should be more vexing is that 59 per cent of all Pakistanis share Al Qaeda's attitudes towards the Americans.⁷ Today, Pakistan is the most serious issue facing the free world, a hot flash-point in the world given the USA's involvement in neighbouring Afghanistan, and not only a 60-year old Indian concern.

Today, Pakistan is the most serious issue facing the free world, a hot flash-point in the world given the USA's involvement in neighbouring Afghanistan, and not only a 60-year old Indian concern.

PAKISTAN'S PRETENSIONS

Once in a long while, Pakistan would catch a terrorist and use that as evidence to claim friendship with the USA. Now, Pakistan's actions in Swat and Waziristan appear to give the impression that Pakistan favours the USA over the Taliban. In fact, Pakistan's slow rate of catching terrorists and taking action against them should, in itself, raise flags⁸. After an eight-year hiatus, Pakistan and the USA finally got wise to the issue of ground action against the Taliban making camp in the northwest territories. It was obvious that the longer we would let the tens of thousands of Al Qaeda terrorists and Taliban loose and uncaught in Pakistani territory, the more time they would have to regroup and plan. This was a no-brainer, but it is noteworthy that the Pakistan regime forestalled ground action for 7+ years. Any strategist can tell you that the Taliban should not have that freedom of planning. This is a global war, and the world's security is at stake⁹.

7. Nicholas D. Kristof, "Taliban in Nuclear Pakistan Pose Biggest Threat to US," *Star Bulletin*, July 24, 2009.

8. The former Director General of India's Defence Intelligence Agency, Lt Gen Kamal Davar writes "[P]akistani forces would occasionally help the CIA capture second string Al Qaeda figures to meet the objective of keeping aid money flowing from Washington ... [t]he Bush administration deceived itself from the very beginning." See "Emerging Situation in Pakistan: Implications for India," *CLAWS Journal*, Winter 2008, p. 51.

9. Taliban and Pak-based terrorists have exploded bombs in London, Spain, and numerous Indian cities.

The “hammer-and-anvil” operation of the United States was mostly the US hammer and the little Pakistani anvil because the Taliban and Al Qaeda elements managed to escape through the Pakistani cordon¹⁰. In early March 2007, Musharaff’s regime made a startling deal with the one-legged Mullah Dadullah of the Taliban to regain a strong foothold in southwestern Afghanistan¹¹. Thus, Pakistan prepared to turn its back on its erstwhile ally and benefactor, the United States, but fortunately the North Atlantic Treaty Organisation (NATO) forces sprung a trap for Dadullah after the deal was made public, killing him in a military operation¹². Later, towards the end of 2007, the Pakistani “cleansing” of Waziristan was a failure, ending with the militants ruling the roost and attacking army convoys and police stations at will¹³. Pakistani operations in Swat launched in October 2007 with helicopter gunships yielded few positive results, only to end with the halting of action and conducting of negotiations with the Taliban¹⁴. Subsequently, Pakistani actions in Swat have been an “off-on” campaign. Pakistani actions against Waziristan and Swat in the 2nd quarter of 2008 sounded like a successful operation, but were done with exceptionally few troops. Subsequently, Pakistan signed an unholy ceasefire agreement with the militants in Waziristan. Of late, Pakistan has allowed Islamic rule to be imposed in Swat, and Pakistan has little to no control over its Federally Administered Tribal Areas (FATA) regions¹⁵. In January 2009, Pakistan again launched operations in Swat¹⁶ after Maulana Fazlullah’s militants burned 165 girls’ schools and 80 video shops, and blew

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10. Syed Saleem Shahzad, “Pakistan: After the Hammer, Now the Screws,” *Asia Times Online*, http://www.atimes.com/atimes/South_Asia/FE19Df03.html, May 13, 2004.
 11. Syed Saleem Shahzad, “Pakistan Makes a Deal with the Taliban,” *Asia Times Online*, http://www.atimes.com/atimes/South_Asia/IC01Df03.html, Mar 1, 2007.
 12. Benjamin Sand, “US-led Forces Kill Top Taliban Commander in Afghanistan,” *voanews.com*, <http://www.voanews.com/english/archive/2007-05/2007-05-13-voa7.cf> m, May 13, 2007.
 13. Wikipedia, “War in North-West Pakistan,” http://en.wikipedia.org/wiki/Waziristan_War, accessed March 2009.
 14. Bill Roggio, “Pakistan Launches Operation in Swat,” *The Long War Journal*, http://www.longwarjournal.org/archives/2007/10/pakistan_launches_op.php October 26, 2007.
 15. For insights into FATA and NWFP, refer Samarjit Ghosh, “Insurgency in the FATA and NWFP: Challenges & Prospects for the Pakistan Army,” *Manekshaw Paper*, no. 6, *CLAWS*, 2008.
 16. Rahimullah Yusufzai, “Pakistan: War in Focus – Swat 2009,” *The Muslim News*, <http://www.muslimnews.co.uk/paper/index.php?article=3954>, February 27, 2009.

up 20 bridges during 2008, while it is expected that one-third of Swat's population has left Swat¹⁷. However, in February 2009, Pakistan again stopped its Swat operations¹⁸. The current situation seems much like Pakistan taking distempered action against the Taliban under US pressure, and yearning at every step to find an excuse for a ceasefire or negotiated settlement.

Anybody can discern that Pakistan's actions are half-hearted, as it attempts to appease Washington as well as its own civil Islamic population, though Pakistan is, no doubt, in a serious bind. Its police officers in Swat have either deserted or taken a long leave, and the Pakistan Army is loath to fight its own people, probably fearing mutinies within its own army. But, the foolish one in all this is the USA, which expects Pakistan to help it in FATA and Swat. To some extent, the USA has been successful in persuading Pakistan. Overall, the USA is living in an illusory fool's paradise, hoping that Pakistani pretensions are sincere. The USA is showing signs that it is absolutely unable to deal with the Afghan psychology. They obviously aren't like Maharaja Ranjit Singh who could plug the Afghans at the Khyber Pass.

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AFGHANISTAN'S POPPY TRADE

For one, it continues to astound this analyst that the main source of Taliban funding, opium grown in the fields of Afghanistan, is allowed to grow. Why is it that knowing the truth, the USA has not burned as many of those fields as possible? Do you think that the USA is held back by human rights considerations, where it refrains from taking away farmers' livelihoods? A warring nation would not limit

17. Amir Mir, "Situation in the Swat Valley of Pakistan," *Raman's Terrorism Analysis*, <http://ramanterrorismanalysis.blogspot.com/2009/01/situation-in-swat-valley-of-pakistan.html>, Wednesday, January 21, 2009.

18. "Pakistan Army Halts Operations in Swat," Reuters, <http://www.reuters.com/article/worldNews/idUSTRE51M42O20090223>, Mon Feb 23, 2009

If family and blood relatives' benefits are considered personal benefits, as is often the case in a tight-knit society such as of the Pashtuns, Karzai is part of the drug trade problem.

itself to such chicanery, knowing full well that wheat and corn can replace those crops. Though 20,000 acres (or 10 per cent) of poppy fields have reportedly been destroyed, there are numerous government officials and former warlords now in Hamid Karzai's government who encourage the trade. It also took the US Administration of Donald Rumsfeld some time to make the connection between poppy and war.¹⁹ When aerial spraying of poppy fields was undertaken and further sought to be intensified, there was wide opposition from none other than Hamid Karzai.²⁰

The excuse given by Karzai was that the aerial spraying would (1) damage other crops; and (2) damage his chances at reelection. It is quite evident that members of his own Cabinet influenced him to speak up like this, because they were themselves complicit in the drug trade. To complicate issues, Karzai's brother, Ahmed Wali Karzai, has been implicated in the drug trade.²¹ As recently as July 2009, Hamid Karzai pardoned 10 convicted drug offenders because they were connected to well-to-do families.²² Quite apparently, the whole of Afghanistan is corrupt and resistant to counter poppy eradication²³. Other reports have tied Karzai himself as benefiting from the drug trade. If family and blood relatives' benefits are considered personal benefits, as is often the case in a tight-knit society such as of the Pashtuns, Karzai is part of the drug trade problem.

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19. James Risen, "Poppy Fields Are Now a Front Line in Afghanistan War," *The New York Times* of the Web Learning Network, <http://www.nytimes.com/learning/students/pop/articles/16drugs.html>, May 16, 2007.
 20. Jonathan S. Landay, "Outcry Against Poisoning Afghanistan Poppies," *The Seattle Times*, October 26, 2007, <http://community.seattletimes.nwsources.com/archive/?date=20071026&slug=poppy26>.
 21. James Risen, "Reports Link Karzai's Brother to Afghanistan Heroin Trade", *The New York Times*, <http://www.nytimes.com/2008/10/05/world/asia/05afghan.html>, October 4, 2008.
 22. "Washington Upset Over Karzai Drug Pardons," UPI.com, http://www.upi.com/Emerging_Threats/2009/07/15/Washington-upset-over-Karzai-drug-pardons/UPI-655912476825707, July 15, 2009.
 23. Jon Boone, "Hamid Karzai: Too Nice, too Weak - How West's Own Man Fell out of Favour", *The Guardian*, <http://www.guardian.co.uk/world/2009/march/23/hamid-karzai-afghanistan>, March 23, 2009.

OSAMA'S DANGEROUS INFLUENCE

Moreover, Osama bin Laden did not escape to the wilderness and beautiful mountains of Northern Kashmir and the Northwest Frontier of Pakistan to retire. His record confirms that he creates political havoc wherever he goes²⁴. When in Sudan, he encouraged civil war, and the Darfur condition today is in no small amount owed to the seeds sowed by him back then, not to mention, of course, the role of China acting like a rogue nation. It is common history that he resorted to amassing a small army when he was fighting the Russians from Pakistani soil, and once he returned to Afghanistan in 1995, quickly moved to buy off the Taliban and take over the virtual reins of Taliban internal and foreign policy. He has advocated revolution in Saudi Arabia, where his family lives, though the lack of liberties in Saudi Arabia is well known. His nature is one of a troublemaker for the rest of the world, though in his mind, no doubt, and in the minds of many aggrieved individuals in the rest of the world, especially developing nations, he is probably a hero. But, what makes us think that he will sit calmly and quietly in peaceful meditation in Pakistan? To the contrary, he reportedly sought acquire to nukes and is plotting the destruction of America in what has been dubbed the *American Hiroshima*²⁵. Nevertheless, the situation in Pakistan has only gotten worse after he crossed the Durand Line into Pakistan after the failed Tora Bora bombing by American warplanes in 2002. It is possible to conclude that the increased turmoil in Pakistan's FATA and Northwest Frontier Province (NWFP) is in no small measure due entirely to his influence after entering Pakistan. It is quite apparent that Pakistan is in trouble simply to have bin Laden's presence there²⁶. Pakistan has repeatedly claimed that Osama is not in Pakistan, yet,

24. Wikipedia, "Osama bin Laden," http://en.wikipedia.org/wiki/Osama_bin_Laden.

25. Paul Williams, *The Al Qaeda Connection* (New York: Prometheus Books, 2005), pp. 25-40, p. 78, pp. 191-200.

26. Reports of June 2008 of him dying of kidney disease must be taken with a pinch of salt, since that analysis was made thousands of miles away after looking at medical reports, and is likely an American disinformation campaign.

For all practical purposes, the hideous terrorism unleashed by Osama bin Laden has got Pakistan, Afghanistan, the USA, and the rest of the world in an undesirable clasp from which there is no let up as of yet.

while other reports claim him to be dead, there is no evidence for either^{27, 28}. For all practical purposes, the hideous terrorism unleashed by Osama bin Laden has got Pakistan, Afghanistan, the USA, and the rest of the world in an undesirable clasp from which there is no let up as of yet.

THE FATE OF PAST PAKISTANI PRESIDENTS

President Musharaff of Pakistan escaped four attempts on his life by terrorist organisations. That he was forcefully pushed out, under duress, is no surprise. The past six Presidents and Prime

Ministers of Pakistan before him had traumatic exits – two with death (Zulfiqar Bhutto was hanged; Zia ul-Haq’s airplane was blown up in mid-air), two with exile (Benazir Bhutto and Nawaz Sharif), and two in shame after defeat in war (Ayub Khan and Yahya Khan).²⁹ Therefore, Zardari’s fate is not at all secure. Besides, Gen Pervez Ashraf Kayani is oft reported to be the real power broker in Pakistan. However, rather than any one person or group ruling Pakistan, there is a strong consensus that “uncertainty” rules Pakistan; there is also a strong feeling that a “vacuum” rules the troubled state of Pakistan.³⁰ What makes this matter more dangerous andj disturbing

27. George Stephanopoulos, “White House: ‘Inconclusive’ Whether Osama Alive or Dead,” abc news <http://www.guardian.co.uk/world/2009/mar/23/hamid-karzai-afghanistan>, May 10, 2009.

28. For their own political reasons, Pakistan and Afghanistan make different claims. Karzai claims that Osama is hiding in the mountains between Afghanistan and Pakistan, obviously to ensure that US pressure is kept up in that region such that his continuation as President is more assured. Zardari claims that Osama is probably dead, since he hasn’t shown up for eight years; obviously, Zardari says so to get the US to step breathing down his neck. US National Security Advisor, Gen Jim Jones, takes a path between those two, and believes that the evidence is inconclusive. Refer, *Ibid.*, p. 26.

29. “Generals Ruled Pakistan for Half its Existence,” ExpressIndia.com, <http://www.expressindia.com/latest-news/Generals-ruled-Pakistan-for-half-its-existence/244434/>, November 28, 2007.

30. Farzana Shaikh, “The Vacuum that Rules Pakistan,” *The Independent*, <http://www.independent.co.uk/opinion/commentators/farzana-shaikh-the-vacuum-that-rules-pakistan-1667546.html>, April 12, 2009.

than just the act of assassination of a President is that the terrorists have a suspected agenda of acquiring control over the nuclear assets of Pakistan.³¹ Heavy demonstrations by Islamic extremists in early April 2007, barely 1,000 metres away from Musharaff's house in Islamabad, were testimony to the brewing sentiments and dangers in Pakistan. This was followed by Benazir's assassination in December 2007³². Add to this a pro-China military and a pro-Islamist public that do not see eye to eye. Moreover, with about 50 Pakistani nuclear warheads with long-range delivery capability that could conceivably fall into their possession, the Al Qaeda terrorists and associates will make Kim Jong Il and the Ayatollahs look like babies. Considering there are more than 10,000 militants in Pakistan, a potential attack and capture of a nuclear warhead and delivery system by them is not altogether impossible^{33, 34}. All this is financed and fired by Afghani hashish and their medieval and despotic practices. This is what makes Pakistan the most dangerous nation in the world today. Pakistan is sitting atop an active volcano, and we haven't seen the full eruption yet.

DRUGS AND NUCLEAR WEAPONS: A DEADLY COCKTAIL FROM AFGHANISTAN TO SOUTH AMERICA

Pakistan is already in internal turmoil. The left arm of the government rides saddle with the Islamic extremists and terrorists, while the right arm doesn't feel strong enough to take on the left. To compound this, the right arm scarcely

31. Rolf Mowatt-Larssen, "Nuclear Security in Pakistan: Reducing the Risks of Nuclear Terrorism", Arms Control Association, http://www.armscontrol.org/act/2009_07-08/Mowatt-Larssen, July/August 2009.

32. This event or something similar was probably predicted in numerous private circles, that Benazir was playing with her life in returning to Pakistan from exile.

33. Obviously, this is a major threat to India and its cities. Now with A. Q. Khan free, and possibly seeking revenge, his services may be rendered again to the Al Qaeda.

34. No doubt, there are hurdles for capturing nuclear weapons. First, the Pakistan Army has all nuclear facilities and mobile deployments under heavy military guard. Militants cannot find that easy to do, especially since the Pakistan Army firepower is heavier than what the militants can muster. Next, warheads are kept separate from missiles during peace-time: assembling them requires special talent that the militants may not have. Further, learning how to fire them accurately to a specific trajectory is another hurdle that the militants will have to learn. However, capture of nuclear material can be used in a nuclear ground explosion is a little easier than tipping them on missiles.

Pakistan is already in internal turmoil. The left arm of the government rides saddle with the Islamic extremists and terrorists, while the right arm doesn't feel strong enough to take on the left. To compound this, the right arm scarcely knows what the left arm does; Pakistan is thus exhibiting bipolar disorder.

knows what the left arm does; Pakistan is thus exhibiting bipolar disorder. All this while Afghan hashish, and heroin “choice number four” — the best in the world market—is smuggled through Pakistan to the rest of the world, aided and abetted by government insiders and the ISI. The infamous ISI surreptitiously shores up terrorist organisations that stir trouble in Indian Kashmir and plant bombs in trains in Spain , England, and Mumbai. Unemployment in Pakistan runs at a substantial 20 per cent in effective terms when underemployment is considered³⁵, while an estimated 74 per cent live under the poverty level of \$2 per day³⁶. With such economic conditions and frustrations, mixed with Islamic terrorists bent upon acquiring nuclear weapons, combined with an unstable government, Pakistan

is smoking not just hashish but potential nuclear fallout.

Not only that, Al Qaeda that found a safe haven in Pakistan, and has extended its reach to the “safe triangle” of Iguacu Falls that borders Argentina, Brazil, and Paraguay. The “Triangle” has been a lawless area for two decades and more. Shiite mosques became prominent there since the 1975 civil war in Lebanon when scores of Lebanese Shiites migrated there, an exodus that continued after the 1982 Israeli invasion of Lebanon. From the “Triangle,” Al Qaeda and Hezbollah reportedly operate a base of drug smuggling and gun running into the USA through the porous Mexican border³⁷.

35. These estimates ‘might’ be conservative: underemployment is about 13.6 percent while unemployment is reported at 8.3 percent. See “Special Section: Underemployment in Pakistan,” <http://209.85.173.132/search?q=cache:0cKkEDLdxPoJ:www.sbp.org.pk/reports/quarterly/FY06/third/Special.pdf+pakistan%27s+underemployment+level&hl=en&ct=clnk&cd=1&gl=us>. And “Unemployment in Pakistan,” SOCYBERTY, <http://www.socyberty.com/Economics/Unemployment-in-Pakistan.20469> 3, August 10, 2008.

36. Wikipedia, “Poverty in Pakistan,” http://en.wikipedia.org/wiki/Poverty_in_Pakistan. India’s poverty levels are actually slightly higher where 77% live under \$2 per day.

37. Williams, n. 25, pp. 119-137

Further, the Albanian mafia established a strong foothold in Latin America in the late 1990s, where they ousted the Colombian mafia from preeminence in the trade. To assist in drug smuggling in Latin America, the Albanian mafia needed guns that were readily supplied by their drug suppliers, Al Qaeda, and their cousins, Hezbollah, who had already created a foothold in the “Triangle.” The drugs supplied by Al Qaeda came from Afghanistani poppy fields. In this regard, Osama bin Laden is said by Brazilian intelligence to have visited the “Triangle” in 1998 – his only visit to the American hemisphere³⁸. Now, Al Qaeda and Hezbollah supposedly freely train Hispanic and Muslim volunteers in armaments in the “Triangle,” and then send them with suitcase nukes across the Mexican border into the USA with the help of the Honduran *Mara Salvatrucha*, the largest crime syndicate in the USA today. These volunteers merge into sleeper cells inside the USA and await the day they will be called upon by the mighty Osama to destroy the United States, in what he dubs the *American Hiroshima*³⁹. Al Qaeda, thus, discovered an ingenious method of subverting the USA, the supporter of its arch enemy, Israel. Now we can partly understand why the USA is so intricately caught up in Afghanistan and why it needs to continue its campaign there.

Mike Tenet, former Director of the Central Intelligence Agency (CIA), reported to George W. Bush on October 11, 2001, that at least two suitcase nukes had found their way into the United States⁴⁰, and in July 2007, President George W. Bush spoke publicly of this danger for the first time, something the US government already knew for six years⁴¹. Any earlier disclosure possibly had the risk of generating panic.

AMERICAN HIROSHIMA: THE REAL THREAT TO USA

The grave and imminent danger to the USA is the simultaneous blowing up of one dozen American cities by suitcase-size nuclear bombs of two to ten

38. *Ibid.*, p. 132

39. *Ibid.*

40. *Ibid.*, p. 94

41. It is not impossible to imagine that the US penetrated sleeper cells in mainland USA in the aftermath of the introduction of the Patriot Act, and apprehended suitcase nukes.

Al Qaeda is reported to have purchased 20 nuclear warheads in 1998 from Turkmenistan, Kazakhstan, Ukraine, and Russia, one tactical nuclear weapon of which was purportedly attempted to be used against Israel in 2001 by a Pakistani agent who was intercepted by the Mossad at the Israeli border.

kiloton yield. Intelligence agencies around the world, including the political Hans Blix of the International Atomic Energy Agency (IAEA), all agree that bin Laden has these “suitcase” nukes, acquired from the Chechen rebels, who stole or secretly bought them from Russian stores in the aftermath of the break-up of the Soviet empire⁴². The former General of the USSR responsible for the withdrawal of Soviet forces from Afghanistan, Alexander Lebed, who later became head of the Russian nuclear weapons management agency, reported on CBS that the USSR had produced 132 suitcase-size nuclear bombs of which only 48 were accountable for⁴³. It cannot be known if that was a disinformation trick. However, Al Qaeda is reported to have purchased 20 nuclear warheads in 1998 from Turkmenistan, Kazakhstan, Ukraine,

and Russia, one tactical nuclear weapon of which was purportedly attempted to be used against Israel in 2001 by a Pakistani agent who was intercepted by the Mossad at the Israeli border⁴⁴. Thus, the evidence adds up piece by piece. In addition, fissile material was stated to be acquired by Al Qaeda from the Islamic Movement of Uzbekistan. Money for these nukes was paid for through hashish, cocaine, and heroin produced in Afghanistan, smuggled into Pakistan with the ISI’s help, taken across to Europe by the Turkish mafia, the *bubas*, and sold in Europe by the violent Albanian mafia⁴⁵.

What should be a rude awakening is that former Pakistani nuclear scientist A. Q. Khan allegedly sold centrifuge technology to the Brazilian government of Lula da Silva, a lifelong Marxist, and long time ally of Fidel Castro, thus,

42. Williams, n. 25, “The Loose Nukes,” pp. 81-96, p.93.

43. Ibid., p.87.

44. Ibid., p. 96.

45. Ibid., pp. 59-64.

introducing nuclear weapons in the USA's hemisphere⁴⁶. The Hudson Institute, a think-tank in Washington, DC, expressed fears that Brazil, Venezuela, and Cuba are possibly forming a new axis of evil in the backyard of the US, which could make the Cuban missile crisis of 1962 look like child's play⁴⁷. Lula has been one of the most acerbic critics of the US action in Afghanistan; Venezuela's Chavez hates the US, nationalised all foreign oil companies in June 2007, and reportedly awarded a \$1 million gift to Al Qaeda in the wake of 9/11⁴⁸; in addition, the anti-US tirade of Cuba is well known, though Barack Obama is showing signs of easing up on Cuba⁴⁹. Colin Powell visited Brazil when reports came in that Dr. Khan had been in contact with Brazil. We can now understand the importance of George W. Bush's March 2007 visit to Latin America against this backdrop, and of the support to the Colombian government against Venezuela. While the world remains fixated on Iran and North Korea, Brazil continues a clandestine nuclear programme.⁵⁰ For instance, Brazil prevented IAEA inspectors from conducting a full inspection of their nuclear facility at Resende.⁵¹ Moreover, Pakistan is now implicated in Myanmar's nuclear ambitions.⁵² Incontrovertibly, Pakistan proliferated nuclear technology to North Korea, which could be proliferating it

For instance, Brazil prevented IAEA inspectors from conducting a full inspection of their nuclear facility at Resende. Moreover, Pakistan is now implicated in Myanmar's nuclear ambitions.

46. *Ibid.*, p. 136.

47. *Ibid.*, p. 137.

48. *Ibid.*, p. 146-147, said to be revealed by a Venezuelan Air Force Major who was the personal pilot of Hugo Chavez. The gift was reported channeled through the Venezuelan Ambassador to India; cited in Ivan Osorio, "Chavez's Bombshell," *National Review*, January 8, 2003.

49. "Obama Eases Curbs on Cuba Travel," BBC News, <http://news.bbc.co.uk/2/hi/americas/7997063.stm>, April 13, 2009.

50. Latest reports now indicate that Myanmar may be getting into the game with North Korea's help. See Dennis D. Gray, "Is Myanmar Going Nuclear with North Korea's Help?" *The Washington Post*, <http://www.washingtonpost.com/wp-dyn/content/article/2009/07/21/AR2009072100256.html>, July 21, 2009.

51. Williams, n. 25, p. 136.

52. Larry Jagan, "Myanmar Drops a Nuclear 'Bombshell'," *Asia Times Online*, http://www.atimes.com/atimes/Southeast_Asia/IE24Ae02.html, May 24, 2007.

to Myanmar. It is a hostile world, becoming more contentious and oppugnant every day. It seems that all nations opposed to the USA have nuclear weapons, are proliferating them, or seeking to acquire them. Nevertheless, Pakistan seems to have a connection with all of them, proliferating nuclear technology to Iran, as well. Furthermore, A. Q. Khan's nuclear espionage and trade network extended across the globe, East and West, northern and southern hemispheres, and spanned every Muslim country⁵³. All terror appears to originate now from Pakistan, including the assistance to Uighur Muslims⁵⁴.

PAKISTAN'S AL QAEDA CONNECTION

On February 4, 2004, Dr. Khan admitted that he sold nuclear technology to Libya, Iran, and North Korea⁵⁵. Further, there is little to no doubt that A. Q. Khan had an Al Qaeda connection. At least 13 senior scientists from his Khan Research Laboratories (KRL) were involved, with two of them spending time in Pakistani custody, two escaping from Pakistan, and nine absconding. Dr. Sultan Bashiruddin Mahmood, a former scientist at KRL, admitted in 2001 that he met bin Laden and al-Zawahiri; in addition, Dr. Abdul Majid Chaudry, a chief engineer at Pakistan's Atomic Energy Commission, admitted to meeting bin Laden and other Al Qaeda officials to discuss the construction of nuclear weapons. Both of them were placed in custody and interrogated by the ISI and CIA; however, both of them were "quietly released" by the Pakistani government after a few months⁵⁶. After the raid by Italian authorities in 2003 on *BBC China*, a cargo ship that was carrying nuclear technology to Libya, there is tell-tale evidence that Khan personally met with bin Laden⁵⁷. Further, it is inconceivable to any political and military analyst, contrary to what Musharaff claimed, that the Pakistani government knew nothing of A. Q. Khan's illicit dealings. Pakistan is riding two wild horses at the same time —

53. Williams, n. 25, p. 115; See map of the A. Q. Khan network in Gordon Corera, *Shopping for Bombs*, (New York: Oxford University Press, 2006).

54. Editorial, "Uighur Terrorism in Pakistan," *Uighur Post*, <http://uighurpost.blogspot.com/2006/06/editorial-uighur-terrorism-in-pakistan.html>, June 26, 2006

55. Williams, n. 25, p. 114.

56. *Ibid.*, pp. 105-116.

57. Corera, n. 53.

Al Qaeda and the USA — and it is definitely only a matter of time before it loses balance, with severe consequences for the whole world.

CRIME-TERRORISM NEXUS

The connection between worldwide crime and terrorism has never been closer and stronger, and never more dangerous. Add to this the state-sponsored terrorism by the axis of evil nations that are aiding and joining forces with the terrorists. China, too, trained the Taliban⁵⁸, and today, Chinese armaments are found in Talibani arsenals and continue to be supplied covertly. Combined, these dangers are much too serious for the US and other freedom loving nations to ignore, yet they have been relatively unaggressive on the job, in spite of the Afghanistan and Iraq actions, and UN sanctions against Iran and North Korea that have links to terrorist organisations. The US has been simply taken for a ride vis-à-vis Pakistan, not only now but for five decades, and has been merely watching while Pakistan now allows the USA's destruction to be plotted on its soil, claiming to be able to do nothing about it. The US is unable to see reality as far as Pakistan is concerned. In addition, the US is simply unable to fully understand the thinking of rebel Muslim groups resident in Pakistan, preferring to accept their *promises* time and time again rather than face-off with the devious challenge they are really facing.

The danger of terrorism joining forces with organised crime, with infiltration into the USA across the Mexican border by potential terrorists in the pay of Al Qaeda, in turn, aided and abetted by Pakistan's dreaded intelligence agency, the ISI, has created a world where nothing seems more serious than the next potential nuclear terror attack activated by sleeper cells in the USA⁵⁹. It is apparently time to nip the nuclear proliferation problem in the bud — which requires some guts and sacrifices — but has its current roots and support in Pakistan. It was for good reason that the US Congress House Speaker, Nancy Pelosi, was recommending since March 2007 to drawdown the campaign

58. During the anti-Soviet Afghanistan campaign in the 1980s, the USA itself asked China to train the freedom fighters. China was supposedly happy to do this to counter Soviet influence. After 9/11, China is happy to do this to counter US influence.

59. Williams, n. 25, pp. 171-190.

The Afghanistan action is not an easy one for the USA to manage and fight.

in Iraq and refocus on Afghanistan, next door to Pakistan's troublesome NWFP, something that the US White House only began to consider seriously in June 2008. It is for this reason that the current Democratic President and former presidential candidate, Barack Obama, was recommending since 2007 to bomb the Taliban hideouts in Pakistan, and during 2008, mentioned repeatedly that he would increase US forces in Afghanistan if elected to power. His January 2009 decision to send 17,000 more troops to Pakistan, and follow that up with another possible 16,000 troops must be seen in this backdrop. The US is threatened at home owing to what is happening in Pakistan. The reason is that Pakistan is apparently nurturing and supporting terror, the like of which will shake the world as never before unless curtailed right now. Time is not on the side of civilised nations in this regard.

AFGHANISTAN TODAY

The Afghanistan action is not an easy one for the USA to manage and fight. For one, there can be no easily imagined conceivable victory for the US against the Pashtuns, who are tenacious and patient fighters⁶⁰. Moreover, each aerial bomb that the USA drops seems to draw more fighters to the Taliban. The Swat and Waziristan actions by Pakistan have not dwindled the total number of Talibani fighters; rather, their number has increased. The Pashtuns are under attack in their own homeland, and it is not difficult to see that they will not roll over and give in to the Americans, or any invader for that matter, for whatever reason at all. Afghanistan is the only nation that has the reputation of being the graveyard of empires⁶¹. The Pashtuns are no pushovers, and it must be remembered that the Pashtun warriors were accepted as a martial race by the British. It should also be remembered that the Pashtuns ruled India for 600 years before being ousted by the Mughal Turks.

60. Richard Opper, Jr., "Iraq Veterans find Taliban Formidable," *Star Bulletin*, July 26, 2009.

61. Seth G. Jones, *In the Graveyard of Empires: America's War in Afghanistan* (W.W. Norton and Company, 2009).

For all the six decades since Pakistan's independence, Pakistan has been unable to enforce its rule and law in the NWFP. The Pashtuns living there are fiercely independent and will resist any outsider that aims to change their way of life and independence. Unless Pakistan resorts to genocide, which is a human rights violation, it is hard to see how the Pashtuns can be subdued. Therefore, the problem is quite intractable, though efforts can continue to tame the beast. It is not known if they can be bought out for a few billion dollars, because sovereignty strikes one as being more important to the Pashtuns than money. Jason Burke writes "[T]hough some fight for cash, interviews with captured and active Taliban reveal the insurgents to be less motivated by economics than many think. Power, politics, culture, feuds, ethnicity, tribal vendettas and Afghan history also play a big part." It is for this reason that Pakistani forces are having such an impossible time keeping the peace after seemingly winning the battles. Nearly two million fled Swat at the outbreak of hostilities in February 2009, of which only 478,000 have been estimated to have returned. The wealthy landowners who drove the local economy have decided to stay away. No one can claim that Pakistan has been able to bring Swat back to normalcy or that the Taliban fighters have been defeated and disarmed. The Pashtuns are not to be messed with, and messing with them is akin to bringing trouble on oneself, which is why Pakistan is now in deep trouble. Remember, it was the Pashtun tribesmen who invaded India in 1947 after the Hindu Maharaja of Kashmir came to odds with the Muslim World War II veterans of Poonch who sought arms from the arms manufacturers of the NWFP.⁶² The Pashtuns will pursue the defence of their lifestyle, the defence of their brethren, and will attack if their lives

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62. Victoria Schofield, *Kashmir in Conflict* (New York: I. B. Tauris and Co., Ltd., 2003).

There is enough evidence with the US State Department that Pakistan is a country that can break up any day and become the world's leading terrorist nation overnight, in succession to the erstwhile Talibani Afghanistan.

are threatened. Unless they can be convincingly defeated in war, there seems little other solution to the prevalent problem.

It is owing to the inherent difficulties in fighting this war that American forces aim to shift their strategy to win the hearts and minds of the Afghans through diplomatic and political initiatives. While the Americans may be fighting to restore normalcy in Afghanistan, that is not what the Pashtuns want. Hence, the two forces continue to see across each other.⁶³

ACTION DECISIONS

If we adopt the traditional approach that action should be taken only when something happens, it might be too late to prevent the next potential nuclear holocaust. Does the world really want to wait for the smoking gun that will send the world's economy into a tailspin, with untold consequences on health and survival (not that the current economy has any different trends⁶⁴) or is a preponderance of evidence sufficient to take precautionary measures? There is enough evidence with the US State Department that Pakistan is a country that can break up any day and become the world's leading terrorist nation overnight, in succession to the erstwhile Talibani Afghanistan.

America is cautious to apply overt preemptive military action against hostile forces inside Pakistan because of world opinion and internal ignorance. It also seems that world public opinion, as well as internal public opinion in the USA, both ranting against US campaigns overseas, are unwittingly siding with the terrorists, crime agencies, and axis of evil nations. The USA's restraint

63. Jason Burke, "Casualties Rise as Afghanistan Strategy Shifts," *The Japan Times*, July 20, 2009.

64. However, it is most likely that the current world economic crisis will reverse if left to itself. The danger is that the economic duress can be exacerbated by political upheaval and terrorist activity.

rekindles memories of their decision not to invade North Vietnam, an action that ended in military defeat for the USA. Is it worthwhile to let the arrogant USA fail, only for India and Pakistan to lose their own freedom to the Taliban for another few centuries to come? Countries in the region obviously have to gauge which side their bread is buttered. The lay public doesn't realise that the USA's campaigns in Iraq and Afghanistan are designed to impede and arrest (1) the drug trade and terrorist breeding grounds centred in Pakistan's NWFP; and (2) the nuclear threat to the world, centred in Iran and Pakistan, but more so in wily Pakistan. Many think that the US is simply seeking revenge, but there is much more in the equation. Not only should the civilised world realise the nuclear dangers they are facing, which can make the threats of global warming pale in comparison to the cold winter of a nuclear fallout, but we should sincerely hope that America doesn't wake up too late. George W. Bush acted entirely in the security interests of his country by invading Afghanistan, and Barack Obama is apparently doing the same by sending more troops there, aiming to increase their numerical strength five-fold by 2010.

It seems quite sure that India, like the USA, will not escape the unholy schemes of the terrorists against it. It is not too distant in the future when Communist inspired Naxalites may join forces with the terror agencies operating from Pakistan, if this nexus has not already been established. Do you think [predominantly] Hindu India can escape the dogmatic wrath of misguided Muslim cross-border terrorists now or in the near future? I would not at all be surprised if Al Qaeda has already transferred one or two nuclear suitcase bombs to sleeper cells in India with the help of the ISI via Tibet and Nepal. Quite simply put, the Indian public's anti-US and pro-Arab sentiments need a reversal, since India, the USA, and Israel are all in the same boat together when it comes to combating external terrorism⁶⁵.

CLOSURE

It is a strange character of a nation that knowingly waits to retaliate till calamity strikes, when the calamity is a near certainty. This is quite

65. Amarjit Singh, "India's Achilles Heel," *Realpolitik*, March 2007, pp. 10-12.

If the strong bastion of liberty and freedom that is the USA goes down, personal and religious freedom in this world will fall as well. Pakistan is dispensable in this context.

disturbing, given that the lives of Americans and Indians and freedom loving nations are at stake. In a strange sense, the major danger in America today is America waiting for the mushroom cloud either on its own soil, on an ally's, or on its soldiers in a foreign country, rather than the terrorists barking rhetorically of the theoretical destruction of America in public squares. The former is an impending, short-term possibility to which full and immediate attention must be directed — while

the latter is only an emotional, long-term philosophy, which the US needs to stand on alert against. It is time that the US quickly and fully defangs those who plot against its very survival rather than wait till the terrorists threaten it by the throat⁶⁶. Thus, the USA needs to not only increase its forces five-fold in Afghanistan to fight the terror emanating from Pakistan, it needs to increase its forces somewhat ten-fold after drawing out its forces in Iraq. Next, there is little to no solution to Pakistani pretensions unless the USA steps across the Durand Line to fight the Taliban directly in their hideouts. Not doing so risks a repeat of the results of not stepping into North Vietnam. We need only remember that if the strong bastion of liberty and freedom that is the USA goes down, personal and religious freedom in this world will fall as well. Pakistan is dispensable in this context.

66. It is a principle in international relations theory that nuclear nations do not go to war with each other. In the case of Pakistan, it is wise for the USA to reconsider that principle since Pakistani missiles don't yet pose a threat to US cities. US forces in Kandahar and other bases in Afghanistan are within Pakistani missile and nuclear warhead range, but when a preemptive defanging operation is conducted by the USA, soldier casualties can be planned to be minimised by sending them across the border into Pakistan.



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