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AIR POWER

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EDITOR'S NOTE

One of our trustees, Shri NN Vohra, Governor of Jammu and Kashmir delivered the National Security lecture at the USI on 'Civil Military Relations-Challenges and Opportunities' on 06 Dec 13. The lecture is reproduced as the lead article in this journal.

As we approach the end of another year, a number of significant events have taken place that could possibly have an impact on our strategic positioning. The assertiveness displayed by China when in April this year a platoon of PLA set up a camp at Depsang 30 kms south of Daulat Beg Oldi (DBO) and 19 kms inside our territory, disturbed the status quo. This led to some 300 of our troops encamping about 300 mtrs away. It was an avoidable face off and although the event did not escalate, and the status quo was restored in three weeks, the question remained as to whether such events could recur. The Border Defence Cooperation Agreement of October 2013, apparently satisfied both India and China, but a lurking suspicion remains that the border incursions could and probably would continue to take place. It will be prudent on our part to remain vigilant and fashion our courses of action beforehand.

The assertiveness of China was again displayed when in late Nov 13, it unilaterally declared a new Air Defence Identification Zone(ADIZ) extending some 500kms into the East China Sea. An ADIZ when instituted, requires all aircraft to identify themselves and provide location information as demanded. In this case, the ADIZ overlaps the ADIZ of Japan creating avoidable confusion. No country has the right to impede the movement of aircraft over international waters and the Chinese declaration was provocative. The risk quotient in the area has been ratcheted upwards and many nations must be wondering as to what China will do next.

On our Western borders, the belligerence of Pakistan continues with frequent threats either direct or implied. The security situation demands attention. Hence it was but fitting that the Inaugural Address at the Subroto Mukherjee Seminar organized by the Centre in Nov 13 should be delivered by the Vice Chief of Air Staff and Chief of Air Staff designate on 'National Security and Aerospace Power'. The talk is reproduced in this edition of the journal. The articles on the DBO crisis and PLAAF potential are also relevant.

Nuclear issues continue on their upward disturbing trend. The threat of use of nuclear weapons including tactical nuclear weapons by Pakistan, and news of Chinese plans to double their arsenal of missiles that can target USA are indicative of the trend. Two excellent articles on 'Using Nuclear Weapons First' and 'India's Ballistic Missile Defence' are also included in this edition. Other articles included are on enlarged national security issues and some of these are written by our young and promising scholars.

Happy reading

A handwritten signature in black ink, appearing to be 'Ravi', written in a cursive style.

CIVIL-MILITARY RELATIONS: OPPORTUNITIES AND CHALLENGES

N.N. VOHRA

I am very happy to have been asked to deliver the USI National Security Lecture 2013 and to speak on “Civil-Military Relations: Opportunities and Challenges”.

Before I proceed to reflect on the theme of today’s lecture, I think it would be useful to have reasonable clarity about what exactly do we have in mind when we use the term “civil-military relations”. I say this because earlier this year, at a seminar held in a defence think-tank at Delhi, a statement was made that “unsatisfactory civil-military relations are having an adverse impact on the functioning of the military in India”. While all those who may be involved in studying military matters would understand that this statement refers to the functioning of the defence apparatus, I feel that a free use of the term “civil and military relations” should be best avoided as it has the potential of causing altogether unfounded doubts and suspicions in the minds of millions of people in India.

Our armed forces, comprising the army, navy and air force, have a strength of about 14 lakh personnel and we have over 27 lakh ex-Servicemen. If the families of our serving and retired officers and men are also taken into account, we have more than two crore people who enjoy the trust

Shri N.N. Vohra, presently Governor, Jammu and Kashmir has formerly been Defence Production Secretary, Defence Secretary, Home Secretary and Principal Secretary to the Prime Minister.

The lecture was delivered at USI on December 6, 2013 as the Annual National Security Lecture. Reproduced with the concurrence of USI.

and affection of all the people of our country. I would, therefore, stress the importance of ensuring against there being any doubt whatsoever that over a billion people of our country have a very warm relationship with all our men in uniform. To ensure against any unfounded misgivings being created about this important relationship, I feel that our strategic analysts and commentators may, instead of using the term "civil-military relations", comment directly on the functioning of the defence management apparatus and say whatever they wish to say.

I shall now speak briefly about yet another facet of the civil-military interface which relates to the duty which the army has been discharging, ever since 1947, of providing aid to the civil authority and supporting the affected states in combating insurgency and terrorism. Experience in the past over six decades has shown that whenever any state government faces difficulty in dealing with an existing or emerging serious law and order situation, it approaches the Union Home Ministry, seeking the deployment of Central Police Forces (CPFs) to assist the state police in restoring normalcy in the disturbed area. Experience has also shown that, in many cases, when it is found that even the police and CPFs together would not be able to handle a given disorder, the army has invariably been called upon to provide the required support.

A consequence of the situation which I have just described is that the army has continued to be deployed in several parts of the country in considerable strength, and for prolonged periods, to carry out anti-insurgency and anti-terrorism operations. On many occasions, the operations carried out by the army, in conjunction with the state police and CPFs have led to complaints and allegations from the local population about the violation of their rights. In this context, it would be recalled that for the past several years, there has been a continuing debate on whether or not the Armed Forces Special Powers Act (AFSPA) should continue to apply to the disturbed areas where the army has been carrying out sustained operations for combating insurgency and terrorism.

While every uniformed force, in whichever area it is called upon to operate, is duty bound to ensure that the people's civil rights are protected,

it is equally necessary for the Centre and the affected states to collectively evolve an acceptable approach which ensures that the personnel of the military formations which are involved in carrying out counter-insurgency or anti-terrorism operations are provided the requisite legal protection.

As law and order situations shall continue to arise in the future, in one or the other part of the country, it would be useful, in the longer term perspective, if well planned and time-bound steps are implemented for enlarging the strength and the logistical resources of the State Police organisations and upgrading their professional capabilities for meeting future challenges. The development of the police into a more effective force should, hopefully, lead to a progressive reduction in the recurring need for seeking the army's support. I would also add that the requisite training and professional upgradation of the police, as also of the CPF's, can be most usefully assisted by the army, which has well equipped and competent training centres all over the country. I would also add that internal security management would become far more effective if the army were to develop operational interoperability with the police and identified CPFs.

I now come to the species of civil-military relations on which the USI has asked me to speak this morning. The theme on which I am required to comment actually relates to the civil-military balance and, therefore, essentially concerns the functioning of the defence apparatus and the varied issues which may arise from the professional interface between the Defence Ministry and the military leadership of the three armed forces. The various elements which comprise this theme fall within the arena of higher defence management. I shall try to speak on some of the more important aspects of this theme.

In the past two decades and more, a growing number of former senior officers of the armed forces have been writing on issues relating to higher defence management. These commentators broadly fall into two main groups: one which largely focusses on the failings of the Defence Ministry and the other which also speaks about the deficiencies in the internal functioning of the armed forces. I shall rapidly go over the more significant dissatisfactions voiced by both these groups.

A criticism which has been recurrently raised alleges that impediments arise in the functioning of the Defence Ministry because the civilian officers posted in the ministry exercise authority which far exceeds their mandate. I shall examine the basis of this misperception and try to explain the true position in simple terms.

First and foremost, in any discussion on defence management, it is extremely important to bear in mind that in our democratic Parliamentary framework the power lies with the elected representatives of the people, from among whom Cabinet ministers are appointed. The ministers have the responsibility of managing the affairs of the departments under their charge and decide all important matters except those which are required to be submitted to the Cabinet, Cabinet Committee on Security, prime minister, president or other specified authorities. The civil servants working in the various departments of the Government of India are the tools or the instrumentalities for assisting the ministers in finalising policies and then ensuring that the same are effectively executed.

The Constitution of India lays down the framework within which the Union, i.e. the Government of India, and the states are required to carry out their respective responsibilities. List 1 of the 7th Schedule of the Constitution of India enumerates the subjects which are to be dealt with by the Government of India. In this list, the Government of India has been, *inter alia*, assigned responsibility for ensuring the “defence of India and every part thereof”. The supreme command of the armed forces rests in the president. The responsibility for national defence vests with the Cabinet. This responsibility is discharged through the Ministry of Defence, which provides the policy framework and wherewithal to the armed forces to discharge their responsibilities in the context of the defence of the country. The Raksha Mantri is the head of the Ministry of Defence. The principal task of the Defence Ministry is to obtain policy directions of the government on all defence and security related matters and see that these are implemented by the Services Headquarters, inter-Service organisations, production establishments and research and development organisations.

As provided by the Constitution, the various subjects in List 1 are distributed among the different departments in accordance with the Government of India (Allocation of Business) Rules 1961. Under these rules, the various matters relating to the defence of India have been allocated to the Ministry of Defence which comprises the Department of Defence, Department of Defence Production, Department of Defence Research and Development and the Department of Ex-Servicemen Welfare.

Further, under the Government of India (Transaction of Business) Rules 1961, it is laid down that "all business allotted to a department specified under the Government of India (Allocation of Business) Rules 1961, shall be disposed of by, or under the general or special directions of, the Minister-in-charge" of the Department (Rule 3), subject to the provision of these rules.

The Transaction of Business Rules further provide that "in each department, the Secretary (which term includes the Special Secretary or Additional Secretary or Joint Secretary in independent charge) shall be the administrative head thereof, and shall be responsible for the proper transaction of business and the careful observance of these rules in that department" (Rule 11).

Thus, as per the constitutional framework, the overall responsibility for the functioning of the Ministry of Defence rests entirely on the Raksha Mantri and the responsibility for ensuring that the business of the Department of Defence is transacted strictly in conformity with the Government of India (Transaction of Business) Rules 1961 is vested in the defence secretary.

From my own experience of working in the Defence Ministry for many years, I can state, without an iota of doubts, that officers working in the Defence Ministry discharge their duties with great care and all important matters relating to the four departments of the Defence Ministry are decided by the Raksha Mantri, except those cases which are required to be submitted to the other designated authorities.

In the context of what I have just explained, the Defence Ministry is clearly responsible to the Government of India for dealing with all matters relating to the defence of India and the armed forces of the Union and, further as provided under the Defence Services Regulations, the Chiefs

of the Services are responsible to the president through the Defence Ministry, for the command, discipline, recruitment, training, organisation, administration and preparation of war of their respective Services.

The civilian face of the Defence Ministry is represented by the Raksha Mantri, his junior ministerial colleagues, the defence secretary and the other three administrative secretaries in the ministry and, say, another about 15-20 officers of joint secretary level and above in all the four department of the ministry. During my days in the Defence Ministry, a dozen joint secretary level officers in the four department of the Ministry were dealing with all the matters which were received from the Army, Navy and Air Headquarters, commonly referred to as the Service Headquarters (SHQ), and from several inter-Service organisation.

The arrangements which obtained in my time have undergone very significant changes after the amendments of the Government of India (Transaction of Business Rules) and the establishment of the integrated Army, Navy, Air and Defence Staff Headquarters of the Ministry of Defence. The Integrated Headquarters (IHQ) are involved with policy formulation in regard to the defence of India and the armed forces of the Union and are responsible for providing the executive directions required in the implementation of policies laid down by the Ministry of Defence.

Another frequently voiced dissatisfaction is that the civilians who are posted in the Defence Ministry do not have adequate past experience of working in this arena and also do not have long enough tenures to gain specialisation for effectively dealing with military matters. This perception is largely true. Perhaps only a few among those who get posted in the Ministry of Defence, particularly officers at the joint secretary and equivalent level may have done previous stints in the Defence or Home Ministries. As regards tenures, while then Central Secretariat Services officers may serve for long periods, the deputation officers appointed to director and joint secretary level posts enjoy average tenures of .five years I strongly believe that it is necessary to remedy this situation and had made a definitive recommendation in this regard over a decade ago, about which I shall speak a little later.

Some commentators have alleged that the role of the political leaders has been hijacked by Indian Administrative Services (IAS) officers and what obtains in the Defence Ministry today is “bureaucratic control and not civilian political control of the military”. It has been further argued that the civil services have succeeded in having their own way essentially because the political leadership has little to no past experience or expertise in handling defence matters, have little to no interest, and lack the will to support reforms in the defence management apparatus. This line of thinking is carried forward to conclude that as the Defence Ministry does not have the confidence and capability to adjudicate on the competing claims and demands made by the individual Services, each Service largely follows its own course and enlarges its role as per the whims and fancies of successive chiefs.

I have already explained at some length the constitutional framework within which the Defence Ministry and its officers are required to function. However, to eradicate any misperceptions, it would be most useful if the curricula of the various military training institutions also contains a suitably designed course for enabling the officer cadres to gain adequate awareness of the working of the Constitution of India and, side by side to enhance their political awareness. Doing this would also provide a useful opportunity for appointing well qualified civilian teachers in the various military training academies with whom the trainee officers could have informal discussions on varied other matters in which they may be interested

As regards the assertion that the individual Services largely follow their own volitions on account of the Defence Ministry’s failure to enforce effective control, there cannot be any debate about the crucial need for the Integrated Defence Staff to work overtime for securing a level of jointness which will enable critical *inter-se* prioritisation of the varied demands projected by the individual Services and, based thereon, to evolve a closely integrated Defence Plan which has a 10-15 year, perspective.

I now come to the views expressed by several former senior officers who are unhappy with the internal health, morale and discipline of the Services. Some of them are of the view that issues about civilian control

have arisen essentially, because successive Raksha Mantris have chosen not to exercise the requisite influence and control and have been particularly amiss in never questioning the chiefs about the logic and assumptions relating to the execution of military plans, as this vital responsibility has been left entirely to the Service Headquarters. Operation Blue Star, Exercise Brass Tacks, Exercise Checker Board, Indian Peace-Keeping Force (IPKF) Operations in Sri Lanka and several other events are cited as examples of serious avoidable failures which happened because of the lack of clarity about the goals to be achieved and, besides, on account of major gaps in the operational plans. It is asked why such failures have never been subjected to any questioning or audit, as should have been done, in a well run system.

In the context of some of the cited failures, it is regrettable that the records relating to past operations, even of the wars fought by our armed forces, have continued to remain clothed in secrecy. This has had the adverse consequence of successive generations of military officers being denied the opportunity of learning from past mistakes. This important issue was taken note of by the Group of Ministers on National Security (2001) and a Committee to Review the Publication of Military Histories was set up Raksha Mantri in 2002. This committee, which I was called upon to Chair, gave a clear recommendation that the histories of the 1962, 1965 and 1971 Wars should be published without any further delay. This was in 2003. I gather that the history of the 1965 War has since been published.

Some commentators have gone to the extent of taking the position that difficulties arise in the functioning of the Defence Ministry because Raksha Mantris do not have past exposure to military matters. This is not a well founded notion. The USA and various European countries faced two prolonged world wars and two to three generations of their youth were compelled to undergo conscriptions. Consequently, for many years in the post World War periods, a number of ministers in these countries were persons who had earlier served in the armed forces and had been directly exposed to military functioning. Today, however, even in these countries, there may now be no elected persons who would have earlier exposure to serving in the military. In India, we have never had any

conscription. Recruitments to all our forces are done on voluntary basis. It would, therefore, not be logical to suggest that our Raksha Mantris should necessarily have been exposed to military matters.

It is disturbing to hear angry statements that the Defence Ministry has not been devoting timely attention to dealing with its tasks. During my days in the Defence Ministry, I worked with eight Raksha Mantris of whom five were the prime ministers of the country, and can say, without any hesitation whatsoever, that even the prime ministers who held charge of Defence Ministry remained most seriously concerned about national security management issues while being overburdened with a horde of crisis situations on varied fronts. However, a factor which invariably came in the way of arriving at adequately prompt and satisfactory solutions, such as may have been possible in those troubled times, was our failure to present to the raksha mantri clear-cut options based on the advice received from the Chiefs of Staff Committee. In this context, it is relevant to recall the virtually established practice that the Chiefs would raise no significant matter in the Raksha Mantri's Monday morning meetings but seek to discuss substantive issues only in one-on-one meetings with him and, if possible also with the Prime Minister. I also recall that whenever the chiefs met the raksha mantri together and presented him with even a broadly agreed approach, there was no delay in the required decisions being promptly arrived at and speedily promulgated. While, after the establishment of the Integrated Defence Staff, the decision-making processes would, hopefully, have improved very significantly, I would reiterate the importance of ensuring that the Defence Ministry functions on the basis of dynamic coordination between the civilian and military elements. I would also stress that integrated approaches shall materialise if decision-making is based on processes which are rooted in jointness.

My memory goes back to the late 1980s when the Defence Ministry's functioning was, among other factors, most adversely affected by a severe financial crisis in the country. Reckoning the understandable worries and tensions within the Defence Ministry, Prime Minister V.P. Singh, who was also our Raksha Mantri at that time, set up a Committee on Defence Expenditure

(CDE), which was charged to review the existing defence set-up and recommend practical solutions to rationalise military expenditures. I was the defence secretary at that time. Arun Singh, who was chairman of this committee, consulted me informally about the recommendations evolved by his group and I gave him my personal opinion that while the proposal to create the proposed Joint Chiefs of Staff (JCS) set-up for advising the Raksha Mantri on all military matters would necessarily have to be processed for consideration. At the political level, there appeared no difficulty whatsoever in implementing all the other recommendations for enforcing economies, closing redundant ordnance factories, rationalizing the finance wing functioning and enlarging the existing administrative and financial delegations. The Chiefs of Staff Committee (COSC), after examining the CDE Report, communicated that none of the committee's recommendations would be accepted if the government did not accept the recommended restructuring of the Chiefs of Staff Committee. To secure better resource management the Defence Ministry went ahead and ordered financial delegations upto the Army Command equivalent levels, placed an Internal Financial Adviser (IFA) in each Service Headquarters and directed several other useful changes.

The defence reforms process did not move much further till May 1998 when the successful underground nuclear tests at Pokhran catapulted India into the exclusive league of nuclear power states. Needless to say, this sudden development cast very high responsibility on the Government of India, particularly on the Defence Ministry. This led to the establishment of various arrangements and structures for handling strategic issues and decisions. Thus, the National Security Council was set up in November 1998 and a National Security Advisor (NSA) was appointed at about the same time. Then, summer 1999, came the Kargil War, which took the country entirely by surprise and generated grave misgivings about the failure of the defence apparatus and serious concerns about the army's preparedness. The Kargil Review Committee (KRC) was set up to undertake a thorough review of the events leading up to the Pakistani aggression in the Kargil district and to recommend measures for safeguarding national security against such armed

intrusions. The KRC Report (1999) was speedily examined by a Group of Ministers (GoM) which was chaired by Home Minister L.K. Advani. For undertaking national security reforms, the Group of Ministers set up four task forces, one of which was on the higher defence management. Among the foremost recommendations made by this task force was the creation of the Chief of Defence Staff (CDS) who supported by the Vice CDS, would head the Integrated Defence Staff to improve the planning process promote “jointness” among the armed forces and provide single point military advice to the government.

While the Group of Ministers endorsed almost all the major recommendations of the task force on higher defence management, the proposal regarding the creation of a chief of Defence Staff got involved in the lack of collective support by the three Services and failed to secure approval for want of political consensus.

I shall now briefly speak about certain issues which continue to affect the efficient functioning of the defence apparatus:

- there must be no further delay in finalising the national security doctrine, on the basis of which integrated threat assessments, be made;
- while some improvements have been achieved in the past year, the Defence Ministry must enforce strict measures to ensure that the Ordnance Factories (OFs), Defence Public Sector Undertakings (PSUs), Defence Research and Development Organisation (DRDO) establishments and other concerned agencies function efficiently to deliver supplies services as per the envisaged time and cost schedules. Prolonged delays cause serious difficulties for the armed forces and economic losses as the lack of certainty about supplies indigenous sources compels expensive imports whenever emergency arises;
- while there have been notable advances in the rationalisation of the procurement policies and procedures, there is still need to ensure against prolonged acquisition proceedings as such delays altogether nullify the “make or buy” approaches;
- the individual Services enjoy the autonomy of taking decisions to make their own selections of weapons, equipment and system; Integrated

Services Headquarters must take effective step to establish a tri-Service approach in regard to such decisions as doing so will engender very significant financial savings;

- the defence planning process has still to get established; the X and XI Defence Plans were implemented without receiving formal approval and while the Long-Term Integrated. Perspective Plan (LTIPP) has since been finalized, it is still viewed as a totalling up of the wish lists of the individual Services; the Integrated Defence Staff must devote urgent attention towards finalising a fully Integrated Defence Plan with at least a 10-15 year perspective,
- the Services enjoy the authority of virtually settling their own manpower policies; the pro-rata percentage representation of Arms and Services in the army needs to be 'modified' forthwith as it is virtually a "quota system" which breeds group loyalties and cuts it A he very roots of jointness within the Service.

Over the years, continuing efforts have been made by the Defence Ministry to promote jointness through integration of the planning, training other systems so that, progressively a tri-Service approach could get fully established. Thus, in the 1980s, two very important steps were taken: the establishment of the Army Training Command (ARTRAC) and the Directorate General of Defence Planning Staff (DG, DPS). It would be profitable, even at this stage, if the Chiefs of Staff Committee were to set up an expert group to review the functioning so far of these two institutions and identify the reasons why both these crucial organisations could not achieve their objectives which were, *inter alia*, envisaged to promote the establishment of jointness and a tri-Service approach.

While the functioning of the defence apparatus has been getting steadily refined, I feel that the continuing lack of consensus among the three Services is thwarting the achievement of the vital objective of "jointness". A number of joint Service institutions have come into existence in the post Kargil War period. Among the new institutions, frequent references are made to the Integrated Defence, Staff (IDS), Defence Intelligence Agency (DIA), Andaman

Nicobar Command and the Strategic Forces Command. While it may be far too early to rejoice over these recently established inter-agency institutions, it is disconcerting to learn that the individual Services are not doing all that is required to see that these new organisations get fully established without facing delays and difficulties. A former army chief is quoted to say that the Integrated Defence Staff is “a redundancy in military bureaucracy”; the founder Director of the Defence Intelligence Agency is quoted to bring out that “the Defence Intelligence Agency cannot deliver as the intelligence Agencies of the three Services feel threatened by it” and about the integrated Defence Staff it is stated that “the Services will never allow this body to function as they feel threatened that it will start examining the basis of their budgetary proposals, acquisition plans and force structures”.

The time has come for the individual Services to close their ranks and get collectively concerned about the major threats and formidable challenges which we face in our close neighbourhood and beyond. The global security environment is continuing to become growingly complex and huge uncertainties loom large on various fronts.

Our military has to be also concerned about the arising consequences of the economic meltdown and the strong likelihood of the allocations for defence facing a significant decline in the coming time. In this scenario, to prepare for successfully meeting future challenges, it is of the highest importance that the individual Services shed all reservations and establish meaningful jointness. The pursuit of a truly tri-Service approach will not only reduce functional overlaps but also contribute towards reducing wasteful duplications and redundancies. I learn that the Integrated Defence Staff have already promulgated a joint doctrine on the Indian armed forces which is presently undergoing revision because of the differing views of the Service Headquarters on several important issues. In this context, I would reiterate the crucial importance of ensuring the urgent finalisation of the Joint Doctrine which covers all aspects of integrated operations. Any delay in this regard would come in the way of the armed forces preparing themselves fully for delivering an effective response when any emergency arises in the future.

In view of the serious economic problems being faced the world over, many countries are exploring various approaches for containing and restricting the large expenditures being incurred on maintaining their armed forces. In this context, our Defence Ministry must realise the need to keep a very close watch on the rising cost of maintaining the military apparatus and ensuring that the high cost of the longer-term acquisitions can be met from wit in the future availability of resources. Side by side, urgent attention needs to be paid to reducing dependency on continuing imports of weapons and systems. This would require a very vigorous revving up of the ongoing indigenisation programmes and the DRDO and defence production units joining hands with the private sector to yield speedier results. In the years past, only the navy initiated systematic steps to foster indigenisation of their major platforms and systems and deserve all praise for the wonderful outcomes which they have already been able to achieve.

It also needs being noted that India is not the only country which is engaged in dealing with problems which relate to the functioning of the defence management apparatus. Many democracies have been facing such problems and, benefitting from their own past experiences, several important countries have established strong Parliamentary oversight bodies to monitor all the important issues relating to the functioning of their armed forces. Some countries have even inducted external experts to monitor their ongoing defence reform processes.

India cannot, and must not, be left behind in doing all that needs to be done for strengthening and enhancing our national security interests. I have long been of the view that we need to develop our own model of defence management which vigorously promotes and sustains military professionalism while being fully in tune with our constitutional framework and in harmony with our glorious traditions of soldiering. The model to be evolved should also not be excessively encumbered with varied hierarchical fixations which are rooted in our colonial past.

Considering the threats and challenges which loom on our horizon, it is extremely important that our higher defence management structures are founded in the need to maintain a sensitive balance between the civil and

military components and, side by side, ensuring that the entire military apparatus functions strictly within the parameters of “jointness”.

On the basis of my own past experience, I would say that it would be an ideal situation if the Service chiefs were to collaborate closely and far the Chiefs of Staff Committee to itself take the various required decisions to pave the way for the future and establish jointness, brick upon brick. In the past over two decades, many useful opportunities were lost because of the lack of convergence in the views of the Service Headquarters.

If jointness and a tri-Service approach cannot be achieved soon enough then, perhaps, the only option left may be to proceed towards replacing the existing single Service Acts by an Armed Forces Act which would lay a statutory basis for achieving jointness and delineating the roles, duties and missions of the armed forces, as also the procedures and modalities relating to the functioning of the defence apparatus. In this context, it may not be out of place to recall that the USA achieved its objectives by promulgating the Goldwater-Nichols Act in 1986, after nearly four decades of experimentation under the aegis of its National Security Act. And more recently, because of the serious budgetary problems faced by the country, the UK has been devoting high level attention to introducing reforms in its defence management apparatus. In this context, the Levene Report has sought to clarify the respective roles and responsibilities of Ministers, civilian officers and the military at the policy, strategic and operational levels.

In so far as the tenures of civilians working in Ministry of Defence are concerned, I have been urging, for many years now, the establishment of a dedicated security administration cadre by drawing in the best available talent from the Civil Services, Defence Services, DRDO, Science and Technology (S&T), Information and Communication Technology (ICT), broadcasting and media, et. al. I had proposed that officers of this dedicated cadre should enjoy open ended tenures and those found fit, should be enabled to develop specialisation in dealing with security related matters and be deployed in the Home Ministry, Intelligence Bureau, National Security Council Secretariat, Defence Ministry, Research and Analysis Wing (R&AW) and other security management related areas for their entire careers. This recommendation is

contained in the report of the Task Force on Internal Security (2000), which I had chaired. It was accepted by the Group of Ministers (reference para 4,105, page 56, GoM Report). After hearing me, the Group of Ministers had gone further and added that as "the assignments in these ministries/agencies are perceived, as exacting and unattractive, the members of such a pool should, therefore, be appropriately compensated by provision of non-monetary incentives". It is time to resurrect and speedily implement this decision of the group of Ministers.

Another factor which was noted by the Group of Ministers related to the marked difference in the perception of roles between the civil and military Officers. I was asked to chair a task force to work out the curricula for organising a continuing Joint Civil and Military Training Programme on National Security which would be undergone by brigadier and major general and equivalent rank officers from the three Defence Services, Indian Administrative Service (IAS), Indian Police Service (IPS), Indian Foreign Service (IFS) CPFs and, as the training settled down, the participants would also be drawn from the media, industry and other arenas. On the basis of my recommendations, the first 2-week Joint Civil and Military Training Programme on National Security commenced at the IAS Training Academy at Mussoorie, in February 2003. This programme has been successfully continuing for over a decade now and the 20th Course commenced at Mussoorie in November 2013. It would be beneficial if the Defence Ministry were to review this programme and suitably recast its contents to meet the existing and emerging scenarios.

Recurring media reports in the last two years about controversial interviews relating to personnel issues, the raksha mantri's decision being challenged in the apex court, and several other unseemly scandals have marred the army's glorious image and dragged the Services into the cesspool of partisan and parochial politics. This has caused divisiveness and serious damage to the very fabric of our military. It is, indeed, most unfortunate that any questioning of the deviations from the well established norms is viewed as questioning the very loyalty of the entire Indian Army. Such incidents, which have a grave adverse affect on the morale of the armed

forces, must not be allowed to recur under any circumstances. The time has perhaps come to review the entire existing basis of promotions and appointments to the higher echelons in the three Services.

The patriotism and professionalism of the men and women of our armed forces is second to none among the militaries the world over. Our fearless military personnel, who maintain an eternal vigil on our land, sea and air frontiers, have successfully thwarted successive aggressions and safeguarded the territorial integrity and sovereignty of our motherland in the past over six decades, laying down their lives for the country.

I have a very long association of working with the military. For the past over five years, I have been serving in Jammu and Kashmir (J&K) where I have had the opportunity of observing from very close quarters the extremely difficult circumstances in which the men and women of our army operate round the year, in severe weathers and harsh terrain. I take this opportunity of paying my humble tribute to our valiant soldiers and reiterate that there should be no doubt ever, of any kind, about the devotion and loyalty of our military. Let nothing be ever said or done which generates any kind of debate or controversy which mars the glorious image or affects the morale of the 14 lakh officers and men of our armed forces.

Our national security concerns demand that all interests and all institutions of national power are brought to work most closely together to further the country's interest and build a militarily and economically strong India which enjoys the trust and respect of all our neighbours.

In conclusion, I would say to all my friends in uniform and to all my civilian colleagues: the country must come first, always and ever, and never forget "who lives if India dies".

NATIONAL SECURITY AND AEROSPACE POWER

ARUP RAHA

I am happy to be a part of the 10th Subroto Mukerjee Seminar which has been organised by CAPS on a very important subject, “National Security & Aerospace Power.” I am privileged and overwhelmed to share the same platform with the finest exponents/authority and specialists on national security and aerospace power and it is a great honour to have been invited to deliver the inaugural address at the 10th Subroto Mukerjee Seminar.

The year 1954 is an important milestone year in the history of IAF. The IAF got its first Indian Air Chief in Air Marshal Subroto Mukerjee April 1, 1954. I was not even born when the legendary Air Marshal took charge but was fortunate to have been born in the memorable year, in December 1954. That is the kind of generation gap between the legend and the current crop of leaders of the IAF.

April 1, 1954 is also a memorable day as the President of India presented the Colours to our Air Force. The immediate task of re-equipping and restructuring of IAF with new aircraft and equipment fell upon Air Marshal Mukerjee. During his tenure, the IAF inducted a variety of state-of-the-art aircraft like Mystere, Hunter, Canberra and the legendary Gnat fighter/fighter-bomber aircraft. He laid great emphasis on development of human resources. It was his vision, foresight and planning which contributed immensely in launching the IAF on a trajectory of growth and enhanced

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operational capability. We owe a lot to him for laying the foundation on which the IAF of today has been built.

A large number of issues related to national security, as well as the scope, capability and application of aerospace power, are known to us in a general sense. However, during this seminar these aspects would be brought into focus and deliberated upon by specialists with excellent domain knowledge. As serving professionals and Air Warriors, this discourse will definitely benefit us immensely.

NATIONAL SECURITY

Till recent times there was a general perception in every section of society, including the armed forces personnel, that national security is synonymous with defence forces and is a domain of the armed forces. It meant the capabilities of Army, Navy, and Air Force to safeguard borders, frontiers, coastlines and airspace. There has been a paradigm shift in current thinking. It is no more a mere comparison of capabilities of forces in terms of size, strength, equipment, weapons, training, morale, leadership, etc., between two adversaries to determine the index of nation's security against the other.

National security is all-encompassing. It has a large canvas and spectrum with multiple factors contributing to its determination.

- **Economic Strength.** All-round development, including growth, balanced growth in service and manufacturing sectors, balance of trade and good GDP growth contribute towards the economic strength of a nation. Adequate funds for military growth would be available if the economy is strong, thus enhancing capability through acquisition of weapon systems, equipment and infrastructure.
- **Development of Human Resources.** India is the second most populous country after China. By 2025 India is likely to be the most populous country with nearly two billion people. Such a large population can be a strength to the nation provided we pay adequate attention towards the development of human resources. If the nation can provide good education, skills, employment and make them productive, a large population would be a strength. However, if the majority of the people remain uneducated,

unskilled, unemployed, undernourished and deprived, it would result in social unrest, upheaval and insurgency, in other words, a liability.

- **Technological/Scientific Development.** A good technological and scientific base, talent pool and indigenous capability through R&D is essential for a nation to be strong. No nation can be great unless it has the ability to create core/critical technologies and capacity to absorb them. For progress and indigenous development, it is imperative to have the requisite proficiency in the field of metallurgy, engines, machine tools, electronics, avionics, electronic warfare and information technology.
- **Adequacy/Access to Natural Resources.** Power generation, availability of water, oil, mineral resources and cultivable land for growing crops to feed the people are an absolute necessity for the survival and progress of a nation. Future conflicts will be over the control of critical resources like water and oil.
- **Cyber Security—New Dimension.** In a recent article in the *Economist*, a net-centric nation's vulnerabilities in a cyber world were highlighted in great depth. All activities of a nation, like management of financial activities, power grid, nuclear power stations, railways, air traffic control and communications network are dependent on internet, Information and Communication Technologies (ICT), and Information Technology Enabled Services (ITES). Vulnerabilities in such networks need to be addressed, as trained hackers can disable/cripple these systems with disastrous results, bringing a nation to its knees without even firing a bullet. A proposal to set up a Tri-Service Cyber Command has been recommended to the Government to take care of the cyber domain of the armed forces.
- **Capabilities of Defence Forces.** Defence forces of a nation must have the capability to provide the desired strategic footprint which would include space-based capabilities. To enhance such strategic capability it has been proposed to the Government to set up a Tri-Service Space Command.
- **Good Governance.** It leads to peace and harmony and rapid economic growth and development, thus contributing perhaps the maximum to national security.

- All these factors add up to provide Comprehensive National Security (CNS) which is synonymous with CNP.

STRATEGIC FRONTIERS

National Interests drive a nation's strategy. Considering our economic and energy needs, it is imperative that we expand our influence beyond our immediate neighbourhood. Our strategic presence or footprint should provide us the capability to influence the environment from the Suez to Malacca/Shanghai. It is imperative that the nation builds capabilities/assets that provide reach and the desired effect at these ranges. The Armed Forces Long Term Perspective Plan—2012-27, that is, XII, XIII and XIV plan Periods cater to these needs to a large extent.

SUB-CONVENTIONAL THREAT

Tackling the sub-conventional threat is an immediate challenge to our national security and events like 9/11, 26/11 and the 13/12 attack on Parliament brings out the emerging war waging trends, and the importance of tackling sub-conventional threats cannot be overemphasised. Recent attacks on Mehran Naval base and Minhas Air Base in Pakistan, US bases in Afghanistan indicate the vulnerability of high-value assets and type of warfare that may unfold in future.

FUTURE ROLE OF AEROSPACE POWER IN NATIONAL SECURITY

I firmly believe that the future will witness the continued pre-eminence of aerospace power as the primary instrument of choice for almost all operational contingencies. The IAF's long-term plans cater for this strategic transformation to meet the future challenges to nations' security. Army/land forces have determined the military power of a nation from time immemorial. Navies of seafaring nations capitalised on the inherent advantages of maritime power and built empires, especially across seas/oceans, in faraway continents. Aerospace power is only a century old and air force is the youngest arm of the defence forces that provides immense relief/freedom from the surface friction inherent in army/naval operations.

After the industrial revolution, there has been a rapid development in technology across the world especially in the field of aviation. The twentieth century belonged to air power and truly the twenty-first century belongs to aerospace power.

The history of nations reveals that states became great powers by demonstrating mastery over the creation, deployment and the use of military strength to achieve national objectives. The military power of a nation is one of the most important components of Comprehensive National Power (CNP) amongst many other indices. Therefore, if a nation wants to play an important role in the international arena, it has to invest adequately in strengthening its military power. However, it is aerospace power, in particular, which is best suited to offering prompt response options in times of national security crises.

Aerospace power has the ability to simultaneously interface as well as influence land/sea operations. The success of army or naval operations is uniquely dependent on the use of the 3rd dimension, that is, the protective shield of aerospace power, as well as the offensive capability of air power. The relevance of aerospace power has increased manifold, it is like the ultimate weapon, the *Brahmastra* of ancient mythological India. It is because of this paramount importance of aerospace power that nations have treated their air forces as their best form of defence and invested heavily to provide the “core competency” in the exploitation of aerospace power in achieving national security objectives.

There are examples of nations which defaulted in paying due importance to aerospace power/air force and paid a price in terms of an inability to project military power and deter adversaries. Such air forces always played a secondary role under an army-dominated dispensation in state power and were, thus, never consulted in the planning and conduct of operations during a conflict and treated as an adjunct to the army. The inability to comprehend the importance of aerospace power and dedicate adequate budgetary allocation to the growth of the air force by such nations has led to obsolescence of these air forces. It is only now that such nations have realised their folly and are concentrating on rapid

advancement of their air force inventories through modernisation and a fair share of the budget.

AEROSPACE POWER: INSTRUMENT OF CHOICE

The composition of the armed forces and its desired capability should be determined by the threat perception and its mitigation, as well as the national objectives and aspirations. Therefore, the size of army, number of strike corps; the strength of the navy in terms of blue-water capability with aircraft carriers, nuclear submarines, etc., and the offensive striking power and force multipliers of the air force have to be related to these factors. And, of course, the finite resources available in terms of budgeting would entail prioritisation of the competing needs of the three services.

India has no territorial ambitions, and the armed forces objective in pursuing national interests would be to build the required capabilities for conflict avoidance through deterrence. Deterrence is best achieved through “offensive capability,” or the ability to operate and strike in depth, create such vulnerabilities. The next conflict is likely to be short, swift and intense. The key, therefore, is to have a national instrument which not only provides the best defence but also provides the best deterrence. Aerospace power, with its unique attributes, fits the bill, in the face of a national security challenge.

IAF’S STRATEGIC TRANSFORMATIONAL PLAN

Budgeting. Budget would play a very crucial role in the execution of a strategic transformational plan. Budgetary constraints have a cascading effect on upgradation plans. Sharing budget allocation on pro rata basis is not the best solution to meet the capability that the nation needs. As an element of national power, aerospace power in many circumstances offers choices to the national leadership to influence behaviours and events even during long periods of comparative peace. Therefore, notwithstanding the capital-intensive nature of maintaining an air force, a nation has to ensure its continuous growth through adequate budgetary allocation. This is a fundamental requirement.

In the absence of a well established indigenous aerospace industry, Indian Air Force is forced to source a major share of its inventory from foreign vendors, albeit with licence production at Hindustan Aeronautics Limited (HAL)/defence public sector undertakings (DPSUs). Delays in fulfilling all the contractual obligations, both in terms of quality and timelines, have to be avoided. Slippages result in cost overruns, which we can ill-afford with tight budgeting. Life Cycle Costing (LCC) Model is being adopted by the Ministry of Defence for all high-value acquisitions, as against Direct Cost of Acquisition (DCA) model, thus providing the best value for money spent.

Indigenisation. Lack of adequate indigenous capability is a setback for the growth of our aviation industry. Despite initial impetus after independence in setting up a military industrial complex to enhance the military aviation sector, we are well short of the objectives. Core technology in aero-engines, metallurgy, machine tools, testers, avionics and EW needs to be developed by us. Non-participation of private sector despite its competitiveness and global performance has had a negative influence on indigenisation efforts in the defence sector.

Opportunity. Most of the aerospace industry thrives in the developed world and their economy is dependent on them. However, due to peace and stability in Europe and the developed world, as well as stagnant/shrinking economic growth in the developed countries, the demand for military hardware has been shrinking and downsizing of defence forces has taken place. Due to instability/conflicts in Asia there has been an exponential growth in demand for military aviation hardware in the developing world. Similarly, rapid economic growth has increased the demand for civil aviation assets, especially in Asia. Our industries need to capitalise on these dynamics to build indigenous capability. In fact, the Defence Procurement Policy-2013 (DPP-13) encourages participation by private industry and the offset clause in major acquisitions provides for transfer of technology (ToT) and indigenous efforts through joint ventures and public private partnership, etc. This is a step in the right direction and we need to avail this golden opportunity to lay the foundation of an indigenous aerospace industry.

CONCLUSION

In the future we are unlikely to have an operational contingency that will not demand control of air. Our situational awareness, intelligence (ISR) and precision strike ability would be enhanced by use of aerospace assets. Increased strategic footprint will be provided by aerospace power through space-based assets, air mobility with heavy lift and tactical transport fleets and use of AWACS, FRA, AEW&C. Enhancement of communications network would boost our network-centric warfare capability.

Core competency in exploitation of aerospace power, especially offensive strike capability would provide the best deterrence against any aggressive designs of our adversaries and ensure peace and tranquillity. Aerospace power will remain the prime instrument of our military power.

Capability building is a continuous and a long-term endeavour. It will require visionary planning, commitment of national resources and a synergetic approach by all stakeholders. The civil authorities, military establishments, defence production agencies, R&D organisations and academia need to work together to maintain the trajectory in transformation of India into a strategic aerospace power.

IAF is respected the world over as a professional force. We are determined to provide the nation a strategic aerospace force. We are exclusive by our profession and capability but totally inclusive in serving the nation. *Op Rahat*, the gigantic humanitarian and disaster relief operations in Uttarakhand in June-July 2013, is an appropriate example of this commitment to our people.

USING NUCLEAR WEAPONS FIRST: “A HELL OF AN ALTERNATIVE”

MANPREET SETHI

At the time of the Cuban missile crisis in 1962, President Kennedy was presented with a set of alternative courses of action in response to the Soviet deployment of nuclear tipped missiles in Cuba. These included undertaking military strikes on the missile bases in Cuba; invasion of the island; or a naval blockade of the country. The American President chose the last option because it was considered the least destabilising. The understanding of his security advisors was that any of the options employing US military force would quickly lead to Moscow retaliating by overrunning Berlin. The US would then have to get into a “general war” which would, at some stage, require Washington to use nuclear weapons in a first strike, but also be prepared to suffer nuclear retaliation—an option that was described by President Kennedy to his Joint Chiefs of Staff as “a hell of an alternative.”¹

Indeed, from the time of the first demonstration of the destructive power of the nuclear weapon in 1945, there has been considerable soul-searching on the actual use of the weapon for national security. In 1950, George Kennan pithily articulated a crucial question before then US Secretary of State:

“Are we to rely upon weapons of mass destruction as an integral and vitally important component of our military strength, which we would

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1. As cited by Daryl G Press, *Calculating Credibility: How Leaders Assess Military Threats* (New York: Cornell University Press, 2005), p. 120.

expect to *employ deliberately, immediately, and unhesitatingly* in the event that we become involved in a military conflict with the Soviet Union? Or are we to retain such weapons in our national arsenal only as a deterrent to the use of similar weapons against ourselves and as a *possible means of retaliation* in case they are used?"²

The dilemma of when (and the associated issue of where) to use the nuclear weapon—in a first strike on counterforce targets or in punitive retaliation on cities—has preoccupied every country that has possessed it. Which of these uses better establishes credible deterrence? Does first use deter more effectively? Or, is it the threat of retaliation that carries greater credibility? In sixty years of the existence of the weapon no consensus has been reached on these questions.

An examination of the currently prevailing nuclear doctrines of the nine states possessing nuclear weapons reveals the widespread acceptance of first use as a popular deterrent strategy. Only two of the nine countries have opted for a no-first-use (NFU) strategy. And even these are dismissed as declaratory statements and the NFU is largely treated as meaningless and useless. Is this really true? Is the first use doctrine more credible and better at deterrence than NFU?

This essay explores the value of NFU as a meaningful deterrence strategy. It briefly analyses why militaries tend to be inclined in favour of offensive strategies, but then highlights the limitations—both logistically and politically—of executing a militarily useful nuclear offence in a situation where secure second strike capabilities are available with the adversary. And, this is the case with at least eight out of the nine nuclear armed states today, even if one was to be sceptical about the robustness of the North Korean nuclear arsenal to a first strike by a country like the USA. But even in this scenario, one cannot discount the possibility of China stepping in to support the DPRK, thereby bringing its own secure second strike capability into play.

2. As cited in Lawrence Freedman, *The Evolution of Nuclear Strategy*, Third Edition (New York: Palgrave Macmillan, 2003), p. 63.

Therefore, in the current state of nuclear relations, what is the value of first use when nuclear retaliation is a certainty? Can any rational actor find circumstances compelling enough to use the weapon first, suffer nuclear retaliation, and yet feel that it has come out better in a conflict? If the answer to this is in the negative, which it should be given that the damage caused to modern megacities by even modest fission weapons would be unimaginable, then is the threat of first use credible at all?

In fact, there is an inherent paradox of nuclear deterrence that gets magnified with first use—it is believed that it may be rational to make a first use threat, but it is not rational to carry it out. If it is not rational to carry it out, then how can the threat be credible? And if it is not credible, then why should it deter? But, if it does not deter, why do states retain first use strategies and are dismissive of NFU? Does not the presence of secure retaliatory capabilities make the NFU credible and the first use incredible? Are there any other benefits of an NFU that can better address contemporary challenges? These are some of the questions that this essay seeks to address. Towards this end, it offers three hypotheses:

- There is value in no-first-use as a potent and viable deterrent strategy that is more credible than first use in present times.
- NFU can help in lessening existential nuclear risks and serve the cause of strategic stability.
- NFU can be an effective tool of non-proliferation and disarmament and thus contribute to international security.

The dilemma of when (and where) to use the nuclear weapon—in a first strike on counterforce targets or in punitive retaliation on cities—has preoccupied every country that has possessed it. Which of these uses better establishes credible deterrence? Does first use deter more effectively? Or, is it the threat of retaliation that carries greater credibility? In sixty years of the existence of the weapon no consensus has been reached on these questions.

In a situation where both sides have secure second strike capabilities, even if it is not a situation of mutual assured destruction, a nuclear first strike, however splendid it might be, cannot rule out the possibility of nuclear retaliation. Hence, the calculation of the first user cannot be limited to the damage it will cause by his first strike, but must also take into account the damage in space and time that it will suffer from the adversary's response.

MILITARIES PREFER OFFENCE, BUT WHY NUCLEAR FIRST USE IS NOT A GOOD IDEA

Militaries like to function according to standard operating procedures (SOPs)—whether in peacetime or war operations. This preference leads to a propensity for offensive doctrines where the armed forces have thought through their strategy and devised SOPs to address premeditated scenarios. Offence allows the military to stay with its pre-deliberated course of action while denying the adversary the advantage of being able to play out his moves. As argued by Barry Posen, "A military organisation prefers to fight its own war and prevent its adversary from doing so ... An organisation fighting the war it planned is likely to do better than

one that is not."³

With conventional weapons, this may be a prudent approach. The armed forces can concentrate on the first phase of war to be undertaken by them at the time and place of their choice and thereby either increase the chance of their victory or lessen the damage of war on themselves. But the equation gets skewed with the entry of nuclear weapons. In a situation where both sides have secure second strike capabilities, even if it is not a situation of mutual assured destruction, a nuclear first strike, however splendid it might be, cannot rule out the possibility of nuclear retaliation. Hence, the calculation of the first user cannot be limited to the damage it will cause by his first strike, but must also take into account the damage in space and time that it will suffer from the adversary's response with a weapon of

3. Barry R. Posen, "The Sources of Military Doctrine," in Robert Art and Kenneth Waltz, eds., *The Use of Force: Military Power and International Politics* (Boulder, Colorado: Rowman and Littlefield Publishers, Inc., 2004), p 24.

mass destruction. Therefore, despite an offensive nuclear strategy, neither can victory be assured and nor the extent of damage, owing to the very nature of the weapon, be reduced enough to be deemed acceptable. Is it then useful, and more importantly, credible to threaten first use of nuclear weapons?

It is often argued that a possessor of nuclear weapons is likely to be provoked into using the weapon if the country faces the prospect of a conventional defeat. It would then be left with no option but to use the nuclear weapon. But even in such a situation how does a country gain by using this weapon because once it has done so, its fate shifts from being defeated-now-but-living-to-fight-another-day to one of severe damage/annihilation depending on the state of its geographical, material and human capacities. Jonathan Schell explained this dilemma well when he questioned, "For how can it make sense to 'save' one's country by blowing it to pieces? And what logic is there in staving off a limited defeat by bringing on unlimited, eternal defeat? Nuclear deterrence is like a gun with two barrels, of which one points ahead and the other points back at the gun's holder."⁴ Robert McNamara made a similar argument based on his experience of more than 40 years in the field of nuclear strategy and war plans. He wrote, "During that time [when in office], I have never seen a piece of paper that outlined a plan for the United States or NATO to initiate the use of nuclear weapons with any benefit for the United States or NATO ... To launch weapons against a nuclear-equipped opponent would be suicidal. To do so against a non-nuclear enemy would be militarily unnecessary, morally repugnant, and politically indefensible."⁵ Though McNamara might have expressed this in writing only in 2005, he claims that he, as well as President Kennedy, understood this in the 1960s itself but never made any such statements since they were "totally contrary to established NATO policy." He categorically states that there was no way to effectively contain a nuclear strike and that there can be no guarantee against unlimited escalation once the first nuclear strike occurs.

4. Jonathan Schell, *The Abolition* (Stanford, CA: Stanford University Press, 2000), p. 54.

5. Robert McNamara, "Apocalypse Soon," *Foreign Policy*, May-June 2005.

Secondly, it is questioned whether a country should retain NFU even if it gets to know that the adversary is preparing for a nuclear strike? Should not nuclear pre-emption then be the right step? The answer to this lies in understanding that even preparation is no guarantee of a nuclear strike. Rather, it may well be part of a strategy of "coercive diplomacy." It is not a coincidence that nearly all of the more than 50 incidents of threat of use of nuclear weapons until now have actually intended coercion.⁶ Therefore, despite the apparent show of readiness, there will, more likely than not, still be a chance that nuclear weapons would not actually come into use. But by striking first in the face of apparent readiness on the other side, a country would end up inviting retaliation for certain. A country even with a first use doctrine may or may not use its nuclear weapons despite the projected preparedness, but after having been struck and where the first strike has not been disarming or decapitating (which is well-nigh impossible with the kinds of arsenals states with nuclear weapons today have), retaliation would be a certainty.

Meanwhile, the actual act of using the nuclear weapon first cannot be as easy as it is made out to be since the country has to take into account not just what would happen in the first phase of war, but also on how it would proceed and end, scenarios which are not easy to coherently contemplate in the presence of robust retaliatory nuclear weapons. Hence despite having a first use strategy, most nations not only find it very difficult to actually execute it, but also politically limiting to do so. This is a thought worth considering since conventional wisdom has us believe that first use is more liberating compared to a counterstrike strategy. But serious thought to actual execution of first use reveals the complexities involved in doing so. After all, the purpose of first use should be to convey deterrence through communication of four essential messages:

- I will not hesitate to use the weapon first.
- By doing so, I would be able to substantively improve my situation.
- My first strike will interfere with and degrade your second strike capability.

6. For a comprehensive list of incidents until 1996 see Jasjit Singh, "Why Nuclear Weapons," in Jasjit Singh, ed., *Nuclear India* (New Delhi: Knowledge World, 1998), pp. 12-13.

- I will be able to come out of the crisis looking better after the use of the nuclear weapon than without its use.

Such communication can carry weight where there is a nuclear monopoly in an adversarial equation. But in a situation where the adversary has a survivable nuclear force, retaliation can seriously complicate the calculations of the first user on how it would “look better” after suffering nuclear damage itself. As graphically explained by a strategist, “Engaging in a nuclear war with a nation with whom one is in a condition of mutual vulnerability would be like running a red light across a high speed, heavily travelled, multilane highway under conditions of near zero visibility. One might make it safely across, but one could not form a reasonable expectation that one would.”⁷

Therefore, the essential question that the first user has to ask and answer is whether in a state of mutual vulnerability, the initiator can be in a better position than the one that retaliates? Or can NFU convey its own set of messages more convincingly:

- I will not be the first to use nuclear weapons.
- But any first strike against me would trigger an assured retaliation to cause damage of a kind that you would find unacceptable.
- My counterstrike will ensure that your material situation is worse off after your using the weapon first.
- I might suffer losses, but you will not escape either and you would have brought it upon yourself.

As is clear from above, a no-first-use strategy offers to concede the onus of escalation to the adversary and in that sense becomes more liberating. The military can adopt a more relaxed posture rather than straining the nuclear leash at a hair-trigger alert system that can easily fall prey to misadventure. Neither does it have to perfect the logistics of first use which is not easy considering that it would involve coordinating a nuclear attack on a diversified

7. Steven P. Lee, *Morality, Prudence, and Nuclear Weapons* (Cambridge: Cambridge University Press, 1993), p. 16.

The decision to use the nuclear weapons first is made even more difficult by the knowledge that unlike the case of conventional weapons, the nuclear forces that inflict the damage on the adversary will not really protect own state either. Rather, they would end up inviting retaliation. Therefore, rather than having the first strike option, it would be better to take measures to deter the adversary. Deterrence is, in fact, the only real defence against nuclear weapons.

arsenal with speed and surprise to hit the adversary's forces before they can be launched or dispersed, addressing basic questions such as whether to launch aircraft first or missiles, how many to launch in the first wave, etc.

At the same time, the political leadership is freed from the psychological pressure of making the difficult choice of being the first to use a weapon of mass destruction. This is sure to weigh on him/her personally for the damage caused and also bring international opprobrium for having breached a nuclear taboo. And to top it all, to do so in the knowledge that own vulnerability to retaliation can yet not be escaped. In democracies, the limits on the political leadership when called upon to make this decision are well

understood. But even in the more autocratic systems, this cannot be an easy choice given that today's societies are relatively invigorated by the modern means of communication enabled by the information revolution and these do influence national choices. Even the DPRK, a really "isolated" country by today's standards, could go only so far with its nuclear brinkmanship.

The decision to use the nuclear weapons first is made even more difficult by the knowledge that unlike the case of conventional weapons, the nuclear forces that inflict the damage on the adversary will not really protect own state either. Rather, they would end up inviting retaliation. Therefore, rather than having the first strike option, it would be better to take measures to deter the adversary. Deterrence is, in fact, the only real defence against nuclear weapons.

In the face of such logic, the NFU appears far more sensible and credible. While a country would find it very difficult to use the weapon first, the decision

of retaliation would be far easier, seemingly legitimate, and more guilt-free to make. In fact, by projecting assured retaliation, a nation displays greater confidence, and hence greater deterrence credibility. By placing the onus of escalation on the adversary, while retaining the initiative of punitive nuclear retaliation, a country with a no-first-use strategy steers away from nuclear brinkmanship. And, by establishing the nuclear weapon as an instrument of punishment through retaliation, the country lessens the possibility of deterrence from breaking down, and thus aims to minimise, if not prevent, the very use of the nuclear weapon. NFU actually encourages the possibility of “no use” instead of “sure use.” This is clearly demonstrated in the following table.⁸

Nuclear Posture Country 1	Nuclear Posture Country 2	Nuclear Threshold	Chance of Nuclear War
First Use	First Use	Low	Very High
No-First-Use	No-First-Use	High	Very Low/Nil
First Use	No-First-Use	Relatively High	Relatively Low

As is evident from the table, through NFU coupled with assured retaliation, a country can rein in the initiative more in favour of no use of nuclear weapons. Unless the adversary is completely irrational, has suicidal tendencies or is utterly unmindful of national survival and international public opinion, the possibility of a nuclear war should not arise. But in case of having to deter a rational actor, projection of assured retaliation while maintaining NFU can enforce effective deterrence. This validates the first hypothesis that a credible retaliatory strategy deters effectively and, in fact, better than a first use strategy given the contemporary nuclear capabilities.

HOW DOES NFU PROMOTE STRATEGIC STABILITY?

First use postures based on projection of nuclear war fighting require large arsenals of first strike weapons (such as accurate missiles with multiple independently retargetable vehicles), nuclear superiority to carry out counterforce attacks against an adversary’s retaliatory forces, elaborate and

8. Manpreet Sethi, *Nuclear Strategy: India’s March towards Credible Deterrence* (New Delhi: Knowledge World, 2009), p. 134.

NFU requires building nuclear forces which need not be necessarily in large numbers, but which are ensured survivability through a mix of measures that include hardening of nuclear storage sites, deception, mobility, dispersal over different delivery vectors, and a level of defence. The core of this strategy lies in projecting the invulnerability of a sufficient part of the arsenal.

delegated command and control structures to handle launch on warning or launch under attack postures to coordinate simultaneous nuclear attacks from and over dispersed forces. None of this is conducive to strategic stability especially in the present nuclear realities where many nuclear adversaries do not enjoy the luxury of being geographically apart. Rather, in some cases such as India-China and India-Pakistan, unsettled boundary issues and border skirmishes are routine events. In such a situation, maintaining nuclear forces in a state of hair-trigger readiness for first use not only raises the possibility of an accidental nuclear war based on a miscalculation, but also lowers the threshold of nuclear war in a crisis situation.

It may be recalled that in the early years of the Cold War, warheads of the two Superpowers were not routinely mated, nor necessarily co-located with delivery systems. It was the subsequent development of advanced safety features designed into modern warheads and the advent of sophisticated administrative controls on nuclear weapons that made higher alert levels possible. Ironically, however, after keeping their nuclear missiles on hair-trigger alert for years, the two Superpowers found the best nuclear risk reduction and confidence building in de-alerting these and separating warheads from delivery systems! These form a natural part of the NFU posture.

In fact, an NFU requires building nuclear forces which need not be necessarily in large numbers, but which are ensured survivability through a mix of measures that include hardening of nuclear storage sites, deception, mobility, dispersal over different delivery vectors, and a level of defence. The core of this strategy lies in projecting the invulnerability of a sufficient part of the arsenal to even a worst case first strike and incorporation of

automaticity to retaliation which can cause damage that the adversary is unlikely to find acceptable in lieu of the gains made through the first use.

By virtue of the nature of its force structure and posture requirements, an NFU naturally eliminates the need for forward deployment of nuclear systems, and thus reduces the likelihood of accidental or unauthorised use. Force postures required to cater for launch on warning or launch under attack require pre-delegation of authority to launch nuclear weapons down a clearly defined chain of command and this can never be a risk-free option. The US and USSR experienced this first-hand with their tactical nuclear weapons (TNW). Battles where use of TNW was envisaged were described as “battles of great confusion.” Even when the authority of launch was delegated it was equally realised that situations where the use of nuclear weapons was involved “could never be a purely ‘tactical’ decision, taken by the local commander according to the state of battle. It would be a strategic decision to be taken at the highest level and with reference to the prevailing, overall political and military situation.”⁹ But whether this could be effectively enforced posed a huge challenge given that in times of crisis, lack of information, misinformation and misjudgments could often become causes of confrontation without either side having the intention to precipitate one. As Robert McNamara once said, “It is correct to say that no well-informed, coolly rational political or military leader is likely to initiate the use of nuclear weapon. But political and military leaders, in moments of severe crisis, are likely to be neither well-informed nor coolly rational.”¹⁰

NFU eases this dilemma considerably. In fact, the NFU goes to alleviate the adversary’s insecurity, which, in turn, is beneficial by relieving pressure on its leaders for launching a pre-emptive strike. If the adversary were constantly under the fear that a nuclear strike was imminent, his own temptation to use his nuclear force would be higher. But, the NFU helps to mitigate the “use or lose” pressure and thereby lessens crisis instability since it sends a message that does not place the adversary on the edge at all

9. An assessment of William Kaufmann as cited by Freedman, *The Evolution of Nuclear Strategy*, p. 105.

10. Robert McNamara, *Blundering into Disaster: Surviving the First Century of the Nuclear Age* (London: Bloomsbury, 1987) pp. 13-14.

Managing bilateral Superpower nuclear relations was not easy and history recounts many a tense moment. In the contemporary world where nuclear-armed nations are many, several sharing common and in some cases even contested borders, the challenge of creating strategic stability is exacerbated manifold. In such a scenario, the adoption of no-first-use doctrines would have many benign implications for strategic stability.

times. Rather, it makes it feel more secure, a condition that enhances deterrence stability. To that extent, actions taken by nations to strengthen the survivability of their arsenal can be stabilising and reassuring. The logic of this was aptly explained by Robert McNamara in the context of Soviet hardening their missile sites. He wrote,

"In a period of tension I wanted the Soviet leaders to have confidence that those forces would survive an American attack and would be capable of retaliating effectively. Then they would not feel a pressure to use them pre-emptively ... I had no desire to face, in a period of tension, an adversary who felt cornered, panicky and desperate and who might be tempted to move irrationally."¹¹

In fact, reassurance is a critical aspect of deterrence based on no-first-use and it significantly reduces strategic instability. The nuclear situation is at ease when both nations do not feel the need to go after the other's nuclear weapons for fear of losing own and where neither feels the need to go after the other with nuclear weapons since the costs of assured destruction that neither could escape would be too high.

Managing bilateral Superpower nuclear relations was not easy and history recounts many a tense moment. In the contemporary world where nuclear-armed nations are many, several sharing common and in some cases even contested borders, the challenge of creating strategic stability is exacerbated manifold. In such a scenario, the adoption of no-first-use doctrines would have many benign implications for strategic stability. It has

11. Ibid.

the potential to lessen interstate tensions, increase mutual confidence and thus reinforce a cycle of positives.

HOW DOES NFU PROMOTE NON-PROLIFERATION AND DISARMAMENT?

At this moment countries do not appear ready to give up their nuclear arsenals and in fact, the role of nuclear weapons seems to be expanding beyond the basic purpose of nuclear deterrence. The challenge for non-proliferation as arising from this increasing sense of the value of the nuclear weapon is well evident today. And why not? Why should countries be expected to eschew a weapon that is perceived

as effective for deterrence, including deterring conventional weapons, allowing blackmail, and earning monetary and political benefits? In fact, two countries have well shown the multi-role utility of nuclear weapons. North Korea and Pakistan harbour strong security suspicions and perceive their nuclear weapons as “strategic equalisers” as well as potent bargaining chips. The DPRK has never been shy of brandishing its nuclear capability to drive a hard bargain with a country as powerful as the United States. Islamabad, meanwhile, has intelligently used its nuclear weapons to deter a conventional war with a superior Indian military even as it has actively pursued a policy of terrorism.

Examples such as these tend to add value to the nuclear weapon and indirectly promote proliferation. It is another matter that Pakistan has even been involved in direct proliferation, but the point here is about the spread of the sentiment of the nuclear weapon being a worthwhile possession. As long as this impression is not removed, non-proliferation can never hope to be a sustainable proposition.

If every country was to commit not to be the first to use the weapon, there would be no use—leading to a drop in the stock value of the weapon over a period of time. In turn, this would encourage non-proliferation by sending a strong signal of the diminishing utility of the weapon. At the same time, it would lessen the drive of each NWS for new and modernised nuclear arsenals.

One way, however, of reducing the salience of the nuclear weapon can be found in the universal adoption of NFU by the states possessing these weapons. If every country was to commit not to be the first to use the weapon, there would be no use—leading to a drop in the stock value of the weapon over a period of time. In turn, this would encourage non-proliferation by sending a strong signal of the diminishing utility of the weapon. At the same time, it would lessen the drive of each NWS for new and modernised nuclear arsenals. Rather, as the weapons fall into a state of disuse, they would lose their salience and hence become dispensable, aiding the move towards their eventual elimination.

A case for convincing/compelling states to accept a universal NFU may be made on three grounds. Firstly, the NFU would allow the NWS to retain the notional sense of security that they derive from their national nuclear arsenals. NWS would only pledge not to be the first to use nuclear weapons, but could always retaliate to inflict unacceptable damage. They would have the freedom to possess the weapons but would pledge not to use them first. Gradually, the desire to possess, or improve an unusable weapon would lessen, making it easier to give up the weapon. Therefore, this step would work towards enhancing the gradual irrelevance of the nuclear weapon, especially when reinforced by a ban on use or threat of use of the weapon, quite as on the pattern and experience of the 1925 Geneva Convention.

Secondly, an international consensus on and acceptance of NFU would put pressure on all countries. A united approach could provide the necessary firmness to the international community to deal with possible holdouts. Thirdly, as explained in the first section of this essay, no country can hope to come out better after the first use of nuclear weapons against another nuclear state with a robust second strike force. Therefore, first use against a nuclear adversary that also happens to have superior conventional and substantive nuclear capability is nothing short of suicidal for the first user. The admittance of this reality would demonstrate the futility of retaining a first use posture.

The NFU actually challenges a long held nuclear theology of first use. Until now, this has been largely considered the most effective deterrent

posture in service of national security. But, the adoption of NFU by China and India, the two most populous countries of the world that collectively comprise about a third of humanity, has opened up another possibility at the other end of the spectrum. It offers a counterview to the traditional aggressive and arms race generating doctrine of first use. If NFU were to be accepted by all NWS, then the world might find itself on its way to a diminishing salience of nuclear weapons, their delegitimation, redundancy and eventually their abolition.

CONCLUSION

McNamara wrote in 2005, "I know from direct experience that US nuclear policy today creates unacceptable risks to other nations and to our own."¹² And yet, nuclear first use has been the predominant doctrine over the last six decades that nuclear weapons have been around. Only two countries maintain a no-first-use (NFU) strategy and the general tendency has been to be dismissive of these declarations since it has been believed that it is the threat of first use that establishes credible deterrence. Questioning this conventional wisdom in the face of the current nuclear realities where nearly all nuclear armed states (with the possible exception of North Korea) have a secure second strike capability, this essay explores the value of no-first-use as a meaningful and credible deterrence strategy. Besides, it also offers two other benefits of an NFU. One, since it is premised on communication of threat of punishment, the nature of the required arsenal reduces existential nuclear risks, and by relieving the adversary of a "use or lose" pressure, it enhances strategic stability. Secondly, by de facto making the nuclear weapon unusable, NFU brings down its salience and helps in promotion of non-proliferation and disarmament, thereby making a contribution to international security.

Most nuclear literature tends to be dismissive of the NFU as a declaratory statement. Indeed, given that the USA, the trendsetter of nuclear fashion, has never seriously considered the adoption of NFU, the prolific writings that emanate from the country have largely been devoted to enhancing

12. McNamara, n. 5.

the credibility of deterrence based on first use.¹³ The Soviet Union briefly adopted the NFU from 1982 for about a decade but the fact that it gave it up in the face of reduced conventional capability in 1992 led the proponents of first use to further their argument that NFU was a posture that could possibly be adopted only by conventionally superior nuclear armed nations and which could not be sustained in situations where a nuclear armed nation was faced with the prospect of conventional defeat.

This argument, however, ignores or dismisses the fact that the two nations that have consistently adopted a declared NFU doctrine—China and India—have done so at times when both have been conventionally wanting against their perceived adversaries. In the case of China, it announced its NFU doctrine in 1964 at a time when it counted conventionally far superior USA and Russia amongst its adversaries. In the case of India, the NFU was put down as its doctrine in 1999 when China, its declared adversary and the stated reason for its nuclear test, was rapidly undergoing conventional modernisation. Unfortunately, however, nuclear strategists and scholars in neither China nor India have laboured to explain the logic of the NFU as a viable deterrent strategy.¹⁴

Challenging the current conventional wisdom that tends to favour nuclear first use as a militarily meaningful deterrent strategy, this essay has established the value of NFU on three grounds—for national security, for strategic stability, and for international security premised on nuclear non-proliferation and disarmament. Indeed, a nuclear first use can be hardly an alternative less than hell.

13. To some extent, this can be explained on the basis of the fact that the Americans have crafted their war strategies on the Pearl Harbour experience where acting first and maintaining surprise has been critical. The same has been transposed onto the nuclear field too with Washington maintaining a nuclear first use doctrine and subscribing to a launch on warning and launch under attack force posture. This has been premised on the belief that unless the US was able to undertake a pre-emptive/surprise strike, it stood little chance of being able to destroy all Soviet targets as required by its war plans.

14. China, in fact, has seen greater prudence in maintaining nuclear opacity and ambiguity in its nuclear strategy and hence has never provided any explanations. Meanwhile, India has been engaged in operationalising its nuclear deterrent over the last decade and a half. However, though in both countries there prevails a general consensus in favour of a counterstrike doctrine, one can find rumblings of discontent too especially among the military establishments.

INDIA'S BALLISTIC MISSILE DEFENCE

ARJUN SUBRAMANIAN P

According to a DRDO press statement on November 23, 2012, it successfully tested the indigenously developed Ballistic Missile Defence (BMD) system.¹ After the test DRDO officials claimed that the system will be ready for deployment by 2014.² Already, India's BMD project has created ripples in Pakistan. In response to India's pursuit of missile defences, Pakistan has expanded its countermeasure efforts, primarily through development of manoeuvring re-entry vehicles.³ The Pakistan Army Strategic Force Command, which controls Islamabad's ballistic missiles, has since at least 2004 said it wanted to develop such warheads; analysts now believe these are in service.⁴ Moreover, Pakistan continues to increase its inventory of nuclear weapons' land vector by citing India's BMD claims as a destabilising factor.⁵ In addition to this, China has an advanced nuclear and ballistic missile programme. What is more worrisome is the clandestine nuclear and ballistic missile cooperation between China and Pakistan. Against this backdrop, this paper attempts

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1. Air Defence Interceptor Missile Successfully Destroys Ballistic Missile, MoD, Press Information Bureau, Govt. of India, November 23, 2013. Available at: <http://pib.nic.in/newsite/erelease.aspx?relid=61315>
2. Rajat Pandit, "India tests missile shield, DRDO says it will be operational by 2014," *The Times of India*, November 24, 2012.
3. Usman Ansari, "Pakistan Seeks to Counter Indian ABM Defences," *Defence News*, March 21, 2011.
4. Ibid.
5. Pravin Sawhney, "India's Ballistic Missile Defence capability is grossly exaggerated," DNA, April 4, 2011.

to analyse and find out the actual effectiveness of the BMD system based on the parameters of the tests conducted so far. Apart from the main focus area of this paper, which is divided into six parts, it will also briefly look at the nuclear threat scenario, characteristics of Chinese and Pakistani ballistic missiles, challenges in intercepting a ballistic missile, a few recommendations for improving the defence against ballistic missiles followed by a conclusion.

THE NUCLEAR THREAT SCENARIO

In no other part of the world are there three nuclear armed countries sharing land borders with each other.⁶ More importantly, India is the only nation to share land borders with two nuclear armed states with which it has serious territorial disputes and other security issues, and one among them (Pakistan) has a First Use policy. Pakistan has never declared a No-First-Use (NFU) and on several occasions threatened to use nuclear weapons (first strike) against India or Indian forces in its territory. Pakistan is using its nuclear weapons capability as a hedge to continue its policy of bleeding India with a thousand cuts through proxy war. In other words, Pakistan is using its nuclear capability as a safeguard against any punitive conventional offensive from India in retaliation to any of its state-sponsored terrorist activities. This nuclear safeguard proved its effectiveness in the 2001–2002 crises which followed the December 2001 terrorist attack on the Indian parliament. Among other reasons, Pakistani threat to go on a nuclear first strike would have been a strong influencing factor on India's decision not to cross the border. This is evident from the fact that India's new war doctrine, termed now as the "proactive strategy," and which was earlier called as the "Cold Start," has been formulated keeping in mind not to cross the Pakistani nuclear threshold.

China which has a stated policy of NFU has very recently created a great deal of ambiguity and concern by not mentioning about a NFU in

6. Pakistan shares a land link with China through the occupied part of Kashmir controlled by it.

its recent defence white paper.⁷ However, Colonel Yang Yujun, a spokesman for China's Ministry of Defence, clarified on this question unambiguously during a briefing on April 25, 2013 when he stated: "China repeatedly reaffirms that it has always pursued no-first-use nuclear weapons policy, upholds its nuclear strategy of self-defence, and never takes part in any form of nuclear arms race with any country. The policy has never been changed. The concern about changes of China's nuclear policy is unnecessary."⁸ Yet there is a possibility that China is rethinking on its NFU policy largely due to the improving US conventional precision strike capability and BMD efforts. Nevertheless, ambiguity, particularly in nuclear weapons employment doctrine, is more dangerous than a clearly stated First Use policy.

Pakistan and China have an advanced ballistic missile programme which was developed primarily for delivery of nuclear weapons. China has the longest and the most advanced ballistic missile programme in Asia after Russia.

Pakistan and China have an advanced ballistic missile programme which was developed primarily for delivery of nuclear weapons. China has the longest and the most advanced ballistic missile programme in Asia after Russia. A recent report of the US National Air and Space Intelligence Centre (NASIC) says that "China has the most active and diverse ballistic missile development programme in the world." It further states that, "It (China) is developing and testing offensive missiles, forming additional missile units, qualitatively upgrading missile systems and developing methods to counter ballistic missile defences. The Chinese ballistic missile force is expanding in both size and types of missiles."⁹ China has developed and deployed various versions of ballistic missiles like the short range DF-

7. James M. Acton, "Debating China's No-First-Use Commitment: James Acton Responds," *Proliferation Analysis*, Carnegie Endowment, April 22, 2013. Available at: <http://carnegieendowment.org/2013/04/22/debating-china-s-no-first-use-commitment-james-acton-responds/g0lx>

8. Hui Zhang, "China's No-First-Policy Promotes Disarmament," *The Diplomat*, May 22, 2013.

9. "Ballistic & Cruise Missile Threat," National Air and Space Intelligence Center, 2013. Available at: http://www.fas.org/programs/ssp/nukes/nuclearweapons/NASIC2013_050813.pdf

11, DF-15 and DF-18. Very recently China inducted another Short Range Ballistic Missile (SRBM)–DF-12, which reportedly is a copied version of the Russian Iskander missile. In the Medium Range Ballistic Missile (MRBM) category, China has three to four versions of DF-21s among which the DF-21C has a very high Circular Error Probable (CEP) of around 30m which indicates that it would be largely used for conventional strikes. The DF-21D is an anti-ship version designed to target large ships like aircraft carriers. The rest of the DF-21 versions could be for nuclear strikes.¹⁰

Pakistan, a recipient of covert nuclear and missile technology transfer and assistance from China also has advanced variants of ballistic missiles in their inventory.¹¹ Its nuclear doctrine and strategy is *wholly and solely India-centric*, designed to address perceived conventional and nuclear threats from India. Consequently, the nature and function of the Pakistani nuclear deterrent (including delivery mechanisms), as also its rules of employment and deployment, are all tailored to meet this one requirement.¹² Added to this there is also a danger of the Pakistani nuclear weapons falling into the hands of Islamic radicals either within the state institution or outside. The attack on Pakistan Naval Station (PNS) Mehran is an example where the terrorist attack is believed to have taken place with insider help. It is also believed that the base is a storage site for Pakistani nuclear arsenal.¹³ Moreover, if Pakistan deploys its tactical battlefield nuclear missile *Nasr*, which by its nature should have a decentralised command and control, then the possibility of radical elements gaining access to the tactical nuclear weapons are high, leading to possible unauthorised use.

CHARACTERISTICS OF PAKISTANI AND CHINESE BALLISTIC MISSILES

All the Pakistani ballistic missiles are solid fuelled except Ghauri 1 & 2

10. The CEP of other DF-21 versions other than DF-21C and DF-21 D are comparatively large and hence could be used for nuclear delivery, while the more accurate ones will be suitable for conventional precision attacks.

11. Duncan Lennox, *Jane's Strategic Weapons Systems* (Surrey, UK, 2011), issue 55.

12. Manpreet Sethi, *Nuclear Strategy: India's March Towards Credible Deterrence* (KW Publishers Pvt. Ltd.), chapter 2, p. 45.

13. Kelsey Davenport, "Militants Attack Pakistani Base," *Arms Control Today*, September 2012.

and the Chinese are rapidly replacing all their liquid fuelled SRBM with solid fuelled missiles and their MRBM, Intermediary Range Ballistic Missiles (IRBM) and two variants of their Inter Continental Ballistic Missiles (ICBM) (DF-31 and DF-41) are solid fuelled.¹⁴ Solid fuel means—longer storage time, easy maintenance, lesser launch preparation time and better mobility. All these missiles are carried in Transporter Erector Launchers (TELs) and are road mobile, the launch preparation time is shorter from the time of arrival at a pre-surveyed launch site and the accuracy has improved greatly. All these aspects complicate the targeting problem, i.e., targeting the missile before it is launched. Most of these missiles have separating warheads that separate either after burn-out or before re-entry and hence present a more difficult target, i.e., very low Radar Cross Section (RCS). Moreover, in most of their missiles the payload section has either rocket motors or control surfaces for improving accuracy. In addition to that the reaction control motors could also be used to manoeuvre the re-entry vehicle to evade the defences.

CHALLENGES IN INTERCEPTING BALLISTIC MISSILES

The function of a ballistic missile defence system is the same as any other Surface to Air Missile (SAM) system but the characteristics of the function changes because the physical qualities of a ballistic missile target differ from other air vehicles. The primary difference is the velocity and the RCS of the ballistic missile (warhead). The velocity is several times higher

The function of a ballistic missile defence system is the same as any other Surface to Air Missile (SAM) system but the characteristics of the function changes because the physical qualities of a ballistic missile target differ from other air vehicles. The primary difference is the velocity and the RCS of the ballistic missile (warhead). The velocity is several times higher (from high supersonic to very high-hypersonic) and the RCS is very small.

14. Duncan Lennox, *Jane's Strategic Weapons Systems* (Surrey, UK, 2011), issue 55.

(from high supersonic to very high-hypersonic) and the RCS is very small. The velocity of a ballistic missile re-entry vehicle varies depending on the burn-out velocity, range, trajectory, re-entry angle and ballistic coefficient. Normally, a re-entry vehicle of an SRBM with a range of 500 km and an ICBM with a range of 10,000 km has re-entry velocity of Mach 6 and Mach 23 respectively.¹⁵

The challenge in intercepting a ballistic missile compounds if the attacker employs countermeasures to confuse the defences. A BMD system usually looks for certain characteristics of a ballistic missile to find, track and intercept it and these characteristics are the usual trajectory of the missile, the warhead shape and its radar and optical (infrared and visible region of the spectrum) signature. The first step in the process of intercepting a ballistic missile is to detect it and second is to identify the detected object as a threat and here is where the attacker could use countermeasures by manipulating the signature of the missile to deceive the defence system.

The attacker could manipulate the signature of the re-entering warhead and prevent the defence fire control system from recognising it as a threat. This can be done by deploying decoys that resemble the target (simulation) or the signature of the actual warhead could be manipulated to make it appear and behave like the decoys (anti-simulation).¹⁶ Anti-simulation is an effective technique. One anti-simulation strategy would be to enclose the nuclear warhead in a metallised mylar balloon. This would be released along with a large number of empty balloons. Because the radar waves can pass through the thin metal coating, the radar cannot determine what was inside each balloon. To counter IR sensors the temperature of the balloon could be controlled by employing a small heater.¹⁷ Alternatively the attacker can conceal the nuclear warhead in a shroud made of thermal multi-layer

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15. Jurgen Altmann, "Tactical Ballistic Missiles" in *SDI for Europe?: Technical Aspects of Anti-Tactical Ballistic Missile Defences*, RIF Research Report 3/1998, September 1998, p. 32.
 16. US Congress, Office of Technology Assessment, *Ballistic Missile Defence Technologies*, OTA-ISC-254 (Washington DC: US Government Printing Office, September 1985), chapter 7, p. 163.
 17. Andrew M. Sessler, "Countermeasures: A Technical Evaluation of the Operational Effectiveness of the Planned US National Missile Defence System," Study group organised by the Union of Concerned Scientists and the Security Studies Programme at the Massachusetts Institute of Technology, p. 44.

insulation and release it along with a large number of empty shrouds.¹⁸

Apart from these measures, other countermeasures could also be employed where the re-entry vehicle could carry a jammer to jam the tracking radar or release chaffs to create a radar clutter. Chaffs are conducting wires that are cut to a length that maximises its radar reflections, which is one half the radar wavelengths. Hence, chaff cloud could hide the warhead from the radar. Since just one pound of chaff could contain millions of chaff wires, the attacker could deploy numerous chaff dispensers that would create many chaff clouds, only one of which would contain the warhead.¹⁹ Countermeasures could also be employed by changing the trajectory of the missile by either depressing or lofting it, though a significant amount of range and/or payload have to be sacrificed which depends on the apogee selection. For example, the Shaheen II IRBM which has a maximum range of 2,500 km can be launched in a shaped trajectory to hit Delhi from somewhere in Baluchistan, from where the range to New Delhi would be around 1,000 km.²⁰

A BMD Fire Control System (FCS) observes the usual trajectory of a ballistic missile to identify it as a threat. Shaping the trajectory confuses the FCS and the threat might be ignored by it resulting in not firing the interceptors. Besides, a shaped trajectory has other advantages, wherein, a missile fired in a depressed trajectory reduces the reaction time of the

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18. Ibid., p. 44.

19. Ibid., pp. 44-45.

20. Range measurement done using the ruler tool in Google earth application. The approximate value was scaled from the eastern region of Baluchistan, Pakistan to Delhi, India.

defences as the flight time is much lesser and the ones whose trajectory has been lofted re-enters with higher velocity and at steeper re-entry angles and hence lesser flight time from re-entry to impact compared to when launched in a minimum energy trajectory. The most likely missile Pakistan could choose for a shaped trajectory launch for a nuclear strike against New Delhi would be the Shaheen II. However, it has to be noted that for achieving extreme shaped trajectories the missile needs some modifications. It is not known if China and Pakistan have prepared their missile for such a role. Nevertheless, it is always better to prepare the defences to counter any type of threat. Other countermeasures include, using a Manoeuvrable Re-Entry Vehicle (MARV), overwhelming the defence by saturating it with multiple warheads either by Multiple Independently Targetable Re-Entry Vehicle (MIRV-ing the missiles), employing cross-targeting, or going for salvo launches.

INDIAN BALLISTIC MISSILE DEFENCE SYSTEM

The trigger for the Indian BMD programme was the Pakistani acquisition of M-11 missiles from China.²¹ The Indian BMD programme was initiated in 1995²² and the first successful test firing was conducted in 2006. There were a total of eight test firings so far and only the fourth test was aborted as the target missile deviated from its path, while the other seven tests were successful.²³ This is a remarkable achievement considering that only five countries have demonstrated successful interception of ballistic missiles. The last test in November 2012 was significant from previous tests as two targets were engaged simultaneously, though one was a simulation. Nevertheless, we have to look at what DRDO has actually demonstrated and what remains to be proved and improved.

ANALYSIS OF THE SYSTEM

In all tests, the Prithvi missile was used as the attacker missile which simulated the trajectory of a 600 km range missile. It was reported that, in

21. Pravin Sawhney, "Games DRDO Plays," *Force*, April 4, 2011.

22. *Ibid.*

23. <http://idp.justthe80.com/missiles/ballistic-missile-defense-bmd-system>

the last test, the apogee of the attacker Prithvi was increased to 110 km from its normal apogee of 40 km.²⁴ This missile has an actual range of 350 km. Despite the fact that the Prithvi's trajectory was altered to simulate a missile with a longer range it does not mimic a longer range missile as claimed for two reasons. Firstly, the re-entry velocity of the attacker Prithvi was very low. Though DRDO claims to have increased the re-entry velocity by adding additional boosters, it is not clear if it attained the required velocity to mimic a longer range missile. However, reports in the media mentioned the interceptor (Advanced Air Defence [AAD]) speed as Mach 4.5 and the closing speed, before interception, as 2 km/sec.²⁵ The specified interceptor speed should be the average value because observation of the test video shows that the interceptor is at its coast phase at the time of impact during which the speed would be slightly lower than the average speed. So even assuming the interceptor speed to be half of the given closing speed the velocity of the target would be approximately Mach 3 which is still low compared to the re-entry velocity of a 500 km range missile with a ballistic coefficient of 1,000 lbs/ft² which would be around Mach 6.²⁶ Moreover, the ballistic coefficient of the Prithvi could be lower than the above considered value due to the larger surface area of the re-entry body unlike that of a separating warhead.

Secondly, the warhead does not separate from the body of the missile which makes it a large target for both ground-based radar and the radio frequency seeker to acquire and track. In the Pakistani M-9, M-11 and other Chinese missiles with ranges up to 2,000 km the warhead separates from the missile body. According to *Jane's Strategic Weapons System*, the warhead of the M-9 and M-11 separates either after burnout or before re-entry.²⁷ So in a real scenario the system has to confront a target with much higher re-entry velocity and small radar cross-section. The performance of the BMD system under these conditions has not been proven so far. But the unfortunate fact

24. Ajai Shukla, "Anti-Ballistic Missile Defence: Star Wars Over India," *Business Standard*, December 1, 2012.

25. *Ibid.*

26. Herbert Lin, "Rationalized Speed/Altitude Thresholds for ABM Testing," *Science and Global Security*, 1990, vol. 2, p. 91, figure 2.

27. Duncan Lennox, *Jane's Strategic Weapons Systems* (Surrey, UK, 2011), issue 55.

Out of the eight tests conducted so far only two were exo-atmospheric, the rest were endo-atmospheric. In none of the first seven tests were both the interceptors fired simultaneously to evaluate the overall system performance. Only in the last test were two attacker missiles simultaneously engaged, though one was an electronic simulation.

is that India, at present, does not have any other missile without these drawbacks in this range that could be used as a target.

A 2,000 km range ballistic missile, launched in the usual minimum energy trajectory, will have a re-entry velocity of around 4 km/sec²⁸ even at an altitude of 15 km, which means that the velocity is more than Mach 10. As discussed above the system has not been tested against a target with such velocity. Hence the capability of the system to perform under this condition is yet to be proved. Since the AAD missile has the required speed (Mach 4.5) to intercept a re-entry vehicle re-entering at the velocity of a 2,000 km range missile,

the primary objective of the test should be to evaluate the performance of the various guidance systems (command guidance, onboard INS and the radio seeker) and the control systems against a ballistic target (separating warheads) re-entering at an actual velocity of missiles with the specified range.

Out of the eight tests conducted so far only two were exo-atmospheric, the rest were endo-atmospheric. In none of the first seven tests were both the interceptors fired simultaneously to evaluate the overall system performance. Only in the last test were two attacker missiles simultaneously engaged, though one was an electronic simulation. The electronically simulated target had a range of 1,500 km and was successfully intercepted by an electronically simulated interceptor at an altitude of 120 km.²⁹ Dr. Avinash Chander, the then Chief Controller (Missile and Strategic Systems), DRDO cited range limitations and geometry for not using an actual missile

28. N. 26.

29. T. S. Subramanian, "Interceptors' Success—Real and Simulated," *The Hindu*, November 24, 2012.

with a 2,000 km range.³⁰ This is an acceptable reason, but at the same time, claiming that the last test has fully proved the robustness of the system cannot be accepted, unless tested under a realistic scenario. Moreover, the type of the electronically simulated interceptor is not known. Dr. Ajai Shukla, in his article, had mentioned that the simulated interceptor is an AAD.³¹ The AAD is designed only to engage targets at an altitude of 30 km but the reported electronic interception altitude was 120 km, so the electronically simulated interceptor could be the Prithvi Defence Vehicle (PDV), which is said to be the deployment variant of the BMD system. The PDV will be a two stage solid fuelled missile capable of intercepting targets at an altitude of 150 km while the earlier variant, the PAD, can only engage targets at an altitude of 80 km. More exo-atmospheric interception tests should also be done to validate the overall performance of the system, as an effective upper layer defence would reduce the burden for the lower tier. Exo-atmospheric interception is more challenging than endo because the velocity of the re-entry body suffers a sharp decline from an altitude of 20 km³² due to a denser atmosphere which increases the drag coefficient per unit area, thereby reducing the ballistic coefficient. Additionally the sensors will have to encounter and discriminate decoys (if employed by the attacker) and missile debris at exo- atmospheric altitudes.

The current interceptor uses a radar seeker for terminal guidance. The next test will reportedly include a dual seeker (both radar and an electro-optical seeker) for terminal guidance.³³ An optical seeker will have better target acquisition capability, particularly for low tier defence as the re-entry vehicle will be clearly visible as it would get heated due to friction while travelling down the atmosphere. This would enhance the probability of interception.

The main components of the Indian BMD system are the Long Range Tracking Radar (LRTR), Fire Control Radar (FCR), and the two interceptors—

30. T. S. Subramanian, "Real Time Trial of Interceptors and Simulated Missiles," *The Hindu*, November 22, 2012.

31. N. 24.

32. N. 26.

33. Ajai Shukla, "Prithvi Defence Vehicle test: 'Enemy' ballistic Missile to be downed in space next month," *Business Standard*, December 3, 2013. The test that was planned for January 2013 never happened.

AAD for endo-atmosphere and the PDV for exo-atmospheric interception. Except the interceptors, all the other components are developed with foreign assistance. However, the radar seeker for the interceptors was developed with Russian assistance.³⁴ The LRTR for example, is a modified version of the Israeli Green Pine radar in which the range has been increased to 600 km. The Green Pine radar can track a target travelling at a maximum speed of 3 km/s³⁵ (Mach 10), the same data is not known for its modified version (Sword Fish). If the value is the same, the radar cannot track an IRBM with a 2,000 km range which normally has a re-entry velocity of 4 km/sec. The fire control radar which provides command guidance for the interceptor is based on the Thales Multi-function Fire Control radar. DRDO needs to build capability to develop core technologies for these crucial components in the future. Having the capability to build core technologies would enable perfecting, upgrading and enhancing and building future systems.

DRDO has announced major changes to the interceptor and the target missile in the next test.³⁶ New exo-atmospheric interceptor, as discussed earlier, will have a dual terminal sensor and can climb to an altitude of 150 km. The target missile would also be a new missile—a boosted (to increase terminal velocity) two stage version of the Dhanush missile. It will also feature a new pulse motor, which will provide surges of propulsion during the missile's later stage, increasing its manoeuvrability when very close to the target. This attacker missile would be launched from a ship positioned 300-350 km from the interceptor location reaching an apogee of 150 km. With these improvements, which according to the DRDO chief, the target missile would mimic the *actual* terminal conditions of a 1,500 km class ballistic missile. Along with this, six more electronic interceptions, would also be attempted, both endo- and exo-atmosphere.³⁷ A test conducted under these conditions would comparatively pose a tough challenge to the BMD system.

34. <http://www.globalsecurity.org/wmd/world/india/bmd.htm>

35. <http://www.radartutorial.eu/19.kartei/karte405.en.html>

36. This test was supposed to be conducted in January 2013. However, the test has not been carried out till date.

37. n. 33.

RECOMMENDATIONS

- The Prithvi variants must be replaced with *solid fuelled* SRBMs with separating *warheads with higher re-entry velocity*. This will have two benefits; firstly, it would make it available for testing the real effectiveness of the BMD system. Secondly, it would provide a more reliable and survivable nuclear delivery vehicle that would have shorter launch preparation time and better mobility. Prithvi is reported to have a launch preparation time of two hours and also needs more than ten support vehicles which will make it easy for the enemy to detect and target.³⁸
- At present, endo-atmospheric interceptions have taken place within 15 km altitude. The interception altitude should be increased giving the system more time allowing for kill assessment and to fire another round if needed. Faster processors and better algorithm might be needed to perform this in real time. A high altitude interception would also be the best protection if the system is deployed to protect soft targets such as population centres.
- New long-range wideband X-band radar have to be developed. For terminal ballistic missile defence systems the decoy-warhead discrimination is not needed much as the lightweight decoys would slow down and burn during re-entry. However, in case of SRBMs with a separating warhead and apogee within the atmosphere, the booster after stage separation continues along its trajectory and may come into the radar's Field of View (FOV)³⁹ which complicates its task in discriminating. It further gets complicated if the stage is exploded to create a chaff effect.⁴⁰ Hence, high frequency wideband radar would be more efficient in discriminating the warhead from other objects in its FOV.

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38. n. 27.

39. Altmann, n. 15, p. 136.

40. Ibid.

Normally ballistic missile defence radar solid angle is optimised for ballistic missiles launched in minimum energy trajectory. To cater for ballistic missiles launched in lofted and depressed trajectories, multiple radars each with different solid angles should be employed. Handover procedure could be incorporated to keep the data fed to the fire control system within the optimum limit.

- One other use for high frequency radar would be to see through the nuclear cloud created by a masking high altitude atmospheric nuclear explosion the enemy might employ to aid the penetration of the forthcoming strikes, which even S-band radar can perform. However, to increase the probability of intercept, long-range X-band radar netted to the other sensors and systems in the BMD architecture will enable the discrimination of warheads from decoys and other missile debris and track the actual warhead from the mid-course phase itself, providing longer reaction time for the terminal defences, i.e., this would relieve time pressure for the terminal defence systems by allowing it to be prepared to engage the target much

earlier. For enhancing the robustness of the system, the mid-course tracking system should be independent of the terminal defence sensor systems. This would also be a stepping stone for building a mid-course interception system for future. An effective mid-course defence system would reduce the burden for the low tier systems providing a better defence.

- Further increase in radar power aperture product would increase the reaction time for the defence system. Along with this the kill probability could be further increased by improving the burn rate performance of the interceptors. Both these improvements would also increase interception altitude resulting in the increase of the defended footprint.
- Normally ballistic missile defence radar solid angle is optimised for ballistic missiles launched in minimum energy trajectory. To cater for ballistic missiles launched in lofted and depressed trajectories, multiple radars each with different solid angles should be employed. Handover

procedure could be incorporated to keep the data fed to the fire control system within the optimum limit.

- To perfect, improve and fine-tune the system to defend against potential ballistic missile threats, information on the enemy ballistic missile signatures will be enormously helpful. Enemy ballistic missile tests have to be monitored electronically by using long-range wideband high frequency radars and other space based radar and optical sensors which will provide us with a library of signatures of the enemy ballistic missiles. For example the wideband signal returns can be used to obtain a wide variety of target details by using various methods of analysis. Micro-Doppler method can also be employed by using time-frequency analysis to obtain target details like the shape of the target which can also be used for real time Decoy-Warhead discrimination by using the data in the algorithm of the Fire Control System.
- In the present interceptors, fragmentation warhead is employed which is detonated using a Radio Proximity Fuse (RPF). The attacker could harden the re-entry vehicle with additional protective layers to counter this which would ensure that the nuclear warhead inside remains intact. Hence the interceptor should have Hit-to-Kill capability to ensure the complete destruction of the payload.
- Defence against ballistic missile is not only intercepting the missiles after it is launched but the missile also could be destroyed on the ground during launch preparation once it is detected. India has highly accurate supersonic cruise missiles that could be used to destroy the launcher before the hostile missile takes off. India has acquired the Israeli Phalcon Airborne Warning and Control System (AWACS) system and is also in the process of testing the indigenous AWACS system. India also has radar and optical imaging satellites for surveillance. These additional resources should be harnessed to enhance the ability to defend against missiles. These AWACS and satellites can be integrated within a broader missile defence architecture. Defence against ballistic missiles has to be an integrated effort done using multiple methods and at various levels.

- Parallel development of the next phase of the BMD system would help in perfecting the Phase I systems from the experience gained. Once the reliability of the Phase I system is proved after repeated testing under realistic conditions, which should be monitored and certified by an independent and competent body consisting of, but not restricted to personnel in the technical branch of the armed forces and the intended users, it can be put before the government to decide on deploying the system.
- Multiple tests have to be done putting the system under various stressful scenarios, at various weather conditions and operating it for longer duration before deployment. The accuracy of the Patriot system for example was found to be reducing when operated for longer duration. During the first Gulf War, on February 25, 1991, a Patriot battery, charged with protecting Dhahran Air Base, had been running for 100 hours consecutively, and failed to detect the incoming Iraqi Scud.⁴¹ The system should also be tested under a clustered air environment to check its ability to discriminate between the actual target and other objects in its view. There are bitter incidents of friendly fire during the Gulf War where the Patriots shot allied aircraft killing three pilots. The reason was that the Patriot radar was stumped by the cluttered air picture in theatre.⁴² The BMD system should not be operated in isolation, it has to be netted with other sensors to have a better situational awareness to avoid friendly fire.
- Looking to the long term, government should initiate policies that would enable the creation of better industrial infrastructure for DRDO enabling it to develop core technologies that could cater for the future technological needs of the country.

41. Victoria Samson, *American Missile Defence: A Guide to the Issue* (California: Praeger, 2010), chapter 6, p. 100.

42. *Ibid.*, p. 105.

CONCLUSION

In view of the various shortcomings in the tests, it would be a wiser choice for the government to decide against deploying this system in the present condition. Instead, DRDO should be directed to improve the system and test it under realistic conditions. What has been demonstrated so far was done in a controlled environment and all the tests were highly scripted. As far as indigenisation is concerned, it is quite evident that there is a huge gap in the capability to develop core technology and complex components, particularly in the design and development of sensors (both radar and optical). To start with, a strong technological foundation and better infrastructure is required to build this capability.

In the race between offence and defence, at present, offence remains at an advantageous position in terms of technological complexity and cost. Penetration aids for ballistic missiles are relatively simpler to develop and employ than countering and shooting down an incoming ballistic missile with penetrating aids. It might take several decades for the defence system to mature technologically. Political will and sustained financial investment are key factors that will speed up the process of technological maturity of the BMD system.

ANALYSIS OF PLAAF POTENTIAL AGAINST INDIA

RAVINDER CHHATWAL

“Freedom lies in being bold.”

— Robert Frost

BACKGROUND

China's growing military build-up and increasing assertiveness against its neighbouring countries has been a reason for concern to many nations. China has territorial and maritime disputes with many of its neighbours. Their major dispute is with Taiwan. Both the countries claim to be the legitimate government of China. China claims Taiwan to be a part of its territory and has openly stated that it will be ready to use force, if required, to annex Taiwan. China also claims Senkaku islands, also claimed by Japan, as theirs. Another disputed area is Paracel islands which is occupied by China but claimed by Taiwan and Vietnam. China is also involved in a dispute with the Philippines over the Scarborough Shoal. The Spratly islands are another complex bone of contention between China, Taiwan, Malaysia, the Philippines and Vietnam. With India, the border dispute has not yet been resolved. In April this year the Chinese created tension on the border by intruding into the Indian side of the Line of Actual Control (LAC) at Depsang in Ladakh. The People's Liberation Army (PLA) troops set up a camp 19 km inside the Indian side of the LAC. The PLA finally

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withdrew their troops, after about three weeks, in May 2013, after diplomatic negotiations at the highest level and just ahead of the new Chinese Prime Minister Li Keqiang's visit to New Delhi. In June this year PLA troops had intruded into the Indian territory of Chumar in Ladakh and taken away a surveillance camera. In the same area PLA troops again intruded on July 16, 2013. Riding on horses and ponies, around 50 Chinese soldiers intruded into Chumar staking their claim over the area. Indian troops intercepted the Chinese patrol and the next day the PLA patrol went back into their territory.

India's response to Chinese provocations has generally been mild.¹ We need to be firm and stand up boldly to any attempts at coercion by the Chinese. If China feels that they have a big military machine with which they can provoke India then they need to understand that Indian armed forces are fully capable of handling them.

China has a numerically larger armed force compared to India but mere numbers do not tell the full story. What happened in 1962 in the India-China conflict is now history. At that time, China was able to overrun the Indian army but now that cannot happen. The Indian armed forces are in a much better state than what they were in 1962. This article analyses PLAAF (People's Liberation Army & Air Force) capabilities to operate against India from Tibet and adjacent areas. The paper argues that the Chinese air force will have serious limitations against the IAF.

STATE OF INDIA-CHINA RELATIONS

From the Chinese point of view, the issues of concern to them with India are firstly, the Dalai Lama and Tibet; the border dispute; and India's rising status and geopolitical aspirations. From India's point of view, our main concerns are the border dispute; China's support to Pakistan's missile and nuclear weapons programme; and China's attempts to undermine India's regional influence.² China realises that to become a global power it has to

1. See, for example, Brahma Chellaney, "China's Land Grab." <http://www.project-syndicate.org/commentary/chinese-soldiers-set-up-camp-in-india-by-brahma-chellaney> accessed on September 9, 2013.
2. Jayadeva Ranade, in a presentation at CAPS, New Delhi, on August 8, 2013.

first be an unchallenged regional power. India is the only country in the region which can challenge China. On the surface, India–China relations are cordial, but an undercurrent of hostility remains. While India’s trade with China is growing steadily it is unlikely that relations with China will improve in the foreseeable future due to China’s attitude of exerting pressure to contain India. China in the past has had a history of creating tensions and then backing off at the last minute when the other side retaliated. This happened in the 1996 Taiwan Straits Crisis when the Chinese fired missiles into the sea towards Taiwan in a show of force. When the Americans reacted by sending two aircraft carrier groups through the Straits, the Chinese stopped firing the missiles. This has also happened with India every time we have taken a strong stand to Chinese provocations.

While India’s trade with China is growing steadily it is unlikely that relations with China will improve in the foreseeable future due to China’s attitude of exerting pressure to contain India. China in the past has had a history of creating tensions and then backing off at the last minute when the other side retaliated.

The Depsang intrusion is the third major intrusion, by the Chinese, after the 1962 India-China war. The first one was in 1967 in Nathula in Sikkim when there was an armed clash with the Chinese. In 1987 there was another intrusion by the Chinese, this time in Sumdorong Chu in Arunachal Pradesh. The Indian Army reacted swiftly and airlifted an entire brigade into the area and after a few months of troop build-up on both sides the Chinese backed off. As in 1967 in Sikkim, India had taken a strong stand and shown the Chinese that they cannot get away so easily by intruding into Indian territory.

PLAAF MILITARY DOCTRINE

PLAAF military doctrine has its roots in People’s war enunciated by Mao after the communists took over power in 1949. Unlike the Indian Air Force, PLAAF was formed as part of PLA. This is changing now but for almost 50 years PLAAF thinking was dominated by the army and its role was to

The active defence strategy has two components, defensive campaigns and attack campaigns, either of which could be independent PLAAF campaigns or joint campaign with other services. The process of “informationisation” involves fighting a joint services network centric combat campaign, battlefield situational awareness and use of space assets.

provide tactical support to the army and to defend the homeland from air attacks. This backwardness in their thinking kept PLAAF focused on point defence of the capital Beijing and some other vital areas. It was only after the Gulf War of 1991 that PLAAF realised the importance of airpower in modern wars.

Another event which brought home the realisation of modernising PLAAF doctrinal thought was the Taiwan Straits Crisis in 1996 when the US, in a show of force, deployed two aircraft carriers in the Taiwan Straits. The Kosovo air campaign in 1999, Afghanistan 2001, and Iraq 2003 further brought home the message of employment of airpower in modern wars under high-tech conditions.

The Chinese armed forces now follow a strategy of “active defence” and aim to win local wars under conditions of “informationisation.” This strategy is given in their recent white paper of 2013 and in earlier white papers also. The active defence strategy has two components, defensive campaigns and attack campaigns, either of which could be independent PLAAF campaigns or joint campaign with other services. The process of “informationisation” involves fighting a joint services network centric combat campaign, battlefield situational awareness and use of space assets. Since the 1990s China has been modernising its armed forces. The air force now has modern fourth-generation multirole fighters like the SU-27/SU-30 and indigenous J-10. PLAAF has also acquired the very capable long-range surface-to-air missiles, S-300 series, from Russia.

PLAAF places primary importance on achieving air superiority by carrying out air to ground operations to destroy enemy air on the ground.³

3. Richard P. Hallion and Roger Cliff (eds.), “The Chinese Air Force: Evolving Concepts, Roles, and Capabilities,” National Defence University Press, p. 156.

It is likely that in the beginning of the war the PLAAF will utilise the Second Artillery conventional ballistic/cruise missile for attacks on the enemy command and control centres, surface-to-air missile sites, radars, communication centres, DEAD (destruction of enemy air defences), and important airfields. Then follow it up with an air offensive by fighter/bomber aircraft to support a PLA ground offensive. This is the classic manner in which airpower is employed to gain control of the air, but it is difficult to execute against a determined and strong enemy.

CHINESE BALLISTIC AND CRUISE MISSILE THREAT

Since China is likely to use its conventional warhead ballistic and cruise missiles in war it will be pertinent to analyse the threat from these missiles. Nuclear threat is not being discussed here since that is a separate topic by itself.

China's Second Artillery Force (SAF) is responsible for the country's strategic nuclear and conventional ballistic and cruise missiles. China has a large ballistic and cruise missile force which it is expanding in both size and types of missiles. According to the US National Air and Space Intelligence Centre's report on "Ballistic and Cruise Missile Threat" issued in 2013, "China has the most active and diverse ballistic missile development programme in the world." The strength and type of missiles in China's inventory is given in Table 1 below:

Table 1: China's Missile Force⁴

System	Missiles	Launchers	Estimated Range
ICBM	50-75	50-75	5,500+ km
IRBM	5-20	5-20	3,000-5,500 km
MRBM	75-100	75-100	1,000-3,000 km
SRBM	1,000- 1,200	200-250	<1,000 km
GLCM (Ground launched cruise missile)	200-500	40-55	1,500+ km

4. US DOD, "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2012," http://www.defense.gov/pubs/pdfs/2012_cmpr_final.pdf

The PLA's Second Artillery Conventional Missile Brigade is equipped with the Dong Feng 3 and Dong Feng 21 mid-range ballistic missile models, the DF-15 short-range ballistic missile model, and the cruise missile DH-10 (also called CJ-10). Most of these missiles are deployed on China's east coast targeted at Taiwan. One brigade of DF-15 is reported to be deployed in Chengdu targeted at India.

Their major force is of 1,000-1,200 short range ballistic missiles (SRBMs) of up to 1,000 km range and 200-500 GLCM/LACM (Ground launched/Land attack cruise missile) of 1,500 km range. The MRBMs form a force of about 75-100 missiles with a range of up to 3,000 km. The PLA's Second Artillery Conventional Missile Brigade is equipped with the Dong Feng 3 and Dong Feng 21 mid-range ballistic missile models, the DF-15 short-range ballistic missile model, and the cruise missile DH-10 (also called CJ-10). Most of these missiles are deployed on China's east coast targeted at Taiwan. One brigade of DF-15 is reported to be deployed in Chengdu targeted at India.⁵

The DF-3 is no more in use since it is obsolete so the missiles which will shoulder the role for conventional long-range attacks will be the MRBM DF-21; SRBMs DF-15 and DF-11; and the DH-10 cruise missile. There are no confirmed reports on the accuracy of these missiles, so for the purpose of our analysis it can be reasonably expected that the DF-21/DF-15/DF-11 ballistic missiles will have a CEP of 150 m and the DH-10 cruise will have a CEP of 30 m.⁶ China is likely to use these missiles to target our command and control centres, radars, missile sites and airfields. To target an airfield runway and taxi track the minimum number of DMPIs (desired mean point of impact) required will be three for the runway and two for the taxi track. Each DMPI will require a minimum of two hits. Now, if we take the example of their most accurate missile, the DH-10, they will require 10 cruise missiles to shut down one airfield for a short duration of six hours. The crater damage to the runway can be repaired with quick setting cement within

5. <https://web.duke.edu/pass/pdf/warpeaceconf/p-lin.pdf> accessed on September 12, 2013.
6. Sinodefence has given DF-15 CEP as 150 m to 500 m. <http://www.sinodefence.com/strategic/missile/df15.asp>; accessed on September 12, 2013. Another site, http://chinavsindia.org/ballistic_missiles.html has given DF-11A CEP as 200 m.

six hours. To keep one airfield shut for twenty-four hours PLAAF will require forty missiles. This will not make any difference to IAF operations in the east or in the west since IAF has a large number of other operational airfields to operate from. If PLAAF attacks at five airfields they will require 200 missiles per day for attacking the runway and taxi track alone. The number of cruise missiles in their inventory is 200 to 500. Taking the higher figure of 500 and a consumption rate of 200 missiles per day, their stock would be over in two and a half days, with no other major target systems like C2 Centres or air defence units being addressed.

In the case of their MRBM/SRBMs the number required will be more because their inaccuracy is higher (CEP 150 m). PLAAF will require 440 MRBM/SRBMs per day for one airfield. Their stock of 1,300 MRBM/SRBMs will be over in one day when attacking just three airfields.

This does not take into account the number of missiles lost due to launch failures or missed hits. If we take these losses into account then the depletion rate will be even higher. Thus, we can see that the threat from China's conventional missiles is not incapacitating. The best defensive strategy against China's missiles is to deter them by developing similar capabilities so that India can strike counterforce targets in China and also industrial targets in eastern China. The Brahmos cruise missile development needs to be stepped up with longer range and precision. Brahmos 2 is being developed with a range of 500 km but plans need to be made to go up to greater ranges. Similarly we need to step up on conventionally armed MRBM/IRBM Agni ballistic missiles.

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Taking the total number of combat aircraft in both the air forces, PLAAF has 2.1 is to 1 advantage over the IAF but mere numbers do not cover the full story. PLAAF does not have the capability to deploy a large force of aircraft in Tibet against India due to insufficient number of airfields in Tibet and lack of infrastructure to carry out sustained fighter operations. But the large number of aircraft in PLAAF inventory gives them the advantage to quickly replace attrition losses.

Another way to counter China's missiles is to intercept them after launch. This presents its own challenges in terms of sufficient resources for BMD, AWACS, tankers, aerostat radars, fighters and missiles. IAF at present does not have these resources in large numbers to be really effective. Meanwhile, more modern means of runway repair material in the form of aluminium mats need to be explored to keep the runway down time to minutes instead of hours.

PLAAF COMBAT AIRCRAFT FORCE STRUCTURE

PLAAF has total combat aircraft strength of 1,693, as given in *Military Balance 2012*. The force structure is as given in

Table 2 below (naval aviation aircraft are not included):

Table 2: PLAAF combat aircraft force structure.

S. No.	Type	Name	Numbers
1	Bombers	H-6A/E/H/K/M (Copy of TU-16)	82
2	Fighters/Multirole Fighters	J-7 E/G (Copy of Mig-21)	552
		J-8 B/F/H	168
		J-11/J11 B/BS (License produced SU-27)	165
		SU-27 SK/ UBK	75
		SU-30 MKK	73
		J-10 A/S	200

3	Fighter Ground Attack	JH-7/JH-7A	72
		Q-5 C/D	120
4	Electronic Warfare	Y-8 CB/G/XZ (Copy of AN-12)	13
5	ELINT	TU-154 M/D	4
6	ISR	JZ-6/JZ-8/JZ-8F/Y-8H1	99
7	AWACS/AEW	KJ-200 (Y-8 airframe)	4
		KJ-2000 (IL-76 airframe)	4
8	Tanker	H-6U	10
9	Command and Control	B-737	2
		Y-8T	3

INDIAN AIR FORCE COMBAT AIRCRAFT FORCE STRUCTURE

The IAF has total combat aircraft strength of 798, as per *Military Balance 2012*. The force structure is given in Table 3 below-

Table 3: IAF combat aircraft force structure.

S. No.	Type	Name	Numbers
1	Fighters/ Multirole Fighters	Mig-21 M/MF/Bis	141
		Mig-21 Bison	119
		Mig-29	64
		Mirage-2000	52
		Su-30MKI	153
2	Fighter Ground Attack	Jaguar IB/IS/IM	106
		Mig-27ML	127
3	ISR	Gulfstream IV SRA-4	3
4	AWACS	IL-76TD PHALCON	3
5	Tanker	IL-78MKI	6

ANALYSIS OF FORCE STRUCTURE

Taking the total number of combat aircraft in both the air forces, PLAAF has 2.1 is to 1 advantage over the IAF but mere numbers do not cover the full story. PLAAF does not have the capability to deploy a large force of

aircraft in Tibet against India due to insufficient number of airfields in Tibet and lack of infrastructure to carry out sustained fighter operations. But the large number of aircraft in PLAAF inventory gives them the advantage to quickly replace attrition losses.

PLAAF Fighter Force. PLAAF has a fighter/multirole fighter strength of 1,233 aircraft and more than half of this is of old generation fighter/attack aircraft like the J-7 (MiG-21) and the indigenous J-8. These aircraft are likely to be in service for the next few years till they are replaced by newer aircraft like the J-10 and J-11/SU-30. China is also producing a new stealth fighter called the J-20 which is likely to enter service in 2018. PLAAF has 513 fourth generation fighters like the J-10, J-11/SU-27/SU-30 and these constitute only about 41% of the fighter/multirole force but PLAAF is modernising and this number is likely to increase in the coming years.

IAF Fighter Force. IAF has 384 SU-30/MiG-29/Mirage-2000/MiG-21 Bison aircraft which have the capability to launch beyond visual range (BVR) air-to-air missiles. The MiG-21 Bison though on an old airframe is a formidable weapons platform with the Kopyo fire control radar and RVV-AEE (R-77 Adder) BVR air-to-air missiles. In the air-to-ground role the MiG-21 Bison can also carry PGMs. Another point to note is that the SU-30MKI of the IAF has many advantages compared to the Chinese air force SU-30MKK. The SU-30MKI has been fitted with the N-011 BARS fire control radar which has better performance than the N001VE KnAAPO radar of the SU-30MKK. To give an example, the SU-30MKI has a pick up range of 210 km on a one square metre target, compared to 130 km to 140 km range of the SU-30MKK radar on a similar target.⁷ This is a big advantage because in air combat whoever spots the other one first, either electronically or visually, is at an advantage.

The SU-30MKI has thrust vector controls (TVC) which is not there in the SU-30MKK. Thrust vector controls give the pilot better manoeuvrability in close combat. According to Dr. Carlo Kopp, Editor-in-chief of *Air Power Australia*, the "The Indian SU-30MKI is to date the most advanced SU-27

7. Detection range data is from *Air Power Australia* article <http://www.ausairpower.net/APA-Flanker-Radars.html> accessed on September 10, 2013.

derivative to enter production.” About the SU-30MKK which the PLAAF has, he says it is “less accurate and less capable in the air-air role as the SU-30MKI.” He further states of the fire control radar of the IAF SU-30MKI, “The NIIP N011M BARS phased array is the most capable fighter radar produced by Russian industry and is designed to support the R-77M family of ramjet missiles.”⁸

The IAF is also planning induction of 126 French Rafale fighter aircraft for the MMRCA (Medium Multi Role Combat Aircraft) role. This deal is in the contract negotiation stage and once it is finalised deliveries will start within three years. IAF is also planning induction of its stealth aircraft in the next few years. This aircraft is being developed in collaboration with the Russians and has been called the Fifth Generation Fighter Aircraft (FGFA) by the IAF and PAK-FA or the T-50 by the Russians. The aircraft is being developed in Russia and Sukhoi has been chosen to lead the design team. The first prototype flight test was carried out in 2009 and the development aircraft is expected to be in India in 2017 with production planned to start in 2022. This aircraft will have super cruise capability, that means it will be capable of cruising at supersonic speed⁹ in dry power.

Tankers. PLAAF’s tanker force is limited to just ten aircraft of the H-6 class. The H-6U tanker is a modified TU-16 bomber of the Soviet era. These tankers are capable of refuelling only indigenous Chinese fighters like the J-8s and J-10s. They cannot refuel the J-11/SU-27/SU-30 due to compatibility problems. The H-6U has two refuelling points, one on each wing and carries

To refuel PLAAF fighters over Tibet the H-6U will have to take off with full load from rear airfields at lower heights, because of take-off load limitations at high altitude airfields in Tibet. This will take a longer time and thus affect their sortie generation rate. China had attempted to purchase eight IL-78 tankers from Russia but the deal was cancelled.

8. Dr. Carlo Kopp, “Sukhoi Flankers the Shifting Balance of Regional Air Power,” in *Air Power Australia*; <http://www.ausairpower.net/APA-Flanker.html> accessed on September 10, 2013.

9. Gp Capt. B. Menon, “Fifth Generation Fighter Aircraft for the Indian Air Force,” in IDR; <http://www.indiandefencereview.com/news/fifth-generation-fighter-aircraft-for-the-indian-air-force/> accessed on September 10, 2013.

about 18.5 tonnes of fuel for refuelling which is much less than the Russian IL-78 and tankers of Western countries. With 18.5 tonnes of fuel the H-6U can refuel about three to four aircraft in one round. To refuel PLAAF fighters over Tibet the H-6U will have to take off with full load from rear airfields at lower heights, because of take-off load limitations at high altitude airfields in Tibet. This will take a longer time and thus affect their sortie generation rate. China had attempted to purchase eight IL-78 tankers from Russia but the deal was cancelled. China is unable to procure tankers from Western countries due to sanctions after the Tiananmen Square incidents of 1989.

IAF has a tanker force of six IL-78MKI aircraft. The IL-78MKI is a tailor-made variant of IL-78M and is equipped with Israeli fuel-transferring systems. These aircraft are more advanced than the Chinese tankers. The IL-78MKI refuelling capacity is more than double that of the H-6U.

AWACS. China's AWACS/AEW fleet is also limited to four Kong Jing-2000 (KJ-2000) and four of the smaller KJ-200. The KJ-2000 AWACS is based on the IL-76 airframe which China procured from Russia; the radar has been produced in China. The other Chinese AEW aircraft is the Kong Jing-200 which had its first flight in 2005. The KJ-200 with its balance beam-like radar on the back of its Yun-8 (Y-8 is a Chinese copy of Russian AN-12) airframe is a smaller AEW system which supplements the larger AWACS cover. Since the Y-8 is a turboprop aircraft its cruising altitude is lower than the jet engine KJ-2000. Consequently the KJ-200 detection range is also less than the KJ-2000.

Interestingly, China's first attempt to make an indigenous airborne warning and control system (AWACS), called the Kong Jing-1 (KJ-1), dates back to 1969. This project was undertaken on a 1950s designed Soviet TU-4 Bull aircraft. The project was not successful since China did not have the technology to overcome ground clutter problems. In airborne radar the signal return from ground echoes is stronger than the target signal and the radar system must be designed to overcome this limitation. The Chinese were unable to do this and the project was abandoned.

Since then China had been trying to purchase or develop an airborne warning and control capability. In the 1970s relations between China and

USA improved with the express intention of jointly opposing the then Soviet Union as their common enemy. Taking advantage of this situation China began exploring the purchase of E-3A Sentry AWACS from USA. This subject was taken up by the Chinese during President Reagan's visit to China in 1984 but nothing seems to have come off it.¹⁰ The Chinese also negotiated with a number of Western firms to produce jointly an indigenous AWACS. These firms were: Westinghouse (USA); Marconi (UK); Thorn-EMI (UK); and Dornier GmbH (then FRG). China's Harbin aircraft corporation had developed an AEW prototype aircraft by installing the Thorn-EMI Skymaster radar on the Y-12 turbo panda aircraft. A small number of these aircraft were used for maritime surveillance.

India on the other hand has three AWACS and two more are in the pipeline. IAF AWACS are also based on the IL-76/A-50EI airframe but the Phalcon radar is from Israel. Both the IAF and Chinese AWACS are on the same IL-76 platform and their performance also is probably similar since their design is similar with both having active electronically steerable array (AESA) radar. The Chinese had also ordered their Phalcon radar from the Israelis in the mid-1990s but Israel had to cancel the deal in 2000 under pressure from USA. The Americans did not want AWACS technology to fall in the hands of the Chinese. They saw this deal as a threat to Taiwan and of US interests in the region. The Chinese were obviously not pleased with this development but they were determined to have an AWACS. This cancellation of the deal by the Israelis speeded up their own indigenous development. Although the Israelis had removed all the Phalcon radar components the Chinese managed to get some of the technology from them.¹¹ Both the PLAAF and IAF will face AWACS performance limitations in the hills since undulations in the terrain will create detection problems for aircraft masked by hills. The laws of physics are universally applicable

10. US DIA report, "China's Early Warning Capability." <http://www.dia.mil/public-affairs/foia/pdf/CHINA/CHINA'S%20EARLY%20WARNING%20CAPABILITY.pdf>, accessed on September 10, 2013.

11. Mr. Wang Xiaomo, a leading Chinese radar expert, in an interview explained the details how China developed its AWACS KJ-2000 and KJ-200, available online on Asian defence website <http://theasiandefence.blogspot.in/2009/10/development-of-chinese-kj-2000-awacs.html>, accessed on September 10, 2013.

PLA is organised on a regional basis with the country divided into seven military regions (MRs). There are only two military regions opposite India. Lanzhou is opposite Ladakh area and Chengdu is opposite India's north east region and parts of the central sector. The Military Region Air Force (MRAF) are also co-located with the PLA MRs. MRAF is subordinate to the MR.

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In Tibet the main airfields are Gonggar/Kongka Dzong (South of Lhasa at an elevation of 3,570 m), and Hoping (airfield for Shigatse, 250 km west of Lhasa). There is one civil airfield in south Xinjiang Military District of Lanzhou MR that is Gar Gunsu (elevation 4,240 m). The airfields opposite the North Eastern part of India are Bangda/Pangta (elevation 4,334 m, runway length 4,200 m) which is about 130 km from the Indian border and Linzhi in Nyingchi prefecture. Linzhi is a civil airfield at an elevation of 2,949 m, which was opened in 2006, it is just 30 km from the Indian border in Arunachal Pradesh. In addition to these there are two airfields in Lanzhou MR, that is, Kashgar and Hotan. Kashgar is a civil airfield and is quite far for providing close air support to PLA in the Ladakh sector. The distance from Kashgar to Leh is about 570 km. From this distance PLAAF can launch counter air

and requirement of line of sight condition has to be met for radar pick up.

PLAAF AIR OPERATIONS AGAINST INDIA

In any India-China conflict the PLA cannot launch an attack without support of the PLAAF. Due to a number of factors, which will be discussed subsequently, PLAAF's capability to launch a sustained campaign against IAF and to support the PLA ground operations is severely hampered.

PLA is organised on a regional basis with the country divided into seven military regions (MRs). There are only two military regions opposite India. Lanzhou is opposite Ladakh area and Chengdu is opposite India's north east region and parts of the central

strikes but for sustained air support to PLA land campaign, the airfields should be around 200 km from the tactical battle area. Hotan and Gar Gunsa airfields are closer with the distance to Leh being about 330 km to 350 km. The airfields in Tibet are mostly at heights of more than 3,000 m. At these high altitudes aircraft operations suffer from load penalties due to the reduced density of air. This will be a serious limitation for PLAAF even with aerial refuelling.

From available open source imagery it can be seen that these airfields do not have blast pens for parking of fighters in hardened concrete shelters. This means the aircraft will have to be parked in the open thus exposing them to IAF counter air strikes. IAF strike aircraft armed with sensor fused weapons can

destroy these aircraft on the tarmac. Airfield infrastructure capabilities and limitations can significantly affect fighter operations. PLAAF will have to considerably improve these airfields for sustained operations. Fighter operations require logistics and maintenance facilities. Fuel and weapons storage sites would need to be built from scratch, or dramatically expanded. A detailed analysis of airfield suitability would require more current and detailed data that cannot be obtained from open sources, but it is evident that PLAAF at present does not have adequate facilities at their airbases in Tibet. If PLAAF decides to upgrade all their facilities it will take at least one to two years, on fast track, to construct all the requirements. India will have to keep a close watch on these airfields and monitor any developments taking place there. There have also been

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reports of China developing new airfields in Tibet¹² but these are austere airfields and do not have infrastructure for sustained fighter operations. As has been explained earlier, fighter operations require proper support infrastructure. For example, precision guided air-to-ground weapons require special weapon storage bays for the weapons to perform at their optimum level of accuracy. In the present state of their airfields in Tibet, PLAAF is not capable of achieving air superiority against the IAF.

In contrast to PLAAF the IAF has the advantage of operating from most of their airfields in the plains from where they can take off with full bomb load. IAF also has sufficient number of airfields in Western Air Command and Eastern Air Command to sustain the air campaign against China.

In addition to all the infrastructure requirements, the Chinese will have to establish a base air defence centre to provide cover against IAF air threat. To defend the air base PLAAF is likely to deploy the following ground based air defence weapons (fighter interceptor aircraft are not being included since they will be employed for area defence):

- Anti-aircraft artillery 100 mm/85 mm.
- TOR M-1 (SA-15 "Gauntlet") surface-to-air missiles.
- S-300PMU/PMU1/PMU2 surface-to-air missiles.

Anti-Aircraft Artillery. PLAAF has about 16,000 100 mm/85 mm anti-aircraft guns. In addition the PLA Army has its own anti-aircraft artillery of about 7,700 guns but they are of lower calibre (23 mm, 25 mm, 35 mm, and 57 mm). PLAAF is likely to deploy its higher calibre guns for airfield defence and other important locations. These guns are likely to have a maximum range of about 5 km to 7 km and be effective up to a height of about 3,000 m. Against modern high-speed aircraft these guns will not be very effective and will just be of nuisance value.

TOR M-1 (SA-15 Gauntlet). China has procured about 60 launchers of Russian TOR M-1 (NATO code name SA-15 Gauntlet), these are on the inventory of the PLA Army and not the PLAAF.¹³ In addition to being

12. Gurmeet Kanwal and Monika Chansoria, "China Preparing Tibet as Future War Zone," <http://www.deccanherald.com/content/165996/> accessed on September 10, 2013.

13. Launcher numbers have been taken from *Military Balance 2012*.

deployed with the army, these missiles are also likely to be deployed at airbases to provide protection from air threats. TOR M-1 is a highly mobile, rapid reaction, short-range surface-to-air missile designed to engage and destroy not only low flying fighter aircraft and helicopters, but also cruise missiles, stand-off missiles and smart bombs during their terminal flight phase.¹⁴ Some of the main features of the system are given below:

- Effective range—1.5 km to 12 km.
- Target altitude—10 m to 6 km.
- Acquisition radar maximum range for a small target of 0.1 m²—18 km to 22 km.
- Target maximum speed for engagement—700 m/s (2.06M) and g-load up to 10 g.
- Missile maximum speed—850 m/s (2.5 M).
- Reaction time—3.6 s to 10.6 s.
- Battery composition—One Battery Command Post (BCP); Four combat vehicles (CVs). Each CV carries eight vertically launched 9K331 missiles in sealed containers. After launch the missiles turn in the direction of the target for interception. In addition each battery is provided with transloaders and maintenance trucks.

Russian concept is that S-300PMU and TOR M-1 are to be co-located so that terminal point defence against guided weapons aimed at the S-300 battery are intercepted by TOR missiles. PLAAF is also likely to follow a similar concept and deploy them along with the S-300PMU batteries. IAF will have to employ considerable SEAD/DEAD effort to neutralise these systems before launching counter air strikes on these targets. TOR M-1 is mounted on tracked vehicles for better cross-country mobility. Each combat vehicle (CV) is a fully self-contained package, with search radar, a monopulse target tracking radar, and eight guided missiles.¹⁵ The radar can search on the move but to launch it has to

14. Dr. Carlo Kopp, "Self Propelled Air Defence System/SA-15 Gauntlet," in *Air Power Australia* <http://www.ausairpower.net/APA-9K331-Tor.html> accessed on September 25, 2013.

15. *Ibid.*

stop for a very short duration. Attacking aircraft will have to know its precise location to destroy it. This will require real-time ISR (Intelligence Surveillance and Reconnaissance) capability. IAF will need to look into its ISR capabilities. IAF has three Gulfstream IV SRA-4 aircraft for ISR duties.¹⁶ Flying at flight level 400, inside own territory, it can be expected that it will have a detection range of about 200 km to 300 km. Therefore, for targets beyond this range some other capabilities have to be made available through satellites/UAVs.

S-300PMU/PMU1/PMU2 Surface-to-Air Missile. The S-300PMU (P—Podvizhnyy (Mobile); M—Modifitsirovanyy (Modified); U—Uovershenstvannyy (Upgraded); 1—(Upgrade 1) series are the export versions of Russia's lethal long-range surface-to-air missiles. China had first procured the S-300PMU (NATO code name SA-10 Grumble) in 1993. In 1994 a contract was signed for another eight batteries of the improved version S-300PMU1 (SA-10A). The S-300PMU1 is an improved version of S-300PMU with more range and capability to engage ballistic missiles of up to Mach 9 speed. In 2001 another eight batteries of S-300PMU1 were ordered. In 2002/3 China ordered 16 batteries of the more advanced S-300PMU2. The S-300PMU2 *Favorit* (SA-21 Gargoyle) variant is a new missile with larger warhead and better guidance with a range of 200 km, versus the 150 km range of previous versions. In addition to these SAMs, China also has its own indigenous long-range SAM called Hong Qi-9 (HQ-9). This missile has a maximum range of about 90 km to 120 km and is a Chinese derivative of the S-300PMU with some characteristics of US Patriot air defence missile system.¹⁷ Apparently the Chinese have not been able to match it with the more advanced S-300PMU2 and have therefore stopped inducting it.

Table 4 below gives the main features of PLAAF long range SAMs:

16. *Military Balance* 2012.

17. Missile maximum range figures are from *Jane's Strategic Weapon Systems*, issue 55.

Table 4: PLAAF long-range SAMs

PLAAF LONG-RANGE SAMs					
	S-300PMU (SA-10B)	S-300 PMU1 (SA-20)	S-300PMU2 (SA-20) <i>Favorit</i>	HQ-9	Total
Number of Launchers ¹⁸	32	64	64	32	192
Maximum range	75 km	150 km	200 km	90 km to 120 km	
Guidance	Semi Active Radar	Track Via missile	Track Via missile	Track Via missile	

According to US DOD Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2013, “PLA Air Force possesses one of the largest forces of advanced SAM systems in the world.” In addition China is also negotiating with Russia for purchase of their newest long-range SAM, the S-400 TRIUMF. According to the DOD report, “contract has not been signed as yet and Russian officials have stated China would not receive the S-400 until at least 2017.” This missile has a maximum range of 400 km.

The S-300 is a modular system and can be deployed in different combinations but for our ease of understanding we will take a standard S-300PMU2 complex and see its composition, which is given below:

- Central Command Post which forms part of the Battle management complex.
- Big Bird surveillance radar. It can be located up to 1 km from the command post. The Big Bird 64N6NE phased array radar is designed to pick up aircraft, cruise missiles and ballistic missiles. It has a large 2 GHz band reflective phased array antenna with boom mounted feeds, in a dual sector back-to-back arrangement. The large antenna gives it good antenna gain with low side lobes. This will make it difficult to jam. The antenna aperture size is larger than the American Aegis SPY1A ship borne radar. The detection range is about 300 km.¹⁹

18. *Military Balance 2012.*

19. “Search and Acquisition Radars,” *Air Power Australia*. <http://www.ausairpower.net/APA-Acquisition-GCI.html#mozTocId420074> accessed on September 10, 2013.

S-300 uses phased array radars which are difficult to jam due to their agile beam steering, high antenna aperture very low side lobes, high power, monopulse angle tracking and other ECCM features. Normal stand-off jammers and self-protection jamming suites may not be very effective against these missiles.

- Each Central command post can control up to six batteries which can be at a distance of up to 100 km. Communication with the batteries can be on radio link or land-line.
- Each Battery has one acquisition radar and one engagement/fire control radar, Tombstone 30N6E2. The engagement radar can control up to 12 Transporter Erector Launchers (TELs) and each launcher has four missiles in vertical position for cold launch from tubular canisters. The most critical radar in any SAM system is the target engagement radar. The engagement radars used by the S-300PMU series SAM systems are large phased array radars. The engagement radars exported to China have been mounted on all-terrain

vehicles for rapid deployment and enhanced system mobility over rough terrain. Apparently rapid mobility was an important requirement of the Chinese since it enhances survivability. Thus, there will be 6 engagement radars which have to be hit to make a S-300 SAM site ineffective.

- Most of the vehicles are quite heavy and big (Kraz/Maz class) which should make them easy to locate by ISR systems. However, the equipment containers can be removed from their respective vehicle chassis for emplacement in bunkers or hardened shelters if required.²⁰

An analysis of S-300 SAM system reveals:

- S-300 uses phased array radars which are difficult to jam due to their agile beam steering, high antenna aperture very low side lobes, high power, monopulse angle tracking and other ECCM features. Normal stand-off jammers and self-protection jamming suites may not be very effective against these missiles. But the SU-30 MKI in the IAF carries two KNIRTI Sorbstiya jammer pods, one on each wing tip. This pod has digital radio

20. <http://www.ausairpower.net/APA-S-300PMU2-Favorit.html>.

frequency memory (DRFM) capability which is very effective against monopulse emitters.

- It seems that except for the early model PMU systems, PLAAF does not use antenna mast for deployment of PMU1 and PMU2 missiles as it hampers mobility. Without mast the S-300 has an advertised deployment/dismantling time of 5 minutes. Thus, targeting them will require very accurate geo-location and real-time data flow to the shooter aircraft for hard kill.
- These missiles have a maximum range of 200 km. This range is at medium/high levels, at low level the missile range will reduce. Therefore, the best and universal tactic against these SAMs is to fly low, use undulations in the terrain to stay out of missile radar envelope and launch stand-off precision weapons from long range. The Indo-Russian jointly developed Brahmos supersonic cruise missile which has a range of 290 km can be launched against these targets. The air launched version of Brahmos is under development and will soon be inducted in the IAF. There are plans to develop Brahmos to 500 km range. IAF must have these types of missiles in sufficient quantity and include stealth features in it to enhance its survivability.
- Stealth is a very effective technology with which a strike aircraft can penetrate and carry out DEAD against a highly effective S-300 based air defence system. The planned induction of the Indo-Russian Stealth FGFA (Fifth Generation Fighter Aircraft) in the coming years will give us the required capability to attack S-300 type of missile sites.
- Use of small diameter bombs. The small diameter bomb is a precision guided bomb that can be mounted on a fighter aircraft's internal or external hard point or on UCAVs. The GBU-39 with the USAF is a low cost 140 kg PGM with about 70 km range and can penetrate 1.2 m steel or concrete. We need to have these types of weapons to destroy missile sites and other targets with precision.
- Another method to carry out DEAD against the S-300 site is to use the lethal drone like the Israel Aircraft Industries (IAI) Harpy, in the inventory of the IAF. The Harpy is a 2.7 m long, delta-winged air vehicle that is

Looking ahead, in the future the IAF needs to consider the unmanned combat vehicles (UCAVs) like the X-47 and the X-45 for the SEAD/DEAD mission. The stealth features in the UCAVs will enable them to get close and either jam or destroy the missile radars. In the same vein it seems likely that Active Electronically Steered Antenna (AESA) planned for the Indo-Russian stealth capable fifth generation fighter aircraft (FGFA) will include electronic attack (EA) modes, which, when combined with its stealth, will enable them to seek out and blind hostile radars

designed for either ground or ship board launch and provides an autonomous fire and forget DEAD capability of up to 500 km and with an endurance (over a 400 km radius) of up to 2 hours. Target detection is by means of an onboard passive radar receiver. The weapon is equipped with a 32 kg high-explosive warhead that is detonated above its target by a proximity fuse. The vehicle's seeker head is understood to have been upgraded to cover a wider frequency range. It was also reported that IAI was in the process of developing a Harpy variant that is equipped with a data link and a dual electromagnetic/electrooptical seeker head. The reason for this supposed upgrade could be to have the ability to launch a large number of Harpy drones into a target area and continuously update them on potential targets and target priorities,

with the update data being generated by an associated ground station or an airborne control centre.²¹

- Mobile SAM systems like the S-300 need to be eliminated in very short time frames. Thus, a DEAD mission against these types of missile sites is preferable with SEAD providing the necessary back-up. Looking ahead, in the future the IAF needs to consider the unmanned combat vehicles (UCAVs) like the X-47 and the X-45 for the SEAD/DEAD mission. The stealth features in the UCAVs will enable them to get close and either jam or destroy the missile radars. In the same vein it seems likely that Active Electronically Steered Antenna (AESA) planned for the Indo-Russian

21. *Jane's Special Report 2005.*

stealth capable fifth generation fighter aircraft (FGFA) will include electronic attack (EA) modes, which, when combined with its stealth, will enable them to seek out and blind hostile radars in support of their own operations as well as those of other aircraft in the battle zone. EA capability must be added as a standard in the FGFA.

- Another method which sounds very promising is the use of microwave energy weapons to burn out the computers and other electronic equipment associated with air defence networks. The USAF's Suter technology has proved the viability of invading hostile air defence networks and making the system unusable or introducing false target information.²² IAF needs to look into this technology since these methods in combination with other measures would make even the most potent air defence system virtually ineffective. The Israelis showed their capabilities for network attack during their air attack on Syria's nuclear plant at Dayr-az-Dawr in September 2007. The Israelis had shut down the Syrian air defence system for half an hour during the raid. Not a single SAM was fired at the Israeli aircraft and all of them returned home safely after destroying the nuclear reactor. The Israeli capability was similar to the Suter network invasion capability developed by USA using the EC-130 Compass call electronic attack aircraft to shoot data streams into enemy antennas. The passive EC-135 joint electronic surveillance aircraft then monitors enemy signals to check effectiveness of the data streams on the target sensors. Israel has been able to duplicate this facility by modifying its two Gulfstream G550 special mission aircraft.²³

CHINA'S VULNERABILITY TO AIR INTERDICTION IN TIBET

The Tibetan plateau is surrounded by massive mountain ranges on all sides. The plateau is bounded by the Kunlun Mountains in the north and the Himalayas in the south. To the east and southeast the plateau gives way to the forested gorge and ridge geography of the mountainous headwaters of the Salween, Mekong, and Yangtze rivers in the Hengduan

22. *Jane's Defence Weekly*, December 7, 2005.

23. *Aviation Week & Space Technology*, November 26, 2007.

The Eastern Highway (Sichuan-Tibet) links Tibet to the eastern part of China. The road from Chengdu to Lhasa is divided into two, the Northern route and the Southern route. The Northern route was made first in 1954 but it was found to be difficult to maintain due to the arduous mountain terrain. In 1969 another highway was built from the south as an alternative to the northern route. These routes are treacherous and pass through dozens of bridges on the rivers en route like the Mekong, Salween, Dadu, Jinsha, Lantsang and Nujiang.

Mountains of western Sichuan. In the west it is embraced by the curve of the Karakoram Range of northern Kashmir. The plateau is at an approximate average height of 4,000 m. There are four main highways connecting Tibet to mainland China, these are the Central Highway (Qinghai-Tibet); Western Highway (Xinjiang-Tibet); Eastern Highway (Sichuan-Tibet); and Yunnan-Tibet Highway. Another major communication link is the Qinghai-Tibet Railway (QTR) line. In mountain terrain air interdiction dividends are more, compared to plains, due to limited lines of communication and a number of choke points at bridges over the rivers. The roads can also be blocked by creating landslides/avalanches by aerial bombing.

Central Highway. The Central highway (also called the Qinghai-Tibet highway) is 1,965 km long, it starts from Xining in Qinghai and ends at Lhasa city. This highway passes through high mountain ranges with Tanggula pass being the highest at 5,000 m. This highway is unreliable in winters as the snowfall makes it impassable.²⁴

Western Highway. The Western Highway links Xinjiang to Tibet. This highway runs through Aksai-Chin which is claimed by India. It is a 2,143-km road which runs from Kashgar in Xinjiang to Lhatse in Tibet. Construction of this highway began in 1951, and its completion in 1957 caught India by surprise, triggering tensions ahead of the 1962 conflict. Near Shigatse the road branches into three, one continuing toward Xinjiang the second leads

24. Mandip Singh, *Critical Assessment of China's Vulnerabilities in Tibet*, Institute for Defence Studies & Analyses Occasional Paper No.30.

to the Nathula border with India, and the third to Kathmandu, also called the Friendship Highway.

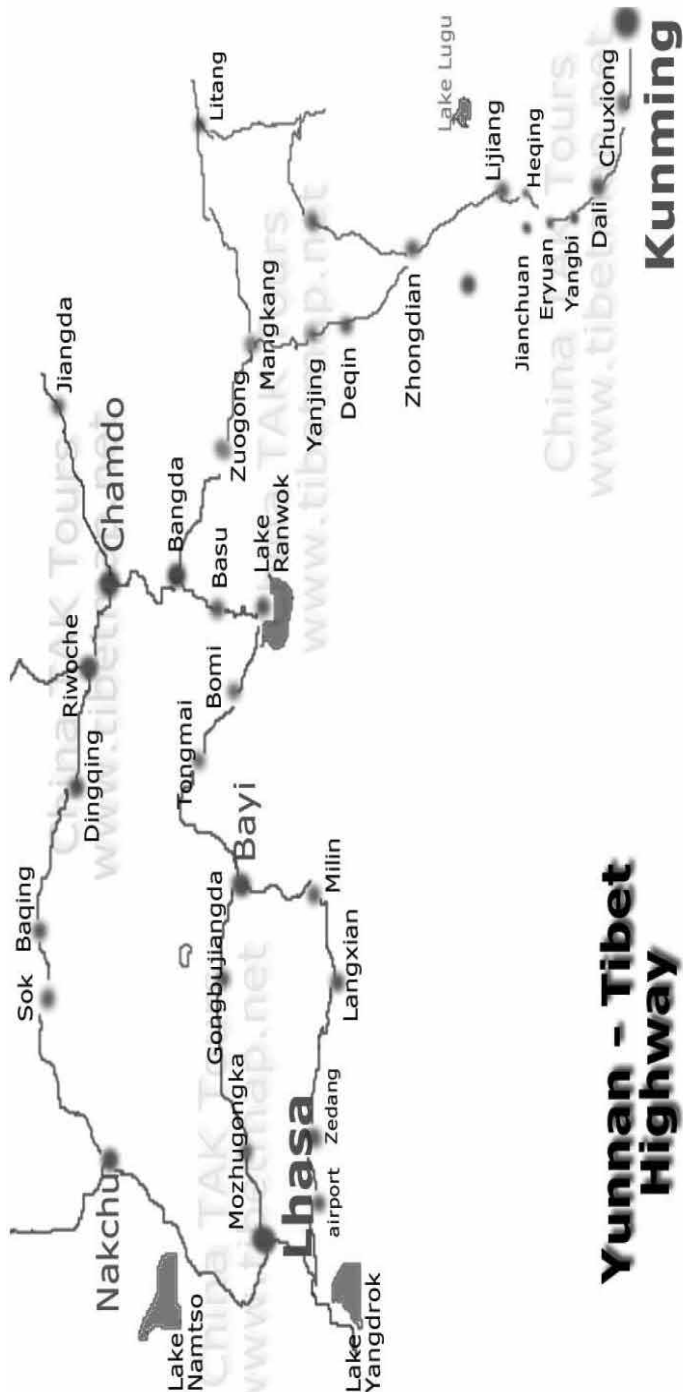
Eastern Highway. The Eastern Highway (Sichuan-Tibet) links Tibet to the eastern part of China. The road from Chengdu to Lhasa is divided into two, the Northern route and the Southern route. The Northern route was made first in 1954 but it was found to be difficult to maintain due to the arduous mountain terrain. In 1969 another highway was built from the south as an alternative to the northern route. These routes are treacherous and pass through dozens of bridges on the rivers en route like the Mekong, Salween, Dadu, Jinsha, Lantsang and Nujiang. The roads are susceptible to road blocks caused by frequent avalanches and landslides. The bridges on this highway are lucrative targets for air interdiction.

Yunnan-Tibet Highway. The 803 km long Yunnan-Tibet highway links Kunming in Yunnan to Lhasa in Tibet. It was constructed in 1979 as an alternative to the Sichuan-Tibet highway. The road passes through 4,330 m high mountains and crosses the rivers Jinsha and Lancang. This road runs adjacent to northern Myanmar and Arunachal Pradesh.

Qinghai-Tibet Railway (QTR). The 1,142 km, single lane Qinghai-Tibet Railway line runs from Golmud to Lhasa and was opened on July 1, 2006. Like the Qinghai-Tibet highway this also runs through mountainous terrain and the 5,000 m Tanggula pass. More than eighty per cent of the Golmud-Lhasa line is at an elevation of more than 4,000 m and there are 675 bridges totalling about 16 km.²⁵ China plans to extend the QTR to Nepal, Nyingchi, Yadong and Shigatse. While the QTR does give the PLA a strategic communication line for quick mobilisation of troops into Tibet it needs to be noted that it is only a single line and vulnerable to air interdiction by the IAF. The bridges that are within IAF range are prone to air attacks. The PLA cannot ensure air defence of the entire line.

Yarlung Tsangpo River. The Yarlung Tsangpo (Brahmaputra) runs through the heartland of Tibet from west to east. The river rises near Mount Kailash in the far west of Tibet and runs 2,900 km all the way across Tibet till it does a hairpin turn in eastern Tibet and flows towards India. The

25. <http://www.xinhuanet.com>



Map Source: [http://www.google.co.in/imgres?imgurl=http://www.tibetmap.net/Maps/rd-Km-Ls\(big\).jpg&imgrefurl=http://www.tibetmap.net/xl/OL-KunmingLasa.html&h=900&w=1100&sz=69&tbnid](http://www.google.co.in/imgres?imgurl=http://www.tibetmap.net/Maps/rd-Km-Ls(big).jpg&imgrefurl=http://www.tibetmap.net/xl/OL-KunmingLasa.html&h=900&w=1100&sz=69&tbnid)

In mountainous terrain air interdiction is very effective because there are no alternate routes and even those one or two which are there are also susceptible to air attacks. Important choke points like bridges are prime targets for interdiction. IAF will have to have sufficient PGMs to attack point targets like bridges.

river is aligned along the Shigatse-Lhasa line. The main bridges on the river are Paizhen bridge on the Lhasa-Nyingchi road; Qushui bridge on the Lhasa-Gonggar airport road; Tsetang bridge; Saga bridge to the west of Shigatse and Nyago bridge.²⁶ These bridges are also lucrative targets for air interdiction. These bridges are all-important for PLA troop movements from their rear base to the forward areas.

The main communication links of PLA in Tibet have been discussed above. In mountainous terrain air interdiction is very effective because there are no alternate

routes and even those one or two which are there are also susceptible to air attacks. Important choke points like bridges are prime targets for interdiction. IAF will have to have sufficient PGMs to attack point targets like bridges. Aerial bombing in the mountains can cause landslides thereby causing roadblocks. In mountain regions providing air defence cover to vital points is a difficult task due to limitations of terrain. The early warning available for ground-based air defence weapons like SAMs and anti-aircraft artillery can be severely degraded due to obstruction from high mountains. Guiding interceptor aircraft with AWACS or ground-based radars will also have similar limitations. Even if PLAAF launches their SU-30MKK fighters to intercept the attackers, they will be no match to the superior performance of the IAF SU-30MKI.

CONCLUSION

With the present state of airfield infrastructure in Tibet PLAAF is not capable of achieving air superiority against IAF. Consequently, PLAAF cannot launch an air offensive against India to support PLA Army ground offensive. The implication of this is that the Chinese army's capability,

26. Mandip, n. 24.

without support of its air force, will be severely limited. PLAAF can, no doubt, build up its airfield infrastructure for sustained air operations but this will take time and this is a trend which India will have to observe.

The main advantage that PLA has is in their Second Artillery's conventional capability. However, given the diversity of airfields available to the IAF, and the accuracy required to shut down these airfields for an adequate period of time, PLA does not have the numbers to pose a significant threat.

IAF needs to build up its combat aircraft fleet strength to handle both China and Pakistan. IAF mobile radar and missile units must be equipped and trained for true shoot and scoot capability so as to avoid being targeted by enemy missiles. IAF needs more long-range ISR capability to locate and track moving ground targets. IAF long-range precision weapons inventory needs to be increased. The Brahmos air-launched version will enhance IAF long-range precision attack capability. India's conventional ballistic and cruise missile inventory needs to be enhanced to counter Chinese capabilities.

Since China listens to only firmness, India needs to be determined to deter them whenever they create tensions.

THE DAULAT BEG OLDI CRISIS: MYTHS, MISTAKES AND LESSONS IN DEALING WITH CHINA

BHARTENDU KUMAR SINGH

INTRODUCTION

China and India enjoy relative peace between them and have avoided another war after the one fought in 1962. However, at times, there have been clashes and crises along the Line of Actual Control (LAC) that have put to test the conflict management skills of political and military leadership of both the countries. On each occasion, it shook India's public opinion. The summer crisis in 2013 was no different. As the Chinese PLA seized the opportunity and lay tents almost 19 km inside the Indian side of the Line of Actual Control (LAC) in the Daulti Beg Oldi (DBO) sector during April 15-May 5, 2013, the Indian public opinion was up in arms. The persistent refusal on the part of the Chinese troops to withdraw only raised the stakes in the crisis. Concurrently, the Government of India faced unprecedented strong domestic criticism over handling of relations with China in general and the border intrusion in particular. It is, however, apparent that India's domestic debate about handling relations with China suffers from many myths and mistakes as was evident during the recent crisis.

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This paper will, therefore, study the myths that were in propagation during the crisis. It will also study and analyse the mistakes that induced panic and urgency in the crisis. Finally, the paper will attempt to design the approach basket in handling such issues with China.

NATURE OF THE DBO CRISIS

The DBO crisis is no match to other crises that India has faced in its relatively peaceful but chequered relations with China. The Nathula crisis (1967) was the most intense in which the two sides waged a mini war over six days resulting in more Chinese deaths than Indian loss of lives. Similarly, the Sumdorong Chu crisis (1987) was another moment, perhaps most intense since 1962, when the two countries were on the verge of a war. In both the cases, the Chinese intrusion was on a very large scale that was matched by an equal and opposite response from India. On the other hand, the 2013 crisis was quite localised, small in number and less intense. The Chinese came, pitched their tents and stayed put, much to the chagrin of Indian troops patrolling the area and in blatant violation of all the confidence-building measures (CBMs) meant to avoid such intrusions on LAC. The Chinese foreign ministry and media downplayed and denied the intrusion theory. When the intrusion was noticed, the Government of India was confident of handling it and so was the army. India's diplomatic corps did not press the panic button; rather started working on it. It took three weeks of diplomatic parleys to resolve the crisis. However, an impatient media sensationalised the developments through inflated reporting and some politicians and strategic experts joined them in belittling the Government by identifying the DBO crisis as symbolic of India's capitulation before the Chinese might.

It is doubtful and debatable if the crisis ended because China cared for domestic public opinion in India. Rather, the Chinese media chose to chastise its Indian counterpart for working on trivial issues. Similarly, the proposition that neighbourhood concerns prompted China's Ladakh withdrawal¹ is again not sustainable since China has an aggressive strategic

1. Ananth Krishnan, "Neighbourhood Concerns may have Prompted China's Ladakh Withdrawal," *The Hindu* (New Delhi), July 20, 2013.

posture with its neighbours. The real motivations behind China's entry in DBO will remain a mystery with various theories doing the rounds, some of them discussed later in this paper. But China withdrew because of certain ground factors. First, the Chinese bluff was increasingly being exposed, even if the number of Chinese troops was small. China was simply not in a position to deny its camps! Second, apparently, the Chinese troops were there in DBO since Indian troops had camped in the unpopulated areas that the Chinese wanted to discourage. Third, there was some deft posturing by Indian armed forces like erecting tents opposite Chinese ones and an imbued sense of confidence in dealing with Chinese PLA. Fourth, the diplomatic engagement on behalf of India provided an escape route for both sides while addressing their mutual concerns.

DBO CRISIS: MYTHS

Perhaps the most important myth that the Indian media, politicians and strategic experts portrayed was to describe the Chinese intrusion as a serious incident! For the record, the strength of Chinese troops that entered the Indian side was not more than a platoon. As Prime Minister Dr. Manmohan Singh himself explained, the intrusion was essentially a "localised" one and was confident that the issue would be resolved.² Therefore, the alacrity of alarm could have been measured, more so, since the Chinese troops had made similar intrusions across the LAC in the past (albeit for shorter durations). The frequency of such intrusions, however, has increased in recent years.³ Interestingly, the Chinese also allege forays by Indian Army into their side. Such intrusions take place because of certain factors. First, the LAC has not been actually demarcated on the ground leading to differential perceptions by both sides in many sectors. Both sides are presently engaged in demarcating the LAC on the ground but the process may take considerable time. As India's Defence Minister himself said on one occasion in Parliament:

There is no commonly delineated LAC between India and China. There are a few areas along the border where India and China have differing

2. "Chinese incursion a localised problem, can be resolved': PM," *The Times of India* (New Delhi), April 28, 2013.

3. "Chinese troops crossed LAC 150 times this year," www.dnaindia.com, July 23, 2013.

perceptions of the LAC. Both sides undertake patrols up to their respective perceptions of the LAC. The Indian security forces continue to patrol up to all areas that fall within the Indian perception of the LAC.⁴

Second, China seems to be resorting to intrusions as a mechanism for testing the ground situation, while regretting the same at times as “accidental intrusions.”⁵ China has invested heavily in the development of border areas in Tibet through road and rail networks that have enhanced its troop mobility and offensive capability. India, on the other hand, is way behind.⁶ China could be using intrusions to prick India in vulnerable areas and test the response in force mobilisation and defensive capabilities. Third, China could be using these intrusions as a psychological game to have an edge in the ongoing border negotiations and enhance its bargaining power. While China has hardened its claim on India’s Arunachal Pradesh (particularly the Tawang tract), it is frequenting the unpopulated areas in Ladakh to reassert its sovereignty.⁷ India’s lack of infrastructure in the region has only abetted Chinese adventures.

Another myth propagated that the Indian government or its diplomatic corps were not doing enough to manage the crisis with China. While some accused the Government of falling into a “new trap” laid by China,⁸ others alleged the Government of having a flawed foreign policy (with particular reference to China).⁹ The opposition used the parliamentary forum to allege that Government was doing nothing about the Chinese incursion.¹⁰ The protagonists of this viewpoint forget that it was Late Rajiv Gandhi who took the initiative to

4. Government of India, Ministry of Defence, Rajya Sabha Unstarred Question No. 4388, answered on May 16, 2012.
5. “Depsang bulge incursion accidental, Chinese military think tank says,” *The Economic Times* (New Delhi), July 15, 2013.
6. Out of the 73 roads identified as strategic border roads, 15 have been completed, 39 are scheduled for completion by 2013 and the remaining 19 by 2016. Source: Government of India, Ministry of Defence, Rajya Sabha Starred Question No. 21, answered on November 23, 2011.
7. B. Raman, “Chinese intrusions,” *The Outlook*, April 23, 2013, <http://www.outlookindia.com/article.aspx?285042>
8. “M. M. Joshi slams Centre over border row with China,” <http://news.outlookindia.com/items.aspx?artid=799022> May 25, 2013.
9. “PM should clear confusion over UPA’s China policy: BJP,” <http://news.outlookindia.com/items.aspx?artid=797928> May 12, 2013.
10. “UPA Government doing nothing about Chinese incursion, says Mulayam,” *The Hindu* (New Delhi), April 29, 2013.

reach out to the Chinese leadership in the wake of Sumdurong Chu incident in 1987 and set up the basis for institutionalised communication with the top Chinese leadership. Successive prime ministers, since then, have built upon this edifice and have engaged Chinese leadership in numerous manners. At the same time, India has always placed its best diplomats in housing the Indian Embassy in Beijing or the East Asia Division in New Delhi, who have engaged China in a series of formal, informal and backyard negotiations. This has led to relative peace on the LAC between the two countries. The Government as well as its diplomats need not always speak in public as was demanded by some opposition leaders in the recent crisis. Relations with China remain very sensitive and being vocal may not serve India's national interest in the long term. At the end of the day, the Chinese withdrawal of troops from Indian side of LAC was because of diplomatic parleys.¹¹

The protests championed a third myth, i.e., the Indian Army was not being reasonably involved in matters related to the LAC or China. Several factors debunk this allegation. First, the Indian Army is tasked with the primary role of management of "peace and tranquillity" on the LAC through coordination with Chinese counterparts. The broad contours were provided by the landmark treaties on "Maintenance of peace along the LAC" (1993), "Confidence-building measures in military field along the LAC" (1996), and "Memorandum of Understanding for exchanges and cooperation in the field of defence" (2006). The Indian Army has done its job with perfection and the nation owes it for managing peace with China. Second, the Indian Army is also involved in the ongoing border talks at various levels. If and when the border negotiations succeed, the Indian Army should get due amount of credit for that. Third, the Indian Army has also been reaching out to their Chinese counterparts through various mechanisms of military diplomacy such as joint military exercises, defence dialogues (five rounds so far) and other CBMs. In the instant crisis, when the Chinese made the incursion and erected tents in DBO sector, Indian security forces put up tents opposite the Chinese ones in six hours, a speed which was unimaginable a decade back.¹²

11. John Cherian, "Defused by diplomacy," www.frontline.in/world-affairs/defused-by-diplomacy/article4705449.ece. May 15, 2013.

12. "India responded in six hours flat," *The Hindu* (New Delhi), May 10, 2013.

While the stand-off with China was going on, the Army did not make any public comments since the task of informing people is usually done by the Government and foreign office. Eventually, no compromise was made to end the stand-off with China, as explained by Army's then General Officer Commanding-in-Chief K. T. Parnaik.¹³

The last myth proposed was that such incursions may ultimately lead to war.¹⁴ It was alleged that China was actually preparing for war and these incursions were a precursor to a larger crisis. Apart from denials at top level,¹⁵ a war is unlikely between the two countries for several reasons. First, there are a reasonable number of CBMs and crisis management tools institutionalised between the two countries.¹⁶ That is supplemented by healthy political communication channel at the political leadership level; quite a good development since the frozen 1960s and 1970s. Second, China seems to be happy with the status quo since it occupies the Aksai-Chin tract being claimed by India. It may not resort to an outright war unless it would like to force a border settlement upon India. The increased frequency of intrusions could only be aimed at enhancing its bargaining position in the ongoing border talks. Third, both China and India are not simply rising powers; they are "preoccupied" powers. The leadership in each country is preoccupied with serious domestic challenges: ensuring domestic economic and social development, buttressing social stability, and fending off internal challenges to their respective political systems. These domestic challenges are long-term issues that will take decades to address.¹⁷ The on and off debate on warmongering, therefore, is without any logic.

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13. "Didn't compromise to end stand off with China: Army," <http://news.outlookindia.com/items.aspx?artid=800963> June 17, 2013.
 14. "China can attack India, should not trust that betraying country: Mulayam," www.firstpost.com May 6, 2013. Also see, Bharat Verma, a long time champion of this view, in "incursions in Ladakh a prelude to coming war with China," www.idrw.org, July 22, 2013. Bharat Verma has also edited a book to substantiate his hypothesis based on the DBO crisis. See, Bharat Verma (ed.), *Chinese are Coming: India-China Stand Off* (New Delhi: Lancer, 2013).
 15. "Chances of India, China war 'very, very little,'" says NSA Shivshankar Menon, *The Indian Express* (New Delhi) March 11, 2013.
 16. See, Dipankar Banerjee and Jabin T. Jacob (eds.), *Military Confidence-Building and India-China Relations: Fighting Distrust* (New Delhi: Pentagon Press, 2013).
 17. George G. Gilboy and Eric Heginbotham, *Chinese and Indian Strategic Behaviour: Growing Power and Alarm* (New Delhi: Cambridge University Press, 2012), p. 44.

DBO CRISIS: MISTAKES IN HANDLING RELATIONS WITH CHINA

The DBO crisis brought to the fore the mistakes being made about handling relations with China, both in the short term and the long term. In the present case, at least four developments went kaput and rather induced a sense of panic and urgency in the crisis. First, the crisis became a subject of sensational journalism wherein it was accorded wide coverage in the Indian print and electronic media. The vernacular media, hitherto little interested in foreign policy issues but having a strong outreach amongst the people, played the main spoilsport with ignorant reporting on a sensitive subject. In the run-up to expose the Chinese incursion, the harp was more on Chinese betrayal than on the unresolved border or for that matter the un-demarcated LAC. Second, the crisis also saw undue pressure being exerted on the Indian government and its foreign policy machinery. Little credit was accorded to them for deft handling of such incursions in the past. Mainstream opposition parties, along with some regional parties, openly criticised the Government for soft-peddalling the incursion issue. This despite the Prime Minister's categorical assurance that the Ladakh incursion was a localised problem and would be resolved soon! The third mistake was the advocacy of a military solution, which is a fallacious suggestion, both in the short term as well as in the long term. The gap between Chinese and Indian military is just too much even to consider this approach. India has just "reasonable defensive capability" to stand guard on its territory. It does not have and it will never have an "offensive capability" against China that has established lead in military power and is logistically well supported in the Tibet Autonomous Region (TAR). The fourth mistake was missing the holistic perspective on relations with China during the crisis period. As the crisis was unfolding, China and India had just concluded their dialogue on Afghanistan and the Indian External Affairs Minister had visited Beijing to facilitate preparations for the maiden visit of the new Chinese premier to India.

The DBO crisis also exposed some long-term mistakes in handling relations with China. First, as was evident in 1962,¹⁸ misperceptions still

18. See, Yacov Y. I. Vertzberger, *Misperceptions in Foreign Policymaking: the Sino-Indian Conflict, 1959-1962* (Boulder, Colorado: Westview Press, 1984).

cloud the entire gamut of Sino–Indian relations and India’s political parties and media have invested little in overcoming this gap. Most regional political parties and even a few mainstream political parties do not have lead inputs on key developments on Chinese military and foreign policy developments. The consensus politics on foreign policy issues having taken a back seat, these political parties often seek to cash on nationalistic feelings even if it means going in the wrong direction from what the policymakers intend! It rather sells to portray China as an aggressive country bent on imposing another war on India. Little consideration is given to the fact that the LAC between China and India has been relatively peaceful due to a cobweb of engagement politics between the two countries. Second, many Indians still suffer from an inferiority complex in dealing with China. The rise of China as a military, economic and political power has only aggravated this situation. They nurse a lurking fear that India might lose once again if 1962 is repeated. The absence of another full-fledged war between the two sides or, for that matter, lack of military simulation exercises between the two countries adds to this fear. However, every government in India, since 1962, has worked to reduce the power gap with China. Should there actually be a war, India can afford to hold ground and create a stalemate position for the other side. Third, those who blamed the Government, the diplomats (and even the military) for the Ladakh crisis are also responsible for failing to engender a public opinion about the core concerns in Sino–Indian relations. The Indian electorate is largely confused and ignorant on these core concerns and often fall victim to emotive nationalism and avoidable politicisation. At the same time, the Government is deprived of vital inputs required for taking bold decisions in relations with China. The result is a stasis in key areas like border talks that have been in vogue since the early 1980s in different forms.

DBO CRISIS: KEY DERIVATIVES

The DBO crisis and repeated intrusions before and after the crisis by China are indicators of some core issues that have been hurdles in handling DBO type crises. First, there is an unresolved border dispute on which the two

sides have been engaged in probably the longest negotiation in post-World War II history. The border dispute forms the centrepiece of Sino-Indian relations and the entire gamut of a bilateral relationship in future would be determined by the ability of the two countries to resolve the issue. While there has been no visible progress on a possible contour of an agreement, the sixteen rounds of Special Representatives (SRs) talks have been delineating the guiding factors, albeit in an incremental manner. The intrusions do not reflect the pangs of frustration, but a calculated move by a stronger China to consolidate its position in disputed areas and bargain for them on the negotiating table. Perhaps for this reason, the intrusions are largely in two sectors: the Tawang tract in the eastern sector and the Ladakh tract in the western sector. Hence, the intrusions are going to continue in future till the border dispute is resolved.

Second, the Chinese media may have downplayed the “intrusion” issue as part of their oft-stated line that India does not figure in their threat calculations, but the DBO intrusion was also indicative of new assertions in Chinese foreign and military policy that is already a hotly discussed theme in international relations.¹⁹ Powered by a strong economy and military modernisation programme thriving on a huge defence budget, Chinese assertion is visible all along its periphery: from Japan to South China Sea to India. In recent times, China has been picking up fights with many countries on its periphery over disputed territories. The intensity and frequency have an established pattern, despite a cobweb of dialogue platforms and CBMs. While this may not be akin to a Sino-centric regional order, India along with other countries who are at the receiving end, are grappling with brazen show of Chinese realpolitik. India will have to take a call, sooner than later, about having a grand strategy on handling relations with China on its own since it does not choose bandwagoning or balance of power tactics as standard foreign policy options.

Third, both the countries are undergoing a power transition process. There is a dangerous combination here: China and India are great power

19. Alastair Iain Johnston, “How New and Assertive is China’s New Assertiveness?” *International Security*, vol. 37, no. 4 (Spring 2013), pp. 7-48.

candidates and neighbours too! The experiences of continental Europe during much of the eighteenth and nineteenth centuries point to perpetual acrimonious and conflictual relations where rising powers like Germany, Austria, France and the UK were often at war with each other. While wars have become an exception in the new international order and China and India have managed to grow in “relative peace,” this does not guarantee a peaceful bilateral future. China will have little comfort in having new great powers like Japan and India counterbalancing its influence either in isolation or in tandem with other regional powers. Further, even if the border issue is resolved, both countries would like to carve out “spheres of influence” despite the proclaimed charm offensive that there is enough geopolitical space for both to grow. Therefore, China would still prick India, both on continental platforms (like through the Sino–Pak axis) and, may be, on oceanic platforms too. This hypothesis has already been substantiated and elaborated in recent books.²⁰

Fourth, the DBO crisis was reflective of a larger crisis in Indian foreign policy: lack of consensus. On sensitive issues like China, consensus should be the hallmark. Instead, the Indian media hijacked the platform during the crisis and what we had, therefore, was a media-driven foreign policy. The Indian media is broadly ignorant on China; does not have adequate sensitivities on the issue; and is not interested in beyond “symbolic agendas” on China.²¹ The proliferation of media (both print and visual) in the last two decades has further diluted the consensus politics of foreign policy and replaced it with a game of one-upmanship and competitive reporting. Very few of them have primary reporting mechanism on China and, therefore, resort to perception based journalism. Similarly, the political class, like in the present case, is interested in cashing in on the crisis for electoral dividends rather than forging a consensus with the Government. Earlier, it was only a section of the Indian Left that was critical of the Government

20. See. Vijay Sakhuja, *Asian Maritime Power in the 21st Century: Strategic Transactions—China, India and Southeast Asia* (Singapore: Institute of Southeast Asian Studies, 2011); C. Raja Mohan, *Samudra Manthan: Sino–Indian Rivalry in the Indo–Pacific* (New Delhi: Oxford University Press, 2013).

21. Shruti Pandalai, “Who sets the agenda? Does ‘prime time’ really pace policy? The Indian experience,” *IDSIA Monograph Series*, no. 13 (January 2013), pp. 1-86.

on China policy; today, the basket has expanded to cover most opposition parties, including some mainstream parties which played a pivotal role in building ties with China when they were in power. The irony is that most political parties do not have established mechanisms to develop a primary perspective on foreign policy and countries like China. It is further not known if they demand regular feedback on foreign policy matters from the Government. The result is, therefore, casual statements on foreign policy that defies Government line.

DBO CRISIS: MANAGERIAL LESSONS IN HANDLING RELATIONS WITH CHINA

The DBO crisis and its aftermath bring home many lessons for better management of such crises in future. First, while the Indian opposition and media had taken up the Chinese intrusion in DBO, this was not a stand-alone intrusion. As stated earlier in this paper, Chinese intrusions across LAC have been quite regular in the past and there has been an established pattern of such intrusions over the years. This pattern is likely to continue in future. Emotional nationalism, therefore, is not the solution to such issues since the Chinese would not take cognizance of that. It would be more appropriate if the lead role of the Government and its foreign policy machinery in agenda setting on foreign policy issues is recognised and supported. On the ground, however, New Delhi needs to move towards responsible management of the LAC. As Prof. C. Raja Mohan elaborates, “the DBO intrusion underlined the importance of moving beyond the general statements on peace and tranquillity to specific procedures and practices to prevent military confrontation and escalation.”²²

Second, as evident from the DBO crisis that was ultimately brought to an end through diplomatic efforts, it is diplomacy that would be instrumental in averting or handling such crisis situations in future. Diplomatic efforts, therefore, need to be supported across the political spectrum without subjecting it to political prejudices. If China and India enjoy a “relative peace,” a large amount of credit goes to the diplomatic machinery that has

22. C. Raja Mohan, “Unquiet on the Front,” *The Indian Express* (New Delhi), August 12, 2013.

engaged the Chinese side on a series of issues through institutionalised dialogues and interactive mechanisms. Soaring bilateral trade and China's recognition of Sikkim as part of India are some representative samples of diplomatic success. However, it is also true that on the core issues with China including the border talks at SR level, the progress has been quite slow, primarily because the issues are simply "too sensitive." Therefore, if the diplomatic engagement on China has to succeed and the SR level talks on border issue have to reach towards any logical outcome, it must have political support and guidance, again across the spectrum, to enable some bold decisions.

Third, a strong defence preparation is vital in preventing such crises bludgeoning into a full-fledged war. While India's defence preparedness against China is still questionable, the relative gains since 1962 have deterred China against any adventurous venture across the LAC. A stronger defence preparation by India will only perpetuate the relative peace between the two countries. As a veteran diplomat puts it, "India should have enough capabilities deployed to convince the other side (read, China) that aggressive norms would invite counter norms. This is the reason why it is so important for (India) to speed up the upgradation of border infrastructure."²³ Over the years, India's quantum jump in missile defence through development of Agni series has given it a vital deterrence system against China. India has also been planning to upgrade the development of border infrastructure, though it will take ages to match the Chinese progress across the LAC. The recent decision by the Indian Government to raise a 50,000 strong mountain strike corps is another welcome step that would further add to the defence capabilities of India against any military adventurism by China.

Fourth, since deception is an integral part of Chinese strategic culture, its awareness should certainly be part of India's confronting the China challenge in future.²⁴ A focused study of Chinese military modernisation, grand strategy and foreign policy behaviour can help India in adequate

23. Shyam Saran, "China in the Twenty-first Century: What India Needs to Know about China's World View?" *Second Annual K. Subrahmanyam Memorial Lecture* (New Delhi: IIC), August 29, 2013.

24. *Ibid.*

preparation and minimise the risks of attacks by China. India, regretfully, still does not have a primary mechanism to monitor China's military and strategic developments and imports its key conclusions from western sources. Needless to say, they may not cater to India's national interests. To give one example, the annual report on Chinese military developments by the US Department of Defence focuses heavily on Chinese military build-up against Taiwan and Japan and the strategic trends developing between them. Little can be found in this report (or, for that matter, other reports emerging from western sources) about China's deceptive presence in Pakistan, Myanmar, Sri Lanka and Nepal (where the Chinese are present in Terai area and snooping on India). To carry the argument further, while India is relatively prepared to face a Chinese attack in Eastern or Western sector, what if the attack were to come through the Terai in Nepal and aims at capturing Gangetic plains? There is an urgent need to consider such issues through an Indian perspective.

Fifth, India does need a crisis avoidance or management system, the more so with China, with which it had a war in 1962 due to a series of decision-making lapses at the political and military levels. An excellent study of such lapses in 1962 is already available.²⁵ There are reasonable numbers of CBMs on the LAC and some more are in offing²⁶ but their effect has been rather shallow as demonstrated from the series of intrusions. While the Indian Army may have macro-level plans to face a two-front war or a stand-alone war with China, no public document is available to establish its contingent plan to handle a DBO-type situation or a Kargil-type situation on LAC. India can take a cue from the US that has long made use of relatively detailed operational scenarios (i.e., scenarios of particular imagined wars) to help size and shape its defence forces²⁷ or from China where doctrines on military operations other than war (MOOTW) or local

25. See, Steven A. Hoffman, *India and the China Crisis* (Berkeley: University of California Press, 1990).

26. For example, China has submitted a draft CBM on Border Defence Cooperation Agreement (BDCA) that is under active consideration by India.

27. Paul K. Davis, "Defense planning and risk management in the presence of deep uncertainty," in Paul Bracken, Ian Bremmer and David Gordon (eds.), *Managing Strategic Surprises: Lessons from Risk Management and Risk Assessment* (New Delhi: Cambridge University Press, 2008), p. 184.

wars under conditions of informationisation elaborated in white papers on defence can be of some use.

Sixth, consolidation and expansion of network of relations is another area that deserves serious consideration. While China and India have a cobweb of state-to-state relations in many sectors, some of them are in crisis stage after a good start (like defence exchange programmes) while others are threatening India's long-term national interests (like increasing trade deficit in the bilateral trade). Worse, the societal aspect is grossly underdeveloped. There are very few instrumentalities and avenues for the two civilisations to interact with each other and develop the right perspective. Communication network is poor, visa regime is complicated and overall movement of people is small. Academic, sports and tourist exchanges are limited. Perhaps that explains why misperceptions still colour Sino-Indian relations. India must, therefore, make its own game plan for reaching out to the influential segments of Chinese society that could moderate perceptions about India in China and arrange for reciprocal treatment to China as well.

CONCLUSION

The DBO crisis was not a stand-alone crisis; it was just one of the many intrusions. These intrusions will be iterated in future as well, with perhaps increased frequency. Making issue of such intrusions through emotional and reactive nationalism may not serve India's foreign policy interests. The media and political leaders erred in judging the intrusion. They also erred in criticising the Government and its foreign policy machinery. In doing so, they forgot what Anna Orton says in a recent book, "boundaries are manifestations of national identity. They can be trip-wires of war. This is all the more important if the involved parties are nuclear powered."²⁸ As things turned out, the DBO intrusion was sorted out by the Indian diplomatic corps through institutionalised dialogue mechanism with China. This only substantiated what the Government had been emphasising from the early days of the crisis that the issue would be resolved. India, therefore, needs

28. Anna Orton, *India's Borderland Disputes: China, Pakistan, Bangladesh and Nepal* (New Delhi: Epitome Books, 2010), p. 3.

to reconstruct the consensus model in handling issues relating to foreign policy.

Apart from forging consensus on key foreign policy issues, the media and political leadership must also facilitate an informed public opinion that would provide vital inputs to the Government in decision-making. This is more so on issues related to China where misperceptions still cloud the bilateral relations and the challenge from China is not understood in the proper perspective. As China rises on all indices of power matrix, public opinion is vital for right political decisions on China. Also, India is right now in the midst of intensive border negotiations with China at the special representatives' (SRs) level. A public discourse on possible contours of agreement with China (with possible level of compromises) would be of great help to the Government. As and when any future Government negotiates any border agreement with China, it must have the media and the political segment leadership on its side.

Finally, there is only one long-term solution to the DBO crisis: more investments in border talks. While the present crisis may not induce a sense of urgency in South Block, there is a necessity to engage the new Chinese leadership that may not be averse to an early settlement of the "protracted talks." New Delhi must take away the only excuse for China to be overtly critical of India and its great power ambitions. While the SR-level talks have helped in working out the guiding parameters towards a border negotiation, there is a "stasis" in the talks since the focus is more on "supplements" and "camaraderie" than the core issue of early settlement. The political leadership must step in to guide the future course of action and lead them in taking some bold decisions. It was Rajiv Gandhi who brought a new dynamism into the paralysed state of Sino-Indian relations in the late 1980s; it is time for the present leadership to get involved in the border talks and delineate a just and honourable border for India.

ISRAEL'S CONCEPT OF CUMULATIVE DETERRENCE: WILL IT BRING PEACE TO THE REGION?

MANMOHAN BAHADUR

The subject of deterrence is fascinating. Why is it that there are no clearly defined yardsticks that predict the outcome of deterrent situations between adversaries? How is it that David did not get deterred to take on Goliath despite his towering strength? Or, how is it that the military might of America did not deter the North Vietnamese in persevering in their efforts to unify their country? Classical deterrence theory did not deter the nineteen Al Qaeda hijackers of four American aircraft from crashing two of them into the World Trade Centre and bringing in a new term in the English lexicon—9/11. Why do movements or groups like Hamas and Hezbollah periodically launch armed action against Israel knowing full well that their armed might is no match for the technological and military prowess of the Israelis? Why?

Even as deterrence has been debated extensively over the years, new “versions” or models have appeared on the strategic easel. What started with the writings of Bernard Brodie, Thomas Schelling and Herman Kahn during the nuclear Cold War age has now mutated into debates that deal with compartmentalised versions of deterrence. Thus, there is recessed

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Unlike the classic deterrence theory, where start of armed action by any party is taken as a failure of deterrence, Israel has resorted to disproportionate kinetic action (on failure of classic deterrence) to add to the aura of its military power that it advertises as its deterrence capability unique to its military and diplomatic posture. Just as one augments one's money in a bank for security in times of need in future, Israel has been "banking" the results of its military engagements in a cumulative manner to buttress its deterrent stance and image.

deterrence, long-term or general deterrence, immediate deterrence et al. One amongst the list is what the Israeli-Hamas "engagement" in Gaza in November 2012 brought to fore—a variant of the deterrence doctrine that Israel is trying to implement and perfect in the past decades, in fact, ever since its birth in 1948—cumulative deterrence (lately through exclusive use of air power). Unlike the classic deterrence theory, where start of armed action by any party is taken as a failure of deterrence, Israel has resorted to disproportionate kinetic action (on failure of classic deterrence) to add to the aura of its military power that it advertises as its deterrence capability unique to its military and diplomatic posture. Just as one

augments one's money in a bank for security in times of need in future, Israel has been "banking" the results of its military engagements in a cumulative manner to buttress its deterrent stance and image. According to this doctrine, writes Dr. Eitan Shamir, head of department in the division of National Security Doctrine at Israel's Ministry of Strategic Affairs, "the outcome of every round of violence should leave no room for interpretation. The victorious should be undisputed and the price paid by the vanquished in prestige and material should be sufficiently heavy that they lose their appetite for another round in the foreseeable future ... *after a few rounds* (emphasis added) with exclusively negative outcomes for Israel's adversaries, the Arabs would understand that they

had reached a strategic impasse and thus desist.”¹ These were the thoughts of David Ben Gurion (quoted by Dr. Shamir), the founder and the first Prime Minister of the state of Israel,² which translated into the doctrine of cumulative deterrence—that is, adding to the power of deterrence with each additional round of fighting. Uri Bar-Joseph, a professor in the Department for International Relations of the School for Political Science at Haifa University has studied Israeli cumulative deterrence and terms its aim as, “... convincing the Arab world that the Arab-Israeli conflict cannot be solved militarily at an acceptable cost, not only in the foreseeable future but also in the long run, and thus to persuade Arab political and military elite to end the conflict by political means.”³

Theoretically, deterrence is structurally viable in the Israel-Palestinian conflict as both adversaries lay claim to the same piece of land. Since there is this commonality of interests, the environment is conducive for its application for, as Thomas Schelling wrote, “The deterrence concept requires that there be both conflict and common interest between the parties involved; it is as inapplicable to a situation of pure and complete antagonism of interest as it is to the case of pure and complete interest. Between these extremes, deterring an ally and deterring an enemy differ only by degrees.”⁴

It is against this backdrop that the objective of this essay is to examine whether “cumulative deterrence” of the type practised by Israel is succeeding

To coerce an adversary’s thought process and actions to one’s own advantage is the end-game of any confrontation, kinetic or otherwise. To be deterred or to deter is also a game, albeit psychological, indulged in by adversaries. Deterrence is one part of coercion, the other being compellence.

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1. Eitan Shamir, “Israel’s Future Wars: Universal Lessons of a Peculiar Case,” *Strategic Insights*, vol. 10 special issue, Naval Post Graduate School, Monterey, October 2011, p. 129, available at www.dtic.mil/dtic/tr/fulltext/u2/a554475.pdf accessed December 10, 2012.
 2. Ibid.
 3. Uri Bar-Joseph, “Variations on a Theme: The Conceptualization of Deterrence in Israeli Strategic Thinking,” *Security Studies* 7, no. 3 (1998), p. 148.
 4. Thomas Schelling, *The Strategy of Conflict* (London: Oxford University Press, 1970), p. 11.

in its aim of deterring its adversaries and whether it would bring in lasting peace.

THE DETERRENCE CONSTRUCT

To coerce an adversary's thought process and actions to one's own advantage is the end-game of any confrontation, kinetic or otherwise. To be deterred or to deter is also a game, albeit psychological, indulged in by adversaries. Deterrence is one part of coercion, the other being compellence. Compellence, when introduced, is an active process unlike deterrence, as Thomas Schelling postulated;⁵ it implies that deterrence, which is slightly abstract in nature and does not require a visible response on the part of the deterred, is a more acceptable method to a rational entity (as he has a veil of plausible denial), than compellence wherein a retraction involves a loss of face. Their sum total, coercion, is not necessarily of the military kind only; in fact, economic and political sanctions, along with a host of other measures, constitute the "set" of actions that can be brought to bear on an adversary's decision making prowess. The Israelis have added a "social" factor in their unique fight against suicide bombers, that of "social persuasion," which some may call blackmail (this would be covered in detail later). But deterrence as theory and strategy by itself has been under a cloud, with regard to the low efficacy shown in the 1970s and 1980s and later when new nuclear weapon states came into being.⁶

In simple terms, deterring is persuading an adversary not to take a step that he is contemplating and if he does that (to test the deterrer's resolve), then commence *limited* action to confirm the resolve and to act as a threat of further actions to come—all this, while the main military body is kept in reserve as the deterrent force to prevent the adversary from expanding the scope of the conflict.⁷ Compellence is the *actual* application

5. Thomas C. Schelling, *Arms and Influence* (New Haven, Connecticut: Yale University Press, 1966), p. 72.

6. T. V. Paul, "Complex Deterrence" in T. V. Paul, Patrick M. Morgan and James J. Wirtz (eds.), *Complex Deterrence Strategy in the Global Age* (Cambridge University Press India Ltd., 2009), pp. 3-4.

7. Glenn H. Snyder, *Deterrence and Defense* (New Jersey: Princetown University Press, 1961), p. 11.

of sufficient force to make an adversary *do* something or stop and/or retrace his steps if he has already commenced doing what he was being warned against.⁸ There is, thus, inherent passivity in deterrence but affirmative action in compellence. These two diverse actions form the root cause of many decisions taken by adversaries that may be termed irrational, bringing into question the factor of rationality required for deterrence and compellence to follow the “designated” sequence. There is, however, a differing view too, as will be covered later, but the presence (or absence) of rationality has a bearing on the application of cumulative deterrence and its efficacy in preventing conflict.

What causes deterrence? It is not necessarily the power to cause damage that deters an adversary; it is the *belief* that the deterrer has the capability to cause damage that deters. Additionally, governments often assume that possession of military ability confers on them a deterrent capability;⁹ this is a patently wrong understanding of the potency of the power to hurt. While the possession of the means is important, the acceptance of the deterrer’s intent to use the means by the target of the deterrence is the crucial determinant. Thus, what is of relevance is the factor of *credibility*—it is the credibility as perceived by the target of deterrence of the availability of means with the deterrer *and his (the deterrer’s) willingness to use those means*, which acts (or does not act) as a deterrent.¹⁰

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8. Daniel L. Byman, Mathew C. Waxman and Eric Larson, “Airpower as a coercive instrument (1990)” (Washington DC, Rand) http://www.rand.org/pubs/monograph_reports/MR1061.html accessed August 25, 2013.

9. Patrick M. Morgan, *Deterrence Now* (Cambridge, UK: Cambridge University Press, 2003), p. 15.

10. *Ibid.*

Are there different shades of deterrence and is it possible to have an environment that has an intangible called cumulative deterrence? If yes, then the very fact that an increment in power and authority of cumulative deterrence is possible only post a breakdown of classic deterrence leads to the inference that “disobedience” by the adversary is an integral part of its existential chain. A further deduction is that true deterrence (where violence is prevented) can be deduced to be a myth. As long as there is a *perceived* asymmetry in power equations of the adversaries, one of the antagonists would attack if he *perceives* himself to be in a position to inflict some damage on his adversary;¹¹ this is irrespective of whether he is actually superior, materially or psychologically, to affect or “influence” the outcome. To prevent an antagonist from nurturing such a perception of superiority, the other party may arm himself further, thereby bringing in instability in the deterrence equation (thus, a state of mutual deterrence is itself an unstable situation,¹² perhaps in perpetuity, resulting in a destabilising arms race).

The fairly regular occurrence of violence in West Asia is indicative of the fragile security environment in the area and a breakdown of classic deterrence. It is an established fact that the Israeli military and technological might is eons ahead of what its adversaries can muster—this is especially true when Israel is ranged against the relatively primitive capabilities of non-state actors and “movements” like Hamas, Hezbollah and Fatah. So, why do these organisations take on such a militarily strong opponent while established Westphalian states like Egypt, Syria, Lebanon and Jordan have reconciled to, if not “peace” then to a “no war no peace” state with Israel? What do these “movements” see as “victory?” For, if they view each ceasefire as a proof of their success, as has been the norm after each engagement,¹³

11. Anthony Kenny, *The Logic of Deterrence* (London: Firethorn Press, 1985), p. 43.

12. Patrick M. Morgan, *Deterrence Now* (Cambridge, UK: Cambridge University Press, 2003), p. 20.

13. For instance see Ben Wedeman, “After 8 days of fighting, calm returns to Gaza,” available at <http://edition.cnn.com/2012/11/22/world/meast/gaza-israel-strike/index.html> accessed September 23, 2013. The journalist writes, “For impoverished Gaza, whose 1.7 million residents were massively outgunned by Israel’s military, to survive was to triumph. “I think people feel now that the only way to push Israel to give concessions is resistance,” said Ghazi Hamad, a senior Hamas official, who cited Israel’s agreement to Wednesday’s ceasefire as vindication of Hamas’ struggle.

then this cycle of violence would continue. It thus calls into question the credibility of the Israeli concept of cumulative deterrence for, no matter how much it (Israel) feels it accumulates deterrent power with every skirmish/engagement, periods of peace will be followed by an episode of violent action at some point of time. What Israel is achieving, as this essay will show later, are longer durations of peace before cumulative deterrence breaks down and a new cycle of violence is followed by a ceasefire and then a spell of relative calm reinstated—but that cumulative deterrence would break at some point of time is not in doubt. So, Israel has to over-arm and *demonstrate* in an overwhelming display of its conventional capability (as against nuclear capability) to hurt, each time, in order to achieve enhanced credibility.

ROLE OF NUCLEAR WEAPONS

The strategic world is awash with studies and literature on how nuclear weapons were prime sources of deterrence during the Cold War. The demise of the Cold War has not changed the threat from nuclear holdings of USA, Russia and other countries, despite exhortations and statements to move towards nuclear disarmament (the numbers have reduced but not the destructive threat they convey). These weapons continue to hold a special place in deterrence postures of countries that have this capability. However, Israel's skirmishes and engagements with its opponents have been numerous during this phase itself, a period during which it has been credited as having gone nuclear. So, did its nuclear capability not give it any measure of deterrence in view of the fact that, besides the multiple engagements with Fatah and Hezbollah, the 1973 Yom Kippur war, the 1982 Syrian conflict and the two intifadas were thrust on it? It has been argued that the nuclear status of Israel was not intended, right from the beginning, to be in the Israeli calculus of engagements with its adversaries, including established states. In the late 1960s, Israel shifted from a posture of nuclear ambiguity to nuclear opacity, a posture maintained till date. Some even feel that Israel's nuclear opacity is not an issue of uncertainty regarding its capabilities but rather, "the result of a political, even cultural, refusal to

incorporate its (Israel's) nuclear status into its ongoing political and military practices and thinking."¹⁴ So, in its policy of cumulative deterrence, Israeli nuclear weapons have no role to play whatsoever. Its adversary, however, has an unconventional weapon in its arsenal—the suicide bomber.

THE SUICIDE BOMBER

In the contemporary world, the *Kamikaze* pilots of Japan in World War II heralded the "suicide attack." Since then, there have been a spate of suicide bombers, who have exploded themselves in crowded places to cause maximum casualties. Israel has been at the receiving end of suicide bombings in a big way. However, in the recent past, say about a decade or so, there has been a marked decrease in such attacks. Maj. Gen. Dorong Almog, an Israeli Army Commander, writing in 2004 in the US Army War College journal, *Parameters*, brought out interesting statistics on the suicide bombing campaigns being faced by the Israelis. Quoting an official website of the Government of Israel he has written that since the start of the second Palestinian intifada in September 2000, Israeli authorities had prevented more than 340 suicide bombings from advancing beyond the planning stages. In addition, they had intercepted 142 would-be bombers, most of whom were en route to destinations deep within Israel.¹⁵ Quoting from personal knowledge (as he puts it), General Almog narrates what he calls a true story:

In early 2003 an Israeli agent in the Gaza Strip telephoned Mustafa, a wealthy Palestinian merchant in Gaza, to inform him that over the previous three months his son Ahmad had been preparing for a suicide bombing mission in Israel. Mustafa was told that if his son followed through with his plans, he and his family would suffer severe consequences: their home

14. Avner Cohen and Benjamin Franknel, "Opaque Nuclear Proliferation" in Benjamin Franknel (ed.), *Opaque Nuclear Proliferation: Methodological and Policy Implications* (Portland: Frank Cass, 1991), p. 25. Quoted in Nuclear section of Nuclear Threat Initiative available at www.nti.org/country-profiles/israel/nuclear/ accessed December 7, 2012.

15. Dorong Almog, "Cumulative Deterrence and the War on Terrorism," *Parameters*, Winter 2004-05, pp. 4-19, available at www.carlisle.army.mil/USAWA/Parameters/Articles/04winter/almog.htm accessed December 10, 2012.

would be demolished, and Israel would cut off all commercial ties with Mustafa's company. Neither he nor the members of his family would ever be permitted to enter Israel again. Faced with this ultimatum, Mustafa confronted his son and convinced him that the cost to his family would far outweigh any possible benefits his sacrifice might have for the Palestinian people.¹⁶

So, has Israel found a method to pre-empt and/or reduce attacks of this "foolproof" method of assault? If true, this would indeed be a breakthrough in modern warfare, against an adversary who is considered impervious to coercion. Ahmad, in Almog's article, may have got convinced by his father Mustafa in the case quoted, and based on the statistics furnished by the author there may well have been others, but parallel studies show that plain threats to induce deterrence may not work. Harvard political scientist Jessica Stern, who has interviewed terrorists and their sponsors in wars with an underlying religious base, writes that, "Holy wars take off when there is a large supply of young men who feel humiliated and deprived; when leaders emerge who know how to capitalise on those feelings; and when a segment of society is willing to fund them. They persist when organisations and individuals profit from them psychologically or financially. But they are dependent first and foremost on a deep pool of humiliation."¹⁷

There was a similar situation in Iraq, post the publishing of photographs of the humiliation of prisoners in the Abu Ghraib prison. Scot Atran, writing in *The Washington Quarterly*, says that motivation comes from values and small-group dynamics that override rational self-interest and whose violation leads to moral outrage and seemingly irrational vengeance. Atran says that "Adherence to sacred values, which provides the moral foundations and faith of every society or sect that has endured for generations, ultimately leads to perceived moral obligations that appear to be irrational, such as martyrdom." When Atran's research team interviewed

16. *Ibid.*, p. 4.

17. Jessica Stern, "Beneath Bombast and Bombs, a Caldron of Humiliation," *Los Angeles Times*, June 6, 2004, available at <http://articles.latimes.com/2004/jun/06/opinion/op-stern6>. Accessed on September 7, 2013.

In classic deterrence theories, deterrence and compellence require both sides to have “rational” reasoning, where gaming forms the basis of decision making. Thus, a challenger in a situation of being deterred weighs the losses or “punishment” that he would endure were he to take actions contrary to what the deterrer wants. This is for a rational adversary, but what if he is very deeply motivated instead by reasons that override the fear of threatened reprisals? Instrumental and value rationality are conflicting in nature; while in the former, events are governed by rationalisation, the latter has intangibles like dignity, respect, culture and ideological issues dictating the flow of events, without any thought of the end result.

would-be suicide bombers and those who support them, questions such as, “What if your family were to be killed in retaliation for your action?” or “What if your father were dying and your mother discovered your plans and asked you to delay until the family could recover?” almost always received answers like, “although duty to family exists, duty to God cannot be postponed.” Atran writes that the typical response to the question “What if your action resulted in no one’s death but your own?” is, “God will love you just the same.”¹⁸

So, in a way there is research to show that strongly held values override deterrent threats in many situations; a recent poll in Israeli occupied areas brought out that 40% Palestinians support suicide bombings.¹⁹ However, the fact remains that suicide attacks in Israel have reduced substantially though not died down. So, something seems to have worked to bring down the

success rates of suicide bombings, as brought out by Dorong Almog in his article; a possible answer will be discussed later in this essay.

18. Scott Atran, “The Moral Logic and Growth of Suicide Terrorism,” *The Washington Quarterly*, Spring 2006, p. 138.

19. *The Jerusalem Post*, February 15, 2013 available at <http://www.jpost.com/Middle-East/Poll-40-percent-of-Palestinians-support-suicide-bombing-311779> accessed September 23, 2013.

PREREQUISITE OF RATIONALITY FOR DETERRENCE—REALLY?

In *classic* deterrence theories, deterrence and compellence require both sides to have “rational” reasoning, where gaming forms the basis of decision making. Thus, a challenger in a situation of being deterred weighs the losses or “punishment” that he would endure were he to take actions contrary to what the deterrer wants. This is for a rational adversary, but what if he is very deeply motivated instead by reasons that override the fear of threatened reprisals? Instrumental and value rationality are conflicting in nature; while in the former, events are governed by rationalisation, the latter has intangibles like dignity, respect, culture and ideological issues dictating the flow of events, without any thought of the end result.²⁰ Additional contributors to this decision making could be many and may include other intangibles like perceived persecution at the hands of the adversary or religious reasons. Historically, states faced with imminent defeat or those that are subject to significant punishment from stronger rivals do not do a rethink on the costs that they are being subjected to. Similarly, highly motivated political leaders or those that have taken an inflexible stand dig in their heels even in the face of overwhelming military odds. Thus, irrationality to some does not find place in the *classic* deterrence theory and brings in an element of ambiguity in charting or forecasting the future turn of events.

There is another view, however, that questions the requirement of rationality as a prerequisite for deterrence. Patrick Morgan, writing in his book *Deterrence Now* says that, “Deterrence theorists have assumed rationality as a given and gone ahead to make the theories. But the assumption of rationality on the part of the challenger (attacker) and the deterrer is flawed”—hence, during the cold war, the superpowers maintained a disproportionately large arsenal hoping to deter an even *marginally* rational

20. T. V. Paul, “Complex Deterrence” in T. V. Paul, Patrick M. Morgan and James J. Wirtz (eds.), *Complex Deterrence Strategy in the Global Age* (Cambridge University Press India Ltd., 2009), p. 7.

It appears as if rationality goes through stages, i.e., extended “peace” causes Israel’s opponents to gradually become “irrational” causing a break in deterrence and when rationality about the impact of Israel’s military response starts hurting them, compellence kicks in and drives them to take a rational decision to accept a ceasefire, and other demands; a few stats of the recent engagements would support this viewpoint.

opponent²¹—put in another way, to deter a marginally *irrational* opponent. This was then an irrational act of over-arming to deter an assumed marginal irrationality of the adversary—the recipe was thus tailor-made for an arms race.

Is this applicable to cumulative deterrence of the kind practised by the Israelis? History of the past two decades shows that the threat of massive retaliation by Israel has not deterred the Palestinian movements from threatening and then targeting Israel with unguided rockets and suicide bombers, while the nation-states have maintained peace and in fact have entered into treaties with Israel. Thus, are the Arab states rational while the non-state actors (like Hamas) fall in

the category of irrational? By using overwhelming force and retribution on a disproportionate scale, Israel attempts to make the Hamas et al. do a cost-benefit analysis and weigh the costs of continuing to harass Israel, i.e., introduce rationality in their thinking. The attacks continue till the assessed military capability reduces drastically, indicated by a drop in the number of rockets fired into Israel. Compellence now steps in and the Palestinians are expected to stop all attacks as well as renounce their usage in future. The attacks stop, but only after talks between the two sides through an intermediary; it also boils down to the threshold levels of pain and grief that can be endured at that given period by the adversaries before they agree to suspend kinetic action. As covered earlier, having been pushed into a

21. n. 9, pp. 45-46. He writes further, “It seems impossible to associate deterrence solely with rationality—it is not only rational actors that have to be deterred and can deter, it is not only among rational actors that deterrence works, it is not always better to be rational in deterrence situations, and there is probably no consistent link between what works in general and in individual instances,” p. 65.

corner militarily, no religious or ideological leadership, especially one that is fighting for its survival, can cave in to the opposition's demand. It appears as if rationality goes through stages, i.e., extended "peace" causes Israel's opponents to gradually become "irrational" causing a break in deterrence and when rationality about the impact of Israel's military response starts hurting them, compulsion kicks in and drives them to take a rational decision to accept a ceasefire, and other demands; a few stats of the recent engagements would support this viewpoint. The first intifada is generally considered to have lasted from December 1987 till the Oslo accord was signed in 1993; the casualty count was 1,491 Palestinians and 421 Israelis. In the second intifada (September 2000 to end-2005) the Palestinian lost 4,000 dead and 30,000 injured while the Israelis claimed that 1,000 of their citizens had died and 6,000 were injured.²² In the last major skirmish that started with the targeted assassination on November 14, 2012 by Israel of Ahmed al-Jaabari, the head of Hamas' military wing, 163 Palestinians died and 1,225 were wounded in the wake of 1,500 Israeli strikes. Additionally, like in the earlier engagements, Israel mounted repeated air attacks to destroy the arsenal of Hamas and the underground tunnels from Egyptian Sinai into Gaza that are used to smuggle in goods and arms. So this cycle is a periodic one, with no end to this war seemingly in sight.

ETHICS OF CUMULATIVE DETERRENCE

In war, a guiding code for use of force and violence is the principle of proportionality. However, Israel's cumulative strategy calls for discriminately higher force, with the quantum increasing with each break in deterrence.²³ This is the crux of increasing the power of cumulative deterrence, i.e., it feeds on its own failure to be applied the next time in a disproportionately higher mode. Israel is also following a principle of collective punishment—

22. Casualty counts of both sides vary greatly depending on the source of information. For example see http://aic-background.conflix.org/index.php/the_first_and_second_intifada; also see a BBC timeline of the intifada at http://news.bbc.co.uk/2/hi/middle_east/3677206.stm both accessed September 23, 2013.

23. See n. 1.

ethically, is it justified?²⁴ Another view on ethics is one which Anthony Kenny asks in his book, *The logic of Deterrence*. Talking of nuclear deterrence he queries, "Those who wish to defend deterrence while opposing use therefore have to be prepared to maintain that it can be legitimate to threaten what it would not be legitimate to do. Is this a defensible ethical position?"²⁵ But there is a contradiction here: Israel defends its policy of cumulative deterrence and also uses its instruments of deterrence in times of need; so, as per Kenny's statement, does that make Israel's use of force ethical?

Sometimes, to live up to the stated intentions and to carefully cultivated public profiles, countries themselves get coerced into taking kinetic actions resulting in a break in deterrence. The recent publicly declared "redline" of the use of chemical weapons, purportedly by Syria, put enormous pressure on the American President to live up to his statement of punishing use of chemical weapons. Earlier, "... nuclear deterrence did not prevent wars in all cases, whatever its success in the cold war. In fact, profound concerns for maintaining credibility to keep deterrence effective actually helped stimulate the Vietnam War."²⁶ Similarly, Israel finds itself in an unenviable position of having to live up to its stated policy of resorting to heavy kinetic action every time a Palestinian strike takes place, thus breaking a cumulative deterrence induced state of relative, though temporary, peace. This disproportionate response has been a norm even if the initial Palestinian action had not been a major strike—can this use of disproportionately heavy force, just to live up to a stated policy, be classified as ethical?

THE PROGNOSIS FOR CUMULATIVE DETERRENCE

So, where is cumulative deterrence taking Israel in its endeavour to live in sustained peace? Examining the difficult and extremely tenuous relationship that exists between "high strung" and proud nations, Henry Kissinger in his book *Diplomacy* wrote that "nations cooperate for long periods only

24. Threat of collective punishment is amply clear in the example by Dorong Almog about the pressure brought on Mustafa, the father of Ahmad, to dissuade his son from a suicide mission. Both the Intifadas and the November 2012 engagement were witness to large-scale destruction of infrastructure used by families and communities of Palestinian militants.

25. Anthony Kenny, n. 1, p. 47.

26. n. 9, p. 40.

when they share common political goals and that ... policy must focus on these goals rather than on the mechanisms used to reach them."²⁷ He further adds that, "(though), a functioning international order ... should attempt to reconcile them, it must never wish them (the mechanisms) away."²⁸ So, do the Palestinian-Israeli skirmishes that occur with certainty every few years, point to the fact that the world tends to forget the existence of this problem once peace returns—and the fact that to bring the problem back to centre stage the "marginalised" Palestinians resort to rocket attacks and suicide bombings, knowing full well that the retaliation from Israel would be swift and brutal, as per its declared state policy? These violent activities from

the Palestinians are, as covered earlier, due the sense of accumulated humiliation down the decades and the feeling of disenfranchisement of territories which they claim to be rightfully theirs. The present state though is that both parties are focusing on the methods (violence and counter-violence) and not on the goal (peace with dignity) of their exertions. This is a sure recipe for continuation of the conflict as it is also exactly the antithesis of the Westphalia Treaty principle (that ended the Thirty Years War in Europe in 1648) which was "benefit of the other."²⁹ The further implication of this continuation of a hostile environment is that deterrence would break periodically, as has been happening over the past six decades; the response from Israel would increase in its intensity under the impression that each engagement, more devastating in its effects than the previous, would help

The present state though is that both parties are focusing on the methods (violence and counter-violence) and not on the goal (peace with dignity) of their exertions. This is a sure recipe for continuation of the conflict as it is also exactly the antithesis of the Westphalia Treaty principle (that ended the Thirty Years War in Europe in 1648) which was "benefit of the other."

27. Henry Kissinger, *Diplomacy* (New York: Simon and Schuster Paperbacks), ch. 24, p. 616.

28. *Ibid.*

29. Pierre Beaudry, "The Economic Policy that made the Peace of Westphalia," available at www.schillerinstitute.org/strategic/treaty_of_westphalia.html, accessed September 8, 2013.

strengthen its deterrence; this is an impression doomed to failure. Thus, cumulative deterrence may increase the periods between breakdown of deterrence, but it would be ineffective in establishing a state of permanent peace—which is the ultimate aim of war. There are other explanations which uphold this deduction.

Robert A. Pape a political scientist at the University of Chicago and James Feldman, a former professor of decision analysis and economics at the US Air Force Institute of Technology and the School of Advanced Airpower Studies, have studied the relationship between suicide bombings (a weapon of the technologically challenged adversary) and occupation by a foreign power in their book, *Cutting the Fuse: The Explosion of Global Terrorism and How to Stop It*. A review of the book states that, "... extensive research (by the authors) points out that after the United States occupied Afghanistan and Iraq, suicide attacks worldwide rose dramatically—from 300 between 1980 and 2003 to 1,800 from 2004 to 2009. More than 90 per cent of the attacks were anti-American. Indirect occupations, in which the United States helps lead an occupation without committing troops, such as in Pakistan, have the same impact as direct occupations and explains the rise of suicide terrorism there."³⁰ Pape and Feldman's research found that in each of the countries where suicide terrorism flourished, it was used to combat an occupying force. While occupation may sometimes be necessary to achieve immediate foreign policy goals, it does so at the risk of stimulating a suicide terrorist campaign against the occupier's homeland. This is the dilemma an occupier faces, they noted, since when the threat of occupation was removed, suicide terrorism stopped substantially. After Israel withdrew from southern Lebanon in 2000, for instance, Lebanese suicide terrorist attacks against Israel ended, the authors pointed out. After Israel withdrew militarily from Gaza and portions of the West Bank, suicide attacks came down 90 per cent.³¹ Thus, the drop in suicide

30. Review of Robert Pape's book, *Cutting the Fuse: The Explosion of Global Suicide Terrorism and How to Stop It*, available at <http://news.uchicago.edu/article/2010/10/04/how-end-suicide-bombings-new-book-argues-problem-not-islam-lengthy-military-occup> accessed September 8, 2013.

31. Ibid.

bombings in Israel during this period credited by Dorong Almog to success of their policy of cumulative deterrence may be suspect—the reduction could have also been due the withdrawal of the occupying Israeli forces from Lebanon and portions of the West Bank, as researched by Pape and Feldman.

Uri Bar-Joseph talks about cumulative deterrence being breached due to Arab motivation, strong dissatisfaction with the status quo and the fact that the Arabs had little to lose from Israeli retaliation. Sometimes the strong Israeli retaliation added to the problem and in the final analysis, according to Bar-Joseph, cumulative deterrence was not successful due to Arab motivation and Israeli rigidity till mid-1980, after which it started taking effect. However, “deterrence not accompanied with sufficient reassurance, reward and concessions was unreliable as long as this kept the Arabs deeply unsatisfied.”³² Building of new settlements on occupied territory, besides being a coercive act on the part of Israel, is also a cause of a feeling of helplessness among the Palestinians in many respects. Many rounds of fighting between the two adversaries has resulted in Israel making new settlements which have been controversial, to say the least. So, is this act also a demonstration to the Palestinians that every armed engagement would cause a further reduction in lands that are “disputed?” In the long term this would be a de-stabilising act on the part of Israel, as more Palestinian land gets usurped by permanent Israeli structures. Israeli occupation of occupied territories, especially the act of constructing settlements on them, will continue to fuel Palestinian humiliation and anger.³³ While its security wall and persistent surveillance (through satellite and UAVs) will contain infiltration, the reaction and response would come in other forms, say

32. Uri Bar-Joseph, n. 3, pp. 145-181 quoted in Patrick M. Morgan, *Deterrence Now* (Cambridge, UK: Cambridge University Press, 2003), pp. 157-58.

33. It goes against the realisation reached after the first intifada—“from the viewpoint of Amram Mitzna, Head of the Israeli Defence Forces (1986-1990), this was Israel’s first real challenge to their authority and the realisation that it will be impossible to occupy the disputed territories without a permanent peace solution. Whilst there was violence on both sides this Intifada was also a turning point for the PLO who, under Yasser Arafat, altered their ambitions and now accepted the need to find a permanent solution to peace: a Two State Solution—one for an independent Israel and one for an independent Palestine”—<http://www.bbc.co.uk/learningzone/clips/the-first-intifada-and-palestinian-consciousness/10216.html>.

The security situation that Israel finds itself in is indeed unique. Hemmed in from all quarters, its policy of cumulative deterrence gives it periods of relative peace while living in a continuous high state of year round alert. So, in the final analysis, the violence resorted to by it has failed, and will continually fail, to give it its much yearned permanent peace.

through aerial means, subterranean route or attacks in third countries. The Iron Dome air defence system of Israel may provide a high measure of physical security but is such "tripwire" protection successful in the long term?

Have any steps been taken to remove or reduce the triggering factors in the West Asian conflict? The answer unfortunately is in the negative and the divide is still very vast. In an amazingly frank 2012 documentary made by an Israeli film maker Dror Moreh, "The Gatekeepers," six ex-Chiefs of Shin Bet, the Israeli internal security agency say that the occupation by Israel is taking their country nowhere and that they

may be winning the battle but are losing the war. Philip French of *The Observer* in his review of the documentary says that as per the six Shin Bet heads, "... there has been 'no strategy, only tactics.'" "Forget about morality," one of them says. "But that's only a short-term policy in a seemingly hopeless conflict where the intransigence of both sides and the increasing pig-headedness of politicians have ensured that Israel may end up winning every battle but losing the war."³⁴ Similarly, another reviewer writing in *The New Yorker* says that the six ex-Shin Bet Chiefs are convinced that Israel, "... is on the wrong track and that the future is dark."³⁵ This is indeed a very damning assessment of the policy of cumulative deterrence seen from

34. Philip French's review in *The Guardian* of the Dror Moreh directed documentary, "The Gatekeepers" is available at <http://www.theguardian.com/film/2013/apr/14/the-gatekeepers-review> accessed September 9, 2013. Excerpts of the documentary are available on YouTube.

35. David Denby's review of "The Gatekeepers" in *The New Yorker* of November 29, 2012 available at <http://www.newyorker.com/online/blogs/culture/2012/11/the-gatekeepers-directed-by-dror-moreh.html>, accessed September 9, 2013.

a macro-perspective—it is failing to provide the necessary long-term security to Israel, as assessed by its own internal security Chiefs.

The security situation that Israel finds itself in is indeed unique. Hemmed in from all quarters, its policy of cumulative deterrence gives it periods of relative peace while living in a continuous high state of year round alert. So, in the final analysis, the violence resorted to by it has failed, and will continually fail, to give it its much yearned *permanent* peace. The politics of the region are so complicated and stakes involved so high that the resultant human suffering (mostly of the Palestinians) will always override the threat and pain of individual and collective punishment threatened by Israel as part of its policies based on cumulative deterrence. The path to peace was shown by the signatories at Westphalia where the principle of “benefit of other” prevailed and brought in lasting peace in Europe—such a statesman-like approach is the only way forward.

THE DYNAMICS OF CIVIL- MILITARY RELATIONS IN ISRAEL

LUNGTHUIYANG RIAMEI

Israel was founded in 1948 in the midst of war and hardship, a period personified by the brave men and women driven by a sense of historic mission to risk everything to protect Jewish lives from assault and military attack. The generation that fought for a Jewish state also had to structure government activities that demanded a different kind of boldness in a context tested not by first power but by competing interest goals.¹ Since the creation of the state of Israel, the Jewish population has been defined by military service. The Israeli citizen was ultimately there to serve in its war against the Arab world. Despite recurrent wars and a perpetual state of alert, Israel has profoundly failed to become a military state.² Israel is the only post-World War II democracy in the world that has been in a state of constant war with its neighbours. Its military machine is among the largest in the world relative to its population; 621,500 men and women serve in three branches of Israel Defense Forces (IDF) both in Regular and Reserves troops.³ Most other countries that achieved independence after World War II have been plagued by multiple military coups, and many states in the

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1. Efraim Karsh, *Israel: The First Hundred Years. Vol. 1 Israel's Transition from Community to State* (London: Frank Cass, 2000), p. 45.
2. Alex Chapman, *Begin's Israel, Mubarak's Egypt* (London: Wyndham Publications Ltd. 1983), p. 52.
3. See, "Military Threats to Israel: Middle East Military Balance," *Jewish Virtual Library*, URL: http://www.jewishvirtuallibrary.org/jsourc/Threats_to_Israel/milbal.html, accessed on July 23, 2013.

West Asia were until recently governed by officers in military uniform. Unlike in other West Asian countries the military has never seized power in Israel.

EMERGENCE OF ISRAEL DEFENSE FORCES (IDF)

The Israel Defense Forces was created in 1948 in the midst of the war of Independence out of military units, *Haganah*.⁴ The first Jewish military was charged with protecting a nation still reeling from the genocide of European Jewry. The *Haganah* is the military force of the Jewish people which strives for political independence of Israel. In fact in 1940, the existing High Command of the *Haganah* simply became the high command of the IDF. On the civilian side, there was no defence department in the Jewish shadow administration in Palestine until the 1940s. David Ben-Gurion, Israeli's first Prime Minister and Defence Minister, decided against calling it the Ministry of Defence using the Hebrew word *Haganah*, but instead chose the word *Bitahon*, meaning Security.⁵ The growth of an autonomous power base in defence establishment has been a crucial factor in the balance in Civil-Military relations. The early settlers organised their own community defence force, *Hashomer* (the guards) and the *Haganah* (the defence force) to defend their vulnerable territory. Hence, at the beginning it had no historical traditions, a national glory, ceremonial uniforms and parades, or a conventional hierarchy and discipline.⁶

The Defence Service Law of 1949 established the legal basis of the IDF was closely patterned on the citizen army of Switzerland and has two distinctive components. The Regular Service (*Sherut Sadir*) is on active duty. Within the Regular Service, the Permanent Service (*Sherut Kevah*) comprises career commissioned and non-commissioned officers who form the command and administrative structure of the armed forces. The Conscript Service (*Sherut Hovah*) is made up of men and women.⁷ Except for the Druze and Bedouin,

4. It was a part-time citizen's defence force.

5. n.3, p. 54.

6. Alex Chapman, n. 2, pp. 52-53.

7. Meri Report: *Israel*, Middle East Research Institute, University of Pennsylvania (London: Croom Helm, 1985), p. 7.

Arab citizens of Israel do not serve in the army.

The IDF's doctrine at the strategic level is defensive, while its tactics are offensive. Though it has always been outnumbered by its enemies, the IDF maintains a qualitative advantage by deploying advanced weapons systems many of which are developed and manufactured in Israel for its specific needs. The IDF's main resource is the high calibre of its soldiers. The IDF's three service branches (ground forces, air force and navy) function under a unified command, headed by the chief-of-staff, with the rank of lieutenant general who is responsible to the Minister of Defence.⁸

Education and knowledge have preserved the Jewish people for generations. The IDF is not only a means of defending the country but also promotes a range of educational and cultural initiatives for soldiers. The army contributes a valuable and dynamic social function alongside its military and security role. It is a means of integrating and building Israeli society.⁹ Society is involved to an unparalleled extent in the military. In a country that has housed millions of Jewish immigrants and refugees from all over the world, one cannot overemphasise the role the army has played as a social leveller. People from all social, economic and political backgrounds perform military service side by side with equal conditions and rights.¹⁰ The IDF is responsive to the cultural and social needs of its soldiers, providing recreational and educational activities, as well as personal support services.

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8. See, "Israel Defense Forces: History and Overview," *Jewish Virtual Library*. URL: http://www.jewishvirtuallibrary.org/jsourc/Society_&_Culture/IDF.html, accessed July 25, 2013.

9. For details see, *IDF Background and Information*, URL: <http://www.mahal-idf-volunteers.org/information/background/content.htm>, accessed November 16, 2013.

10. See, *IDF background Information*, URL: <http://www.mahal-idf-volunteers.org/information/background/content.htm>, accessed July 26, 2013.

Under the leadership of David Ben-Gurion, women participated in national security and were given sufficient military training to be able to defend the country in case of attack.

The army's code of ethics features a section on "purity of arms" reinforcing the image among Israelis that their army upheld humanistic universal values even under fire. The army also performed (and continues to perform) in an important social role as a primary melting pot and equaliser for a country of immigrants. From the age of 18 every Israeli male and female is required to serve three to two years, respectively, of compulsory military service. That requirement brought the rural kibbutz resident together with the urbanite, the modern Orthodox together with secular, and the Sabra (native Israeli) together with the immigrant. This also served to reinforce the country's egalitarian spirit.¹¹

CIVIL-MILITARY RELATIONS: GENDER PERSPECTIVE

Military service in Israel is compulsory for both men and women. The Israeli military is based on a gendered division of labour and a gendered structure of power. Women constitute approximately a third of the conscripts and close to twenty per cent of the standing professional army. During the Knesset debates about the Security Service Law (1949), the principle of compulsory service for Jewish women was supported by all except the religious parties. After all, women had served alongside men in combat units during the War of Independence (1947-1948). Under the leadership of David Ben-Gurion, women participated in national security and were given sufficient military training to be able to defend the country in case of attack.¹²

The religious parties viewed the integration of women in the military as harmful because of their physical condition, the impact on morality in the institution and feared impact on the birth rate. The secular forces viewed

11. Joshua Mitnick, "The Israeli Defense Forces," *My Jewish learning*, URL: http://www.myjewishlearning.com/israel/Contemporary_Life/Society_and_Religious_Issues/Compulsory_Army_Service.shtml?p=1, accessed July 25, 2013.

12. Dafna N. Izraeli, "Israel Defense Forces," *Jewish Women's Archive*, URL: <http://jwa.org/encyclopedia/article/israel-defense-forces>, accessed July 25, 2013.

the integration of women as self-evident just as they saw the exclusion of married and pregnant women as obvious. In the end religious parties and the ruling party agreed that Jewish men and women were conscripted on unequal terms.¹³

The National Service Law (1953) specifies groups of persons that are automatically exempted from service: married women, pregnant women and mothers, Christian and Muslim women. Further, in 1978, the government of Menachem Begin (Likud) enacted a law allowing women to be exempted for religious reasons if they wanted. However, the Law does not exempt men for reasons of religion, conscience, or marital status.¹⁴ The length of service is different too; men have to serve for three years and women for two. Regulations have changed a couple of times both in 1993 and 1994, and the length of service for women was cut back.

Military socialisation and instruction in Israel begin at kindergarten and schools. In school, Israel Jewish youths prepare themselves to join the military forces. Members of the IDF hold lectures to give information and impressions of life in the Israeli army. Some youths volunteer for special units or undergo pre-induction courses. Gender differences are already at work at this stage because boys and girls are separated.¹⁵ The female soldiers in the IDF have an additional, non-assigned though culturally encouraged function. With their visible feminist, in sharp contrast to the rugged, army milieu, women soldiers serve as nurturing factor especially in the combat units. They soften the atmosphere in the unit bringing to the barracks a touch of warmth and effect, reminiscent of home and family. In 2000, the parliament abolished the combat restriction for women. Even if figures have changed during the last decade, women in the Israeli defence forces are still overrepresented in person and administrative profession. The other most popular areas for women have to do with education, welfare and communications.

The centrality of the military and security in society leads to a marginalisation of women on a symbolic level. Because they are not

13. Klein Uta, "The Gender Perspective of Civil-Military Relations in Israel Society," *Current Sociology*, vol. 50 (5). September 2002, p. 671.

14. Ibid.

15. Ibid., pp. 672-73.

The IDF considers equality as a leading ethic and includes women in almost every mission. The state of Israel is the only country in the world that requires women to serve in the military as mandatory. This obligation makes the IDF include the entire society contributing for the nations' security.

regarded as capable of defending the country and taking part in security discourse, in the public consciousness the soldier as a defender is male. As the concept of citizenship is associated with the right and the duty of defending the country, therefore, military service in the feminist discussion is often seen as a way to achieve political rights. The inclusion of women in the military allows them to be militarised but not to be empowered. On the contrary the "security question" is used to keep women quiet, to exclude them from far-reaching political functions.

Although the Israeli army is still perceived as the main mechanism for building a national identity, it has become the basis of male self-image and a source of male social mobility in society. The military turns out to be the main agent in shaping and constructing gender roles in the society. Though women's role in the military service is visible, males continue to dominate and hold many of the top positions. Despite its importance, until the end of the 1970s the military was not a focus for interest-group formation and mobilisation in feminist politics. The brilliant military victory of 1967 was an affirmation of male hegemony and endowed the military with almost sacred proportions. The 1973 war created a social climate where the status of women in defence was more acceptable than before. The Knesset committee on the status of women, established in 1992, was an important factor in putting pressure on the military to implement greater gender equality.¹⁶

The IDF is most progressive in the world—when measured in terms of gender equality. Almost a third of the defence forces and 50% of its officers are female. In the UK, only 13% of the armed forces are women, while in

16. Dafna N. Izraeli, n. 12.

the US, it is only slightly more at 13.4%.¹⁷ The IDF considers equality as a leading ethic and includes women in almost every mission. The state of Israel is the only country in the world that requires women to serve in the military as mandatory. This obligation makes the IDF include the entire society contributing for the nations' security. The IDF continues to work on incorporating women while maintaining a secure and professional environment. Today women make up 33% of the IDF, and the IDF stands out among the world's militaries for the high representation of women in its ranks.¹⁸ The IDF gives an equal opportunity to empowerment of women through military service.

As such Israel's military is recognised as one of the world's most advanced in gender equality in military service. Representatives of foreign militaries are increasingly seeking guidance from the IDF in facilitating gender equality and preventing sexual harassment.¹⁹

CIVIL-SOCIETY AND MILITARY IN ISRAEL

According to Helman (1997), the participation of males in the military rests upon its construction in terms of community which is experienced as overlapping with society as a whole. Belonging to this community of warriors is seen as an entitlement that legitimises participation in the associations of civil society.²⁰ June 1967 witnessed the emergence of religious-nationalism as a powerful force in Israeli politics, it also served to focus attention on the development of civil society in the Jewish state. According to Augustus Richard Norton, the application of the term "civil society" in the region has come to be associated with groups and organisations that are inclusive in their membership and act as a buffer between the state and citizen.²¹

17. Nick Hopkins, "The Israeli Defence Forces: First for Women," *The Guardian*, July 9, 2012, URL: <http://www.guardian.co.uk/lifeandstyle/2012/jul/09/israeli-defence-forces-women-equality>, accessed on July 27, 2013.

18. "Women of IDF," URL: <http://www.idf.il/1589-en/Dover.aspx>, accessed July 27, 2013.

19. "IDF Leads the Way in Gender Integration," *Israel Defense Forces*, URL: <http://www.idfblog.com/2013/07/22/article-idf-leads-the-way-in-gender-integration/>, accessed on July 27, 2013.

20. Helman Sora, "Military and the construction of community," *Journal of Political and Military Sociology*, vol. 25, Winter 1997, pp. 305-32.

21. Augustus Richard Norton, "The Future of Civil Society in the Middle East," *Middle East Journal*, vol. 47(2) 1993, p. 211.

The war in Lebanon broke the agreement between the states, civil society and the army, creating a social and political division in Israeli society that persists to this day. One of the main characteristics of the war was that its objectives were never really explained to public opinion or indeed to the Israeli government by its perpetrators—Ariel Sharon, Rafael Eiter and Menachem Begin.²² In 1982, Prime Minister Begin launched “Operation Peace for Galilee,” which was an invasion of Lebanon. It was condemned by the world and much of its own when Christian fighters massacred hundreds of Palestinian civilians as the Israeli army stood by. The Operation went wrong for Israel.²³ The invasion of Lebanon was therefore central to the socio-political and cultural changes which took place in Israeli society in the 1980s, 1990s and in the twenty-first century. Furthermore, the position held in Israeli society by the army was devalued. The peace movement and the protest against military policy in Israel emerged as a consequence of the trauma of October 1973. Until then, the Israeli population had total confidence in the government, the army and the policy of military security. In the years of the state’s existence this policy has led to the three wars (1948, 1956 and 1967) which not only demonstrated Israel’s military superiority over its neighbours but also added territories under Israeli control.²⁴

The end of the 1980s and the start of the 1990s saw a flourishing of associations in Israel, representing different needs, wishes and even visions. The new phenomenon marked a significant change compared to the collectivist character of the past, in which the Israeli main organising principle was based on effective control of state bureaucracies and institutions over nearly all spheres of life. The new cultural-political phenomenon appeared in the form of protest, guided by grass-roots organisations, non-profit associations, new social movements and even new political parties. According to the government registrar of non-profit associations, there are close to 32,000 such associations

22. Yahni Sergio, “State, Civil Society and Army in Israel,” *International View Point*, March 10, 2001, URL: <http://internationalviewpoint.org/spip.php?article698>, accessed July 29, 2013.

23. “1982 Lebanon Invasion,” *BBC News*, May 6, 2008, URL: http://news.bbc.co.uk/2/hi/middle_east/7381364.stm, accessed July 29, 2013.

24. See, Yahni Sergio, “State, Civil Society and Army in Israel.”

in Israel today.²⁵

Refusal to serve in the army is considered as personal choice. There is no precise data but various sources have announced that only 20% of reserve soldiers comply with their annual service and around 30% of young men refuse to comply with their compulsory military service.²⁶ During the first Lebanese war in 1982 there was total symbiosis between state and citizens where one could sacrifice everything to defend the country. The Israeli society is experiencing the trend in which universal cosmopolitan principles clash with a conflicting set of principles that are local, particularistic and even fundamentalist in character. There is a new cultural-political phenomenon appearing in the form of protest, guided by grass-roots organisations, non-profit associations, new social movements and even new political parties. But with the weak civil society, exponents of the military society in Israel continue to engage in a struggle to force Israel to continue to use its military power especially against the Palestinians. The al-Aqsa intifada demonstrates the influence upon a conflict reality, not only of the army generals and the statesman (who are frequently ex-generals themselves), but of Israeli military society as well.²⁷

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25. Uri Ben-Eliezer, "The Civil Society and the Military Society in Israel," *Palestine-Israel Journal of Politics, Economic and Culture*, vol. 12, no. 1, 2005, URL: <http://www.pij.org/details.php?id=329>, accessed July 29, 2013.

26. See, Yahni Sergio, "State, Civil Society and Army in Israel."

27. Uri Ben-Eliezer, n. 25.

ISRAEL: A NATION IN ARMS

The nation-in-arms was portrayed as a model of relations between the civil and military sectors, in which the boundaries between the two are fragmented.²⁸ It made possible, on the one hand, to conceive of expanding the army's role and intervention in building the nation, a phenomenon that Horowitz and Lissak termed "partial militarisation" of the civil sector, as well as, on the other hand, to bring about an increase in the influence of civilians and their involvement in the military sector. For example, through Israel's unique system of service in the reserves, which transformed the army into a people's army imbued with the democratic and civil (some added egalitarian) spirit characteristic of the general society.²⁹

Israel military sociologist has accepted Ben-Gurion's idea of rationalisation. Relying on theories of nation building and modernisation to perceive the army as an agent of development and integration,³⁰ these sociologists wrote on the varied functions of the Israeli army and its expanding role in the civilian sphere. The army is said to contribute to the immigration absorption and act as a melting pot for Jewish ethnic groups. The army also played a crucial role in controlling the Israel-Arab citizens in the 1950s and early 1960s over their exclusion from participating in the nation-formation process.³¹

Ever since attaining independence in 1948, arms procurement at constantly higher levels of sophistication has remained a principal factor in Israeli military preparedness. Israel launched its military industry on

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28. David Rapoport, "A comparative theory of Military and political types," in Samuel P. Huntington (ed.), *Changing Patterns of Military Politics* (New York: Free Press, 1962), pp. 71-100; Adam Roberts, "Nation in Arms, The Theory and Practice of Territorial Defence" (London: Chatto & Windus, 1976).
 29. Dan Horowitz, "The Israeli Defense Forces: A Civilized Military in a Partially Militarized Society" in Roman Kolkowiaz and Andrei Korbowski, *Soldiers, Peasants and Bureaucrats* (London: George Allen & Unwin, 1982), pp. 77-106.
 30. John J. Johnson (ed.), *The role of the military in underdeveloped countries* (Princeton: Princeton University Press, 1962); Lucian P. W. Pie, "Armies in the process of political modernization," in Johnson, *The role of the military*, pp. 69-89; Moshe Lissak, "Military and Modernization" (California: Sage, 1976).
 31. Baruch Kimmering, "Sociology, Ideology and Nation Building: The Palestinians and their Meaning in Israel Society," *American Sociological Review*, vol. 57(4): pp. 46-60, in Uri Ben-Eliezer, "A Nation-in-Arms: State, Nation and Militarism in Israel's First Years," *Comparative Studies in Society and History*, vol. 37(2), April 1995, p. 266.

a large scale in the wake of the June 1967 war. Since then, Israel has developed one of the most advanced and sophisticated arms industries in the world. Israel embarked on an all-out policy of self-sufficiency trying to develop and produce all its defence needs. This sense of urgency to achieve independence from foreign suppliers led the country into an unprecedented industrial revolution, the main thrust of which was directed towards the manufacture of military equipment. By 1981, Israel had unlimited potential in the military, industrial and security fields and was able to produce everything it needed to protect itself. The Israeli defence industry enjoys considerable support from the US government. Israel has enhanced its position as a supplier of critical components to militaries around the world.³²

Israel launched its military industry on a large scale in the wake of the June 1967 war. Since then, Israel has developed one of the most advanced and sophisticated arms industries in the world.

ROLE OF MILITARY IN POLITICAL LIFE

Since the founding of the state no institution has played such a dominant role as the Zvah Haganah Le Israel Defense Forces. It has been and remains the ultimate guarantor of Israel's security and is the most powerful military force and the most technologically advanced in West Asia. But equally, the IDF was conceived by David Ben-Gurion as a means to integrate a largely disparate population into a collective whole, thereby allowing a homogeneous national identity to be moulded. In this respect, the role assigned to the IDF reached beyond the immediate demands of national security to embrace the social educational as well as economic development of the state.³³

The central role that the IDF has played in the development of the state has led to an intense debate over civil-military relations in the Jewish state.

32. See, Farah Naaz, "Israel's Arms Industry," *Indian Institute of Defence and Analysis*, URL: <http://www.idsa-india.org/an-mar00-5.html>.

33. Clive Jones and Emma C. Murphy, *Israel Challenges to Identity, Democracy and the State* (London: Routledge, 2002), p. 51.

Israel has been described as a “democratic garrison state” or as having a “civilised military.” Many Israelis have intimate associations with the military and that undermines the democratic system of government.³⁴ National security needs will severely restrict civil liberties, and the military will become the dominant institution of government. This has not happened in Israel, because of the institutional arrangements. Military sociologist Morris Janowitz has argued that Israel’s military is professional and therefore accepts civil authority. IDF is not recruited from separate social groups but rather reflects society as a whole. It is neither corporatist nor alienated from civil society, which are necessary conditions for intervention in politics.³⁵

Uri Ben-Eliezer claims that Israel is a militaristic society. The term is useful for describing a tendency to view organised violence and wars as legitimate means of solving political problems. It is a social and cultural phenomenon that usually has political consequences for the decision making process, it is belief in the inevitability of war.³⁶ The argument put forward by Ben-Gurion was that the existential demands of securing Israel against the armies of the Arab world has resulted in organising Israeli society and that it is a “nation in arms.” Accordingly, militarism in Israel has actually allowed a democratic tradition to flourish. The energies of the military have been directed towards ensuring external security, a goal achieved with the full support of the civilian establishment.³⁷ Ben-Eliezer points to the concept of “parachuting” as evidence of how the military have come to penetrate the civilian sphere of government. Israeli political sphere is replaced with former IDF officers who have completed their military service and enter the political sphere.

The most frequent instances of this tendency have occurred during the demobilisation of officers in postwar period following the 1948, 1967

34. Ibid, p. 52.

35. For details see D. Horowitz and M. Lissak, *Troubles in Utopia: The Overburdened Polity of Israel* (New York: Suny Press, 1989).

36. Uri Ben-Eliezer, “Rethinking the Civil-Military Relations Paradigm,” *Comparative Political Studies*, vol. 30 (3): June 1997, p. 360.

37. Clive Jones and Emma C. Murphy, *Israel Challenges to Identity, Democracy and the State* (London: Routledge, 2002), p. 52.

and 1973 wars. Until the June 1967 war, the great majority of reservist or retired officers joined Labour's ranks. In the 1950s the first generation of such officers included Moshe Dayan, Yigal Allon, Israel Galilee and Chaim Herzog. After 1967, the number of such officers co-opted into the political elite rose sharply, with many for the first time joining the centre-right parties. Among those joining the Labour party were Yitzhak Rabin, Haim Barlev, Aharon Yariv and Meir Amit; Ezer Weizman, Ariel Sharon, Mordechai Zipori and Shlome Lahat joined Likud. Despite their widespread participation in politics, these ex-military officers have not formed distinct pressure groups. The armed forces have generally remained shielded from partisan politics.³⁸ Yet a progressive and civilian oriented military can and does play a reformist role in stable progressive political system where military intervention can easily be crushed by popular government support. In Israel retired military men who entered politics had succeeded in capturing the enthusiasm of the electorate.³⁹

Israel's political system is open to greater interaction between the civilian leadership and the military high command. The chief of IDF meets regularly with the committee on foreign affairs and the Knesset committees. The Chief of Staff of IDF gives opinions and suggestions on government's security policy.

Israel's political system is open to greater interaction between the civilian leadership and the military high command. The chief of IDF meets regularly with the committee on foreign affairs and the Knesset committees. The Chief of Staff of IDF gives opinions and suggestions on government's security policy.⁴⁰ The citizens did not regard the practice of retired officers "parachuting into politics" as threatening to civilian control of the military. No ex-IDF officer had assumed a cabinet position until 1955. Israel law prohibited retired officers from running for the Knesset until 100 days after

38 "Civil Military Relations," URL: <http://countrystudies.us/israel/105.htm>, accessed on July 30, 2013.

39. Perlmutter Amos, *Politics and The Military in Israel 1967-77* (London: Frank Cass, 1978), p. 190.

40. Karim El-Gendy, *The Process of Israeli Decision Making: Mechanisms, Forces and Influences*, (Beirut: Al-Zaytouna Centre for Studies and Consultations, 2010), p.84.

their retirement, but no such law existed regarding cabinet positions. Even retired officers pursuing political careers can be called back to active duty as they remained reserve officers until fifty-five years of age.⁴¹

For Ben-Eliezer, the real threat to democratic government comes from “praetorianism,” defined as a situation in which military officers play a predominant political role owing to their actual or threatened use of force.⁴² The Lebanon experience raised in its most acute form the question of how effectively the civilian government could control the military establishment. IDF operations ordered by Ariel Sharon and Eitan often had been contrary to the government’s decision and the cabinet had been kept ignorant of the military situation. The checks and balances that had previously prevented the defence establishment from dominating the civilian decision-making authority seemed in jeopardy. Although no structural changes were introduced, Sharon was removed from the Ministry of Defence and a more normal pattern of military-civilian relations was restored.⁴³

POLITICAL-MILITARY COOPERATION NORM

Scholars of civil-military relations have argued that Israel disproves Harold Laswell’s classic “garrison state” thesis which posits that a state that is constantly at war cannot remain democratic and that its society will cease to be an open society. National Security will severely restrict civil liberties, and the military will become the dominant institution of government. This has not happened in Israel. The reason for the Israeli case, they claimed, lay in the quality of the country’s institutional arrangement.⁴⁴ What explained the Israeli case, according to all of these scholars, was the IDF’s identity as a citizen army: the IDF reflects the “mosaic” from which Israeli society is comprised; the early retirement of officers prevents the formation of a closed military case; the reserve duty requirement has the effect of weaving the military into the civil system. The military’s life is influenced by the

41. See, “Israel: The Military in Political Life,” URL: <http://www.country-data.com/cgi-bin/query/r-6855.html>, accessed on October 6, 2013.

42. See, Uri Ben-Eliezer, n. 36, p.360.

43. n. 41.

44. Dan Horowitz, “Is Israel a Garrison State?” *Jerusalem Quarterly*, vol. 4. 1997, pp. 58-75.

civilian way of life and is not different from it. It is normal for military personnel to patrol in the streets of Jerusalem or Tel Aviv. In sum, it is the existence of permeable boundaries between the civilian sector of society and the military sector, which engenders civil-military harmony in Israel. Contrary to the predictions of the "Garrison state" thesis Israeli society is not militarised but, on the contrary, the army is civilianised.⁴⁵ In the 1990s, an alternative school of thought arose among scholars of Israeli society. Their claim was not a case of military civilianisation but rather of civil society's militarisation at the hands of political elite and the state's apparatus as part of the latter's attempt to use the war and the military to bring about and then preserve their ethno-national supremacy.⁴⁶

Another group of researchers who built on Samuel Huntington's theory noted the high degree of institutionalisation of politics in Israel and classified it as a "mature democracy" which creates both "objective" and "subjective" civil control of the military. In other words, there are simultaneous mechanisms of civil control that act on the military from the outside, and internal mechanisms, particularly the internalisation of the value of loyalty to the political leadership. Harmony in civil-military relations, the IDF's character as a citizen's army and the existence of boundaries between the civil and the military spheres have led researchers to argue that a clear hierarchy exists between the civilian echelon and military echelon which is subordinate to it. The continued civil control of the military elite serves as a functional defence against the danger of injury to the democratic character of Israeli society.⁴⁷

The existence of permeable boundaries between the military sector and the political sector shows a clear chain of command with the highest ranks of the civilian authority. Most importantly, IDF serves as an instrument for executing policy formulated and dictated by the political

45. Dan Horowitz and Moshe Lissak, "Trouble in Utopia: The overburdened Polity of Israel," Albany New York. 1989. Also see, Peri Yoram, "The Political Military complex: The IDF's influence over Policy toward the Palestinians since 1987," *Israel Affairs*, vol. 11 (2): April 2005, p. 328.

46. Yoram Peri, "The Political Military complex: The IDF's influence over Policy Toward the Palestinians since 1987," *Israeli Affairs*, vol. 11 (2): April 2005, p. 328.

47. Yoram Peri, *The Israeli Military and Israel's Palestinian Policy: From Oslo to the Al-Aqsa Intifada*, Washington: United States Institute of Peace, 2002, p. 11.

The existence of permeable boundaries between the military sector and the political sector shows a clear chain of command with the highest ranks of the civilian authority. Most importantly, IDF serves as an instrument for executing policy formulated and dictated by the political branch. This conception constitutes part of the hegemonic position of the Israeli political-military elite.

branch. This conception constitutes part of the hegemonic position of the Israeli political-military elite. The political-military partnership model arose in Israel due to the constant state of war. It constitutes Israel's unique answer to the "garrison state" dilemma. Though Israel did not become Sparta and the military did not seize power, neither can Israel be called Athens, since the constant state of war engenders constraints on its democratic system. Since the formation of Israel, the military sector in the 1990s saw the beginning of a shift. One of the central factors contributing to the shift was the constant political crisis as a result of Israel's central problem since 1967—the

occupied territories and relations with the Palestinians.⁴⁸ Other important factors contributing to the military status was the change in the nature of modern warfare.

From the beginning of the 1990s, the IDF began promoting its political conception within the Israeli policy arena. Yitzhak Rabin's appointment as defence minister created a very strong axis and expressed to the utmost the political-military partnership model. Rabin did not want the IDF to be involved in the secret talks that led to the Oslo Accords in 1993, but from the moment the Accords were signed, the military was a central player in the political process. IDF officers participated in actual diplomatic meetings and in influencing public opinion. In all of the activities, the role played by the civilian branch within public service was marginal. Further, it was not the state civil servants, but rather the political leadership itself which served as the military officers' interlocutors. The main military body that dealt with the peace process during the 1990s was the strategic planning

48. Yarom Peri, n. 46, p. 329.

division, which was responsible for consolidating the fieldwork discussion with the Palestinians, Jordan and Syria.⁴⁹ The profound weakness at the political level: the unwillingness of politicians to make clear and resolute decisions regarding territory has hampered the peace process in West Asia.⁵⁰

In the course of the year preceding the fall of the Ehud Barak government in February 2001, there were significant disagreements between the government and the military regarding defence policy. The military treated the intifada as a war in every respect. The government on the other hand, though it agreed with the military's assessment that "war ought to be fought like a war," continued at the same time to engage in political negotiations.

The distinguishing features of political-military partnership consist in the fact that despite the military's high level of involvement in formulating policy, in the final analysis it acts according to the directives of the political branch. Indeed there have been so many cases in which the military radically altered the decisions made by the political branch, or in which it did not do what was asked of it. Nevertheless there exists a large amount of space in which to manoeuvre, short of such extreme actions. In 2001, the IDF allowed itself vast interpretative leeway in the implementation of the government policy.

The Israeli Defense Forces is a citizen's army. It reflects the mosaic of which civil society is composed; the early retirement of officers prevents the formation of a close military caste; the reserve service prevents alienation

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49. Ibid., pp. 329-30.

50. Ibid.

Israel's army is part of its society, its personnel and political concepts, and its ideology are part of the Israeli national lifestyle. It is not an independent unit seeing itself in opposition to the civilians who control it. Thus, despite the extraordinary role and performance of the military in Israel, there has been a consistent persistence of civilian rule over the military, and civilian-military relations have not been a problem.

and isolation of the military from civilian society; the integration of the military in the civil system prevents the growth of corporatism; and the military lifestyle in Israel hardly differs from the civilian lifestyle, as reflected in the careless dress of the reserve soldiers who fill the city streets. The existence of permeable boundaries between the civil and military spheres creates harmony in civil-military relations. Such permeability is true of the various social spheres as well as the political sphere. Israel society is not militarised despite the prediction of the garrison state thesis. On the contrary, the military has become civilianised.⁵¹

CONCLUSION

Israel is the only democratic state in West Asia with a stable economy. When the Arab Spring flared up across West Asia and the North African States in 2010, Israel was an exception which was not affected by any of the turmoil. IDF performs the task of the traditional army-defence of the state and has not been seen as a threat to the political regime. There has never been a military coup in the history of Israel. The elite of the Israel defence forces has shown a continued confidence in the political system, although there are occasional complaints about some of the individuals who run it and their political views and perspectives. Civilians continue to control the military and do so by virtue of their dominant politics. Within the Israeli system, not because they control the military itself, but contributing to the limited role of the IDF in politics is its nature. It is a small standing force with a sizable reserve. Israel's army is part of its society, its personnel and political concepts, and its ideology are part of the Israeli national lifestyle.

51. Yoram Peri, n. 47, p. 13.

It is not an independent unit seeing itself in opposition to the civilians who control it. Thus, despite the extraordinary role and performance of the military in Israel, there has been a consistent persistence of civilian rule over the military, and civilian-military relations have not been a problem. Today, despite a strong military and its participation in Israel life, decisions are still made at the political level. The Minister of Defence controls the defence establishment, usually with a firm hand. The military ought to carry out policy, not to determine it. Such civil-military relations in Israel do not exist in other West Asian countries.

FORMING INDIA-VIETNAM-JAPAN TRIDENT

ANKIT KUMAR

George Fernandes, then India's Defence Minister, stated in the year 2000 that "Vietnam and Japan are emerging as crucial strategic partners for India especially in the maritime domain."¹ Soon, the Indian Navy followed by sending its warships, tankers and submarines to Japan, Vietnam and other countries for bilateral exercises and gestures of goodwill. This whole activity was the beginning of India's naval diplomacy in Southeast and East Asia.

China, through its aggression and bullying has made more enemies than friends. It has territorial disputes with almost all its neighbouring countries and so far China has been assertive in laying its claim on those disputed territories. Repeated intrusion of land borders, contiguous maritime boundaries and violations of airspace of other countries by Chinese military forces have become the order of the day.

China started taking aggressive action in South China Sea from 1974 when it seized Paracel Islands from Vietnam after a brief battle. China followed the same tactic again in 1988 when it fought a naval battle with Vietnam over the possession of Spratly islands. Chinese PLA Navy ships sank a Vietnam's Navy ship carrying troops, killing 70 of them; afterwards China landed its marines and occupied 6 islands in the Spratly region. At the same time China has been quite crafty in declaring its intentions

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1. "Why the United States promotes India's great power ambitions," www.monthlyreview.org, vol. 57, issue no. 10, March 2006. See at <http://monthlyreview.org/2006/03/01/why-the-united-states-promotes-indias-great-power-ambitions>

While Japan and the Philippines enjoy security umbrella extended to them by United States, countries like India and Vietnam have to depend on their own military resources to defend their borders in case of war. It is a fact that when a country gets strong enough both economically and militarily, it has a tendency to resort to the use of force to settle disputes in its favour.

for peaceful resolution of those disputes, which is nothing but empty rhetoric. If observed closely, it can be noticed that China practises double standards in its policy of resolving disputes. On the one hand the Chinese state-controlled media and its leaders talk of resolving disputes amicably in order to maintain peace and stability in the region, but on the other hand its military forces continuously violate international laws and intrude into territory controlled by other countries as if they are trying to provoke the country into battle. For instance, Chinese diplomat declared that China would not cause trouble to any country in the South China Sea in "South China Sea Dispute Workshop." At

the same time, the Chinese Navy posted a territorial marker on Gaven Reef (Spratly Islands). It is no secret that China is perceived as a common threat to many countries in the Asia-Pacific region that mainly includes India, Japan, Vietnam and the Philippines.

While Japan and the Philippines enjoy security umbrella extended to them by United States, countries like India and Vietnam have to depend on their own military resources to defend their borders in case of war. It is a fact that when a country gets strong enough both economically and militarily, it has a tendency to resort to the use of force to settle disputes in its favour. There are numerous instances which validate this argument.

Recently, China held a naval exercise with Russia, with reports saying that China wanted to hold it near Japan in order to show its naval strength to Japan. However, Russia was not enthusiastic about the idea. But it has emerged that after the exercise was over, five Chinese warships made a circuit of the Japanese archipelago before returning to China. The manoeuvre was clearly intended to demonstrate Chinese naval might to Japan and the

United States and to show Russia it means “business” in the region.² Being a regional power, it is not only in India’s interest but also its responsibility to ensure the security of its partners and friends in the region in order to maintain peace and stability. Indian Prime Minister Dr. Manmohan Singh declared last June that India could be a net security provider in the region. So it is time we match our words with our actions. Although the ASEAN and East Asian nations have never stated it explicitly, but they want India to be a counterweight to China’s increasing footprints in the region. The question is whether India has the capabilities and, more importantly, the will to take up a bigger role in the region. Is it possible to be a security provider without any formal military alliance?

INDIA AND IT’S TAKE IT EASY POLICY

International affairs experts and world’s prominent strategists have been talking about India becoming a rising superpower for quite some time now. But this idea still seems a bit far-fetched and appears more of a western propaganda of using India against China mainly because of India’s strategic location in the Indian Ocean. India surely is a strong regional power with one million plus strong military and good prospects for high economic growth; but its attitude is nowhere near that of a rising superpower. Our political corps and policymakers get jitters when reports of India’s tiny neighbours like Nepal, Sri Lanka and Bhutan cultivating ties with China emerge. It does not behove a country like India to feel threatened by such small countries despite the fact that they share a far better relationship with India and are way too dependent on India for their own welfare. These countries tend to take India for granted sometimes, so New Delhi should exercise the option of using the “carrot-and-stick” tactic to deal with them and keep them under its influence.

Instead of worrying about these small countries of little importance, India should focus more on the problem it is facing and may face in future from formidable adversaries like China and Pakistan. Both China and

2. “Chinese warships make circuit of Japanese archipelago,” *The Asahi Shimbun*, July 23, 2013, see at <http://ajw.asahi.com/article/asia/china/AJ201307230082>.

Pakistan have been chafing India on border disputes for decades now by various tactics, this despite the fact that on paper they have been making efforts on resolving the border disputes amicably. If India wishes for peace, it is desirable and recommended for the regional security environment but India should not compromise on its national interests for that. A superpower believes in peace on equal terms if not entirely on its own terms.

CHINESE GAME OF FOSTERING PROXIES

The Chinese Communist Party (CCP), through its mouthpiece, talks about the ostensible “peaceful” intentions of growing Chinese military power, but on the other hand Beijing’s “latent” material and “visible” moral support towards some states and non-state actors as a means to keep the countries in territorial conflict with Beijing occupied with other distractions is quite apparent. If examined closely, one can conclude that in the past this double-game strategy of China seems to have worked. China has fathered Pakistan’s nuclear weapons programme, including delivery systems, to target India. China is believed to have involved Pakistan’s scientists in a nuclear test at its Lop Nor nuclear test site in 1989.³ Chinese President Jiang Zemin, during his visit to India in 1996, admitted that China had supplied Pakistan with 5,000 ring magnets (ring magnets are essential for uranium enrichment) when presented with hard evidence. China’s assistance to Pakistan in this area continues unabated.⁴

While India was busy tackling the perpetual skirmishes by Pakistan’s military on international borders and making several painstaking efforts to curb the infiltration of militants from Pakistan Occupied Kashmir (POK) into Indian side, the Chinese built their structures along the Line of Actual Control (LAC) over the years without any Indian protest, simply because Indian authorities were preoccupied with Pakistan to such an extent that they failed to notice such developments on the Sino-Indian border that might pose a security threat to India in the future. By the time New Delhi realised

3. “China’s Nuclear Exports and Assistance to Pakistan,” <http://cns.miis.edu/archive>, see at http://cns.miis.edu/archive/country_india/china/npakpos.htm.

4. Bhaskar Roy, “China’s only win India Policy,” paper no. 5528, www.southasiaanalysis.org, July 16, 2016, see at <http://www.southasiaanalysis.org/node/1318>.

its mistake of ignoring developments on the Chinese side of the border, it was already too late. The Chinese had been successful in their pursuit to a great extent. Most of their infrastructure development works have been completed which includes high speed rail line, Karakoram highway (across POK) and several airports in Tibet which serves the dual purpose of civilian movement as well as military movement.

The Indian side has been inordinately slow in building its infrastructure. Roads needed by security forces along the frontier with China have been delayed by five to seven years⁵ and to add to the woes, the military forces face constant badgering at the hands of the Chinese army when they keep intruding into Indian Territory and forcing the government to dismantle any infrastructure building activity undertaken by the Indian Army near the border.

Data of the Border Road Organisation (BRO) till March 31, 2013, shows that only 16 of the 73 roads along the Chinese frontier have been completed. The most egregious delay is the construction of the 255 km road connecting Darbok-Shyok-Daulat Beg Oldie in northern Ladakh. The road was scheduled for completion in 2012, but is now slated for completion in 2016. The three-week long stand-off in April between Indian and Chinese troops southeast of Daulat Beg Oldie had exposed how the Indian Army and the Indo-Tibetan Border Police (ITBP) struggled on terrain that has no road while their counterparts in China had metalled roads just a few kilometres short of the stand-off location. The worst hit is Arunachal Pradesh. Out of the 21 roads allocated to the BRO, only nine have been

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5. "Roads along border areas delayed by seven years, Antony tells BRO to take help from govt. agencies, private sector," *The Tribune*, May 26, 2013.

It is true that China's policy towards India has not become as threatening as it is towards Japan and the Southeast Asian countries on territorial claims; it still holds its claims on Arunachal Pradesh and Aksai Chin. Would Indian foreign policymakers wait for China to threaten India, or take measures to tell China where to back off? At the moment, India is conceding space.

completed, three of which have a length of less than 20 km each. In J&K, only three of the 12 allocated roads are complete, the rest has been delayed by several years with fresh completion dates being either 2016 or "beyond 2016" (Bannerji, 2013).

The recent events of intrusion by the Chinese PLA on the Indian side of the border and dismantling of structures and taking away of CCTV cameras installed for monitoring the situation at the border certainly points to the fact that the Chinese are unwilling to let India carry out any construction activity near the Sino-Indian border which would help India in strengthening its position.

Meanwhile, reports have emerged that the Chinese want another border protocol. Though no details have been made public by either side, it appears the Chinese want to pin India down with an agreement which will prevent India from fortifying its position. They may even demand that India restrict deployment of its air force in Arunachal Pradesh and close Advance Landing Strips (ALS). (Kapila, 2013.) It will be defeatist if India succumbs to the Chinese pressure, and New Delhi will have to pay a heavy price for that if another border confrontation occurs. However, the Indian Air Force (IAF) recently landed a C-130 super Hercules transport aircraft in Ladakh to strengthen its claim on the border issue. This act also acted as a morale booster for soldiers.

It is true that China's policy towards India has not become as threatening as it is towards Japan and the Southeast Asian countries on territorial claims; it still holds its claims on Arunachal Pradesh and Aksai Chin. Would Indian foreign policymakers wait for China to threaten India, or take measures to tell China where to back off? At the moment, India is conceding space (Anees, 2013).

Beijing perceives India's growing relations with Japan, Vietnam and other countries as detrimental to China's Asia vision. It is, therefore, even more important for India to strengthen economic, political, diplomatic, defence and strategic relations with these countries (Anees, 2013).

SINO-VIETNAMESE DISPUTE AND CAMBODIA AS CHINA'S PROXY

Vietnam and China used to share a very friendly relationship till the 1960s. China provided significant support to North Vietnam's People's Air Force and People's Army in terms of arms, training and essential supplies during the Vietnam War (also known as Second Indochina war [1955-1975]) which helped North Vietnam in defeating the South Vietnamese forces and its allies (mainly the US). In this war, the communist regimes of North Vietnam, Cambodia and Laos fought together against South Vietnam, the US and its allies. In the late 1950s Vietnam started tilting toward the Soviet Union. However when after the war with the US, North Vietnam emerged victorious and succeeded in the Unification of Vietnam, the relationship between China and Vietnam started to worsen when Vietnam signed a 25-year treaty of friendship and cooperation with the Soviet Union (USSR) in 1978 (Sino-Soviet ideological differences already had split the block) and subsequently invaded Cambodia and occupied it. This provoked tensions with China as China had allied itself with the Khmer Rouge government. The tensions were soon followed by a brief border war between China and Vietnam in 1979.

A territorial conflict over the possession of the Spratly islands shot up between several countries. The Spratlys, one of the largest island chains in the South China Sea, is claimed in whole or in part by China, Taiwan, Vietnam, the Philippines, Malaysia and Brunei. Small military forces from the first five countries are stationed on 45 of its islands. Vietnam and China have fought a battle over the possession of Spratly Islands in 1988 (already mentioned).

Vietnam's People Air Force fighters regularly fly over the Spratlys airspace which China objects to, though China itself practises double

Vietnam's People Air Force fighters regularly fly over the Spratly airspace which China objects to, though China itself practises double standards when its PLA Air Force (PLAAF) fighters fly over Japanese controlled Senkaku islands repeatedly and its coast guard ships venture into Japan's territorial waters for patrolling. This clearly indicates that China is interested in changing the status quo by force.

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RELATIONS WITH CAMBODIA

Vietnam invaded Cambodia in 1978 after continuous vexation over the genocide of the ethnic Vietnamese living in Cambodia by Khmer Rouge, which forced them to flee to Vietnam and at the same time Cambodian guerrilla forces harassed Vietnamese forces on the border, taking advantage of the unresolved border issue between the two countries. Pol Pot's hatred for Vietnam was well known, China cashed in on the opportunity and provided Cambodia with support and military hardware, so that it could pressurise Vietnam on relocating the ethnic Chinese in Vietnam who were forced out of the country by Vietnam's government. The real motive behind Chinese help to Khmer Rouge was that China wanted to acquire all of Paracel Islands and conduct oil exploration for its own usage but Vietnam wanted to invite foreign companies for oil exploration.

The territorial dispute between Vietnam and Cambodia still exists, though both sides have been successful in demarcating some portion of their shared border. But the possibility remains that China could exploit the still unresolved border issue to create tensions between Cambodia and Vietnam. Hanoi understands that it faces a bigger security threat from China than Cambodia and therefore Hanoi has embarked on a mission to modernise its forces so as to prepare for any possible conflict in future.

VIETNAM'S MODERNISATION PLAN

Considering the renewed threat from China because of its dynamic modernisation plan, Vietnam too has started modernisation of its defence forces and is in the midst of it. Vietnam's People's Air Force operates the largest fleet of aircraft in Southeast Asia in terms of sheer numbers but most of its fleet is of Cold-War era and hence obsolete to quite an extent. Under its modernisation plan Vietnam has purchased fourteen Su-27 and twenty-four Su-30 fighters from Russia. Four pre-modernised Su-30MK were purchased in 2004 and twenty Su-30MK2 were purchased under two contracts signed in 2009 and 2010. Recently, Russia signed a deal with Vietnam to deliver a dozen Sukhoi-30MK2 multirole combat jets to Vietnam for a sum of \$600 million over the period of 2014-2015. Vietnam plans to acquire a total of 72 Su-30's by 2015.

India plays an important role here as the Indian Air Force trains the Vietnam's People's Air Force pilots to fly the Su-30.

Vietnam plans to deploy a modern submarine fleet by 2016-2017 and has placed orders for six Kilo-class conventional fast attack submarines with Russia. Vietnam also has on order four Dutch Sigma-class Corvettes.⁶

Meanwhile in order to strengthen its defence ties with Vietnam, India has extended \$100 million credit line to Vietnam to purchase military equipment. The money would most probably be used in purchasing four

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6. Carlyle Thayer, "Strategic Posture Review: Vietnam," www.worldpoliticsforum.com, see at <http://www.worldpoliticsreview.com/articles/12623/strategic-posture-review-vietnam>

patrol boats.⁷ This no doubt would beef up the military ties between the two countries to some extent, but India needs to go further. The Indo-Russian jointly developed cruise missile “Brahmos” has been on the top of Vietnam’s demand list but so far India has not committed itself to provide the sophisticated missile because both Russia and India would not want to antagonise China by offering a state-of-the-art missile to a country which has arms embargo imposed on it. But if India, with Russia’s support, can find a way to deliver these missiles to Vietnam, it would be in India’s interest. Indian decision makers are worried about antagonising China, whereas China has helped Pakistan in every possible way not only to develop nuclear weapons but also provided it with various weapon systems which could deliver them.

JAPAN’S GROWING PROXIMITY WITH VIETNAM

Japan has vested interest in the resolution of the Spratly Islands dispute in Vietnam’s favour. As the island is located close to Japan’s oil import lanes, having control of the sea lanes in the hands of a hostile country could have calamitous effect on Japan’s national security and economy. Additionally, Japan is also keen on developing some of the oil blocks in the region which is possible only if Vietnam controls the islands.

Japan’s eagerness to forge closer ties with the fast-growing Southeast Asian countries as a part of efforts to revive Japan’s economy is quite evident from Japanese Prime Minister Shinzo Abe’s recent visit to Malaysia, Singapore and the Philippines. Deepening cooperation with Association of South-East Asian Nations (ASEAN) is strategically important for Japan to keep China in check, which has become assertive in East China and South China Seas.

The relationship between Vietnam and Japan reached a new level post October 2006 when Vietnam’s Prime Minister Nguyen Tan Dung officially visited Japan and opened a new phase of cooperation towards “strategic

7. “India offers Vietnam credit for military ware,” *The Hindu*, July 28, 2013. See at <http://www.thehindu.com/news/national/india-offers-vietnam-credit-for-military-ware/article4960731.ece>

partnership between Vietnam and Japan for peace and prosperity in Asia.”⁸ Vietnam signed a strategic partnership agreement with Japan that called for high-level visits and the establishment of a ministerial-level Joint Cooperation Committee. The following year, Japan and Vietnam adopted a 44-point agenda covering seven substantive areas of cooperation: high-level policy dialogue, economic relations, legal and administrative reform, science and technology, people-to-people exchanges, cooperation in multilateral forums and engagement on issues involving climate change, environment, natural

resources and technology. In December 2008, the two countries signed Vietnam– Japan Economic Partnership Agreement (VJEPA). Lately, Japan has been pursuing the strategy of using countries like Vietnam and Mongolia who have diplomatic ties with North Korea to pressure Pyongyang in reducing tensions and returning Japanese citizens abducted by North Korea.

Japan is currently the largest contributor of development assistance to Vietnam, its second-largest trading partner and its third-largest investor. Japan’s military has so far been careful to offer assistance only in non-combat-related areas like disaster relief, anti-piracy and health care. But even these limited steps build ties between military forces. One plan now under negotiation is to train medical personnel from Vietnam’s navy next year to care for the crews on that nation’s newly purchased Russian-built submarines (Fackler, 2012).

Japan’s Ministry of Defence said it has planned to double its military aid programme next year to help Indonesia and Vietnam. Vietnam could also be among the countries that Japan would allow to buy its submarines and other defence-related equipment, but maybe at a later stage (Fackler, 2012).

8. “Overview of Vietnam-Japan relations,” Vietnam Trade Promotion Agency, see at http://www.vietrade.gov.vn/en/index.php?option=com_content&view=article&id=1034:ov

TIME FOR INDIAN REALPOLITIK

In the last few months, New Delhi has taken a number of initiatives to set up durable bilateral ties in the Asia-Pacific region. The Indian Defence Minister visited Singapore, Australia and Thailand recently, The Australian visit being the maiden visit by an Indian Defence Minister. Japan's Defence Minister Itsunori Onodera will be visiting Vietnam and Thailand soon to boost cooperation on Maritime security. It is quite evident that India and Japan are trying to forge stronger relationships with the same countries as their interests converge. Prime Minister Dr. Manmohan Singh appointed a special PM envoy for Japan which would try to speed up the discussions on various issues of cooperation between India and Japan. India should try and see if it can bring these countries together and form some sort of multilateral partnership.

The group of decision makers which believes in status quo and who have prevailed for a long time are totally unwilling to tinker with India's foreign policy tenets, non-alignment policy being the foremost of those. It was relevant only during the Cold War period and India, in fact, followed this policy only till Jawaharlal Nehru's reign. Technically, New Delhi diverted from the path of non-alignment from 1972 itself when it signed the treaty of friendship with the USSR. This policy should have expired with the end of the Cold War but because Non-alignment policy was a legacy of Nehru, political leaders, especially from the Congress, felt that it needs to be carried on without pondering over its relevance in the post-Cold War period.

The current case of possible US military intervention in Syria is quite relevant for India. Had Syria been a country with no allies like Iraq, the US would not have debated much over taking military action on Syria. But because Syria has the backing of Russia, China and Iran, the US cannot think of attacking Syria and getting away with it. The same applies to India. In 1962 when India was one of the leaders of Non-Alignment movement and was attacked by China, no country came to India's rescue even when India's prime minister wrote letters to the heads of other countries for help. However the possibility of war with China becomes less if India has some

allies on its side which can put pressure on Beijing and can also give added advantage to India while conducting negotiations over border disputes.

EXPORTING DEFENCE EQUIPMENT

As of 2011, official figures show that India's global export of defence-related equipment is about \$150 million. Most of India's defence exports are of low-technology items. Except for a few helicopters and small transport aircraft, which have recently been exported by the state-owned Hindustan Aeronautics Ltd. (HAL) to countries like Ecuador and the Seychelles, respectively, Indian defence exports mainly consist of spare parts, clothing items, parachutes and accessories, communications equipment, night-vision devices, transport vehicles and various types of ammunition.⁹ India supplies defence equipment mainly to Asian and African countries. The reason why India is not able to make any place for its products is because of absence of a clear defence export policy. This in turn affects India's own quest for indigenisation of weapon systems.

CHINA AS THE UNITING FACTOR

Recently, Chinese companies have started constructing a facility for natural gas exploration in the East China Sea in an area which happens to fall under Chinese maritime zone, but the Japanese fear that their activities are likely to cross over to the Japanese side. Japan has been willing for a joint exploration but Beijing has stalled the talks and now it is going ahead with the exploration on its own. This step is likely to stir more tension as the boundary is not marked clearly and Tokyo has been requesting Beijing not to approve any project in an area where territorial claims by both countries are overlapping. The dispute over Senkaku Islands continues.

With India, China's stance has not been as aggressive as it has been with Japan but repetition of intrusion keeps taking place. China has not shown any intent of backing down from its claim on Indian territories, the question over Chinese occupation of Indian territory is seldom raised in discussions.

9. "Global insider: Indian Defence exports constrained by lack of clear policy," www.worldpoliticsreview.com. See at <http://www.worldpoliticsreview.com/trend-lines/13196/global-insider-indian-defense-exports-constrained-by-lack-of-clear-policy>

China opposes any sort of economic activity carried out by Vietnam or by any country on invitation by Vietnam in the South China Sea. It warned Vietnam and India against any unilateral oil exploration activity. Though the fact is that the allocated oil block comes under Vietnam's jurisdiction.

With respect to Vietnam, the Chinese approach has not been any different. China opposes any sort of economic activity carried out by Vietnam or by any country on invitation by Vietnam in the South China Sea. It warned Vietnam and India against any unilateral oil exploration activity. Though the fact is that the allocated oil block comes under Vietnam's jurisdiction.

be around these islands. India may not be a direct party to these disputes, but nonetheless India has its own national interests at stake in both the disputes.

It appears that China is trying to keep the other countries from carrying out any energy exploitation activity in order to safeguard the resources for own usage. China's dispute with both Japan and Vietnam, although appearing to be about possession of islands, is actually about the energy resources that are believed to

INDIA'S STRATEGIC PARTNERSHIP WITH VIETNAM

India has been a traditional friend and partner of Vietnam. Both countries signed the strategic partnership agreement in 2007 to further bolster the military relationship. India has shown renewed vigour in establishing military ties with Vietnam. This partnership remains strongest in political, defence and security cooperation in light of the challenges posed to both countries by a rising China, with India serving as Vietnam's second major supplier of military training and equipment after Russia.

The oil pipeline that links Myanmar and China started operating from July 27, 2013. This is being considered by many as a breakthrough by China in its pursuit of energy diversification and reducing extreme dependence on Strait of Malacca for its oil and natural gas imports. The 793-kilometre pipeline connects Bay of Bengal with southwest China's Yunnan province

and is expected to transfer 12 billion cubic metres of natural gas to China annually, according to a news release on the website of China National Petroleum Corporation (CNPC). (Watt, 2013) A parallel 771-kilometre pipeline that will carry Middle East oil shipped via the Indian Ocean is under construction. So though it has offered benefit to China in terms of security of its oil tankers passing through Strait of Malacca, the advantage is still very limited in its nature as the Chinese oil from Persian Gulf would still have to pass through Indian Navy-dominated area of Indian Ocean. But our eastern flank requires further exigency as it needs to be strengthened more.

Taking a cue from China's strategy of establishing multiple routes for Oil and gas imports, India should also augment its oil exploration activities in Vietnam's controlled area in South China Sea. Vietnam has already extended its backing to India's effort for oil exploration. India should help Vietnam in return for its support by extending all possible support for Vietnam's military modernisation in order to deter China from establishing hegemony in South China Sea. All the while waiting for the US to lift arms embargo first and then follow other countries is not going to benefit India. The US is expected to lift the various sanctions imposed on Vietnam in time to come as it will try to engage with Vietnam in its effort to contain China. India should take the lead. India should not hesitate in offering its defence equipment to Vietnam just out of the fear of antagonising China. A good example is the case where France's naval defence shipbuilding company, DCNS SA, has sold its landing grid to China which allows helicopters to land on or take off from ships without crew assistance even in bad weather, despite objections from Japan. France maintains that the equipment is not

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for military use and does not violate European Union's ban on arms export, but one needs to keep in mind that such a technology could easily be used for military operations.

India has not been very vocal about its interests in the South China Sea, but New Delhi has taken many important steps towards consolidating its position in the area. Like the US and other countries, India too has declared its support for peaceful resolution of conflicts and continued freedom of navigation in international waters. India has also pursued deepening maritime relations with several claimant states, notably Vietnam, with the Indian Navy gaining permanent berthing rights at Nha Trang port and offering the Vietnamese training in submarine warfare.¹⁰

AREAS OF COOPERATION

Natural Resources: Vietnam and India have world's fourth and fifth largest deposits of rare earth minerals, respectively. Japan depends heavily on import of rare earth minerals for its electronic and automobile industry from China which supplies about 90% of Japan's rare earth mineral needs. But following the territorial dispute, China suspended the supply of rare earth minerals for about a month which had a severe impact on Japan's industries. India too has agreed to supply about 7% of Japan's total requirement of rare earth minerals which is a step forward in ending China's monopoly on it.

Vietnam is a resource rich country and India and Japan both depend upon exports to meet their energy needs. Vietnam has several oilfields which could be developed by both Japan and India. India's ONGC Videsh tried to develop an oil block but pulled out of the project. India and Japan will have to step up their efforts in developing these oil blocks to strengthen their energy security.

Civil Nuclear Cooperation: With the sky-rocketing price of crude oil and the persistent use of coal for power generation, countries are finding it difficult to provide electricity to their respective citizens at an affordable price. Exhaust gases not only pollute the surrounding environment but

10. Cheitig Bajpae, "Reaffirming India's South China Sea Credentials," [www.thediplomat.com](http://thediplomat.com), August 14, 2013. See at <http://thediplomat.com/2013/08/14/reaffirming-indias-south-china-sea-credentials/>

also contribute greatly towards global warming. In the past we have seen how the whole of Japan was under the chronic problem of air pollution in the 1960s when industrialisation was at its peak. Recently in Beijing too people are suffering from the problem of air pollution. Automobiles will continue running on petroleum in the foreseeable future and its consumption is likely to increase. But in order to get some sort of grip on pollution, countries have been looking desperately to replace conventional fuels used for generating electricity with renewable sources of energy and clean sources of energy.

With the current trend in the energy sector, the world is only going to witness more and more usage of nuclear material for power generation. Japan is in the process of finalising nuclear deals with both India and Vietnam to help them with their respective nuclear energy programmes. India is likely to gain much from this deal as India has to spend a large amount of its foreign reserves on purchasing crude oil. India is looking to increase the share of nuclear fuel in total power generation in the country and this deal will surely help India a lot. India also has signed a nuclear deal with Vietnam to help Vietnam in developing and maintain nuclear power plants, though India is a late entrant to the club with the US, Russia already expressed its willingness to sign a deal with Vietnam. At a time when Japan is still struggling to restrict the flow of contaminated water into the ocean, the Japanese government is already under extreme pressure from its citizens who are demanding abolition of nuclear energy power plants in Japan in order to avoid another incident similar to the Fukushima nuclear disaster. On September 15, 2013 Japan switched off all its nuclear power plants for a second time. The question over the safety of nuclear

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power is moot but the fact of the matter is that nuclear energy is the only form of clean energy at the time which is capable of electricity generation on a large scale.

Defence equipments: India can offer to sell its indigenous Advanced Light Helicopter (ALH) and Light Attack Helicopter (LAH) and Light Combat Aircraft (LCA) to certain countries at a price which is cheaper than its competitors. The strategy should be to carve out a market share for oneself before one thinks about making huge margins of profits. The international arms market is highly competitive and as of now India's share in it is negligible. India can sell various short and medium range missiles (Prithvi and Brahmos) to Vietnam not only to help Vietnam bolster a credible military power but also to slowly start expanding India's own defence product market. This would enable India to partially recover the huge amount of money it spends in the development of these products, and would also bring in competition and encouragement in India's domestic market for companies to develop more varieties of weapons and delivery systems. India's plan of going for indigenous weapon systems is not going to work out unless India not only buys from private companies but also backs them up in the global competition for arms sale.

Vietnam is looking for submarines to arm its Navy, for which both India and Japan can make offers. Japan has already hinted that it may offer to sell its submarines to Vietnam at a later stage. India too can follow suit. It will not only help the defence ties between India and Vietnam but also help the Indian shipbuilding company, which has started making submarines for the Indian Navy, by gaining more expertise in making submarines.

Economic Investment and Trade: Both India and Vietnam are developing economies and have a highly profitable market potential. Japan on the other hand is an export-oriented economy and is in need of markets where it can invest and simultaneously sell its products or use them as hub for its exports. Japanese companies had a huge investment and market in China which in a way helped China to achieve the growth rate it has today, but after the territorial dispute spilled on in the economic domain, Chinese citizens out of their nationalistic fervour damaged Japanese factories and also boycotted

Japanese goods. So in the given circumstances, India and Vietnam present favourable conditions for Japan to make investments which would in turn help all the three countries achieve their economic goals.

Humanitarian Assistance and Disaster Relief: With the incidents of sea piracy rampant near Somalian coast and Malacca Strait, it is imperative that the three countries come together and undertake coordinated patrolling and joint escorting missions. For a country like India, illegal arms trafficking via sea and maritime terrorism is a proven possibility. The materials for making bombs and assault rifles for 1993 Mumbai blast were sent via sea and the attack of 26/11 again on Mumbai took place through the sea. Recently there were intelligence reports of terrorists numbering in excess of 30 would come to India via sea from Sri Lanka. With all such possibilities looming over the security of Indian coastal cities, it is necessary that India in coordination with other powers of the region increases patrolling in the region so that the possibilities of another deadly terrorist attack could not be repeated. Indian National Security Advisor Shiv Shankar Menon has proposed a "Maritime Concert" in which the region's major maritime powers would have collective responsibility to protect the domain.¹¹ There have already been several demonstrations of this kind of cooperation, including China, India and Japan coordinating their anti-piracy patrols in the Indian Ocean within the framework of the Shared Awareness and Deconfliction (SHADE) mechanism, and the establishment of an Expanded ASEAN Maritime Forum (EAMF) in 2012 (Bajpae, 2013).

MULTILATERAL SECURITY COOPERATION IS EXPEDIENT FOR INDIA

Maritime security requires multilateral cooperation. For a dynamic region such as Asia-Pacific, multilateral and bilateral cooperation networks of groups with compatible and complementing vested interests become more necessary to maintain balance of power in the region. Forging strong bilateral ties within a multilateral cooperation network adds to the overall

11. Cheitig Bajpayee, "Reaffirming India's South China Sea credentials," *thediplomat.com*, August 14, 2013. See at <http://thediplomat.com/2013/08/14/reaffirming-indias-south-china-sea-credentials/>

strengthening of the network. Among the predictions between a multi-polar power structure and choosing sides between the “big two” (United States and China), India will have to figure out which one will be more beneficial to its national interest. India needs to give up its outdated philosophy of non-alignment.¹² According to the views of prominent strategists, the choice for the later, i.e., re-emergence of a bipolar power structure would be like a second cold war in the making, on the other hand, a multi-polar power structure would ensure peace and stability not only in the region but also in the whole world to a great extent. So far New Delhi has abstained from being part of any multilateral construct aimed against any particular country and at the same time has started strategic dialogues and cultivated strategic partnerships on bilateral basis.

CONCLUSION

In international politics there is no such thing as right act or wrong act. One needs to take an action and justify it by all means, stating that under the circumstances, the action taken was the best option and in the interest of all. India's is one such case where the country most of the times remains entangled in the debate whether the action taken will be good or bad. Although in a democracy issues are supposed to be debated and then reach a consensus, in India the debate mostly ends up in a deadlock between those who are for and those who are against. This does nothing else but projects a weak image of the country and exudes the inability of leaders to reach some agreement. New Delhi can learn from recent revelation about the United States' worldwide snooping programme. Instead of feeling guilty over its act of spying on other countries (including allies), the US openly justified its action citing cases where terrorist attacks were allegedly thwarted because of the PRISM spying programme.

New Delhi can make an impact on regional politics and swing things in its favour only if it has the confidence to back itself up. Having capabilities which could pose a challenge to others, or which could neutralise challenges

12. “Can India become a great power?” *The Economist*, March 30, 2013, <http://www.economist.com/news/leaders/21574511-indias-lack-of-strategic-culture-hobbles-its-ambition-be-force-world-can-india>

posed to it by others, is the better way of achieving confidence. But when one has limitations on its capabilities, forming a group of like-minded countries is recommendable as it enhances the combined capabilities of the group.

No doubt, India has carved a niche for itself in the Indian Ocean Region (IOR) due to its rapid naval modernisation, and this will go a long way in augmenting India's strategic relevance in the Asian maritime domain. India's plan of having three active carrier battle groups by 2022 trumpets its intentions of becoming a dominant force in the region.

Asia is going to witness more interstate rivalries, especially in the maritime domain, in time to come. With such a plausible scenario, expanded maritime role of India is prudent not only for safeguarding its growing maritime interests but also to maintain the freedom of navigation in international waters as India's dependence on seaborne trade will keep rising amid India's rise as a resource consuming power. It is pivotal as well as the responsibility of India to protect the other countries from the emergence of interstate security threats which is rooted in China's rise as an assertive and aggressive maritime power. This coupled with the US's hesitance to get involved in disputes in the region gives the impression that United States superpower posture is eroding fast and it will be left to India's ability to play a constructivist maritime role in the region to justify its strategic significance.

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MYANMAR: THE NEW STRATEGIC PAWN IN ASIA PACIFIC?

ASHA MARY MATHEW

The year 2010 witnessed Myanmar setting out on an elaborate course to put an end to its seclusion and work towards integrating itself with the global system. For years together Myanmar had been slapped with embargoes from the West and had undergone various domestic challenges that have led to chaos within the country as well as hampered relations with neighbouring countries. The current leadership of Myanmar, hence, has a long way to go in order to bring about political stability which the country looks to achieve. It definitely goes without saying that political and economic stability go hand in hand. Myanmar is yet to realise its potential in terms of its natural resources and minerals, which if tapped into can generate a lot of wealth, in turn promising better prospects for the country as well as the region.

After the political reforms in Myanmar, Aung San Suu Kyi, leader of the National League for Democracy, made her first trip abroad to the US seeking its help in the development of her country. "Because we are situated between China and India, the two biggest powers in Asia, and because we are on the border of South and South-East Asia, our position is unique, and any relationship with Myanmar must take into consideration this situation," said Aung San Suu Kyi, during her visit to Washington.¹ This carefully worded statement by her reiterates the country's significance in

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1. "Myanmar's location shows its strategic importance: Suu Kyi," *Seven Sisters Post*, September 19, 2012, see <http://sevensisterspost.com/myanmars-location-shows-its-strategic-importance-suu-kyi/>, accessed on October 20, 2012.

Myanmar's strategic position in the region makes it prey to the larger politics that exists in the international arena. If one were to look at the behavioural pattern of external powers in a country or region, it has been proved that their interactions and interventions within any given region have a certain impact on the stability of the region. These interactions are bound to create "systemic interdependencies" or "security complexes" which have repercussions of its own.

the international arena. She also made consequent trips to countries such as Britain, France, India and Singapore.

Myanmar's strategic position in the region makes it prey to the larger politics that exists in the international arena. If one were to look at the behavioural pattern of external powers in a country or region, it has been proved that their interactions and interventions within any given region have a certain impact on the stability of the region. These interactions are bound to create "systemic interdependencies" or "security complexes" which have repercussions of its own.² This basically means that countries in the region have the tendency to lean towards either of these external powers which in due course of time disrupts the prevailing

security architecture of the region. In the larger geopolitical scenario, the growing influence of the US and China in the Asia-Pacific can be seen as a perfect example. The US involvement in Myanmar along with other countries in the region only adds up to China's worries in the region. Myanmar certainly serves as yet another lynch-pin for the US strategy in Asia-Pacific. Japan, a close ally of the US, has also been extensively engaging with Myanmar in the recent years. While looking at it from the regional perspective, it is clear that the growing influence of China in Myanmar has become a matter of worry for India too, which further serves as an impetus to strengthen relations between the two countries.

In 2012, the visit of Prime Minister Manmohan Singh to Myanmar was the

2. T. V. Paul, "The Major Powers and Conflicts in South Asia," in Amitendu Palit (ed.), *South Asia: Beyond the Global Financial Crisis* (New Delhi: Cambridge University Press, 2011), p. 102.

first visit by an Indian prime minister after twenty-five years or so, which highlights the growing importance of the country in the region.³ On the other hand, Myanmar's membership with the Association of South-East Asian Nations (ASEAN) along with its interest in seeking new relations with the US stresses its reservations on the Chinese influence in the country as well as the region.

This clearly reiterates the power play that exists in the region along with the importance of Myanmar amidst it all. The paper would like to focus on this power play and look into the resulting likely geopolitical scenario in the region. India's role amidst this would also form a crucial part of the paper.

Officially recognised as a part of the South-East Asian region, Myanmar lies right between the two Asian giants India and China. The country hence acts as a connecting link between South Asia, South-East Asia as well as East Asia, and is in their immediate proximity. Apart from its strategic positioning, Myanmar is abundant in oil and mineral resources, which only adds to its significance in the region.

STRATEGIC SIGNIFICANCE OF MYANMAR

Officially recognised as a part of the South-East Asian region, Myanmar lies right between the two Asian giants India and China. The country hence acts as a connecting link between South Asia, South-East Asia as well as East Asia, and is in their immediate proximity. Apart from its strategic positioning, Myanmar is abundant in oil and mineral resources, which only adds to its significance in the region.

China's interest in Myanmar can be divided into three broad categories—border security, energy transportation, economic cooperation and naval cooperation. The battle between the Kachin Independence Army and the Myanmar state forces has left a number of the ethnic Kachin civilians displaced and they have been sent to various camps in different parts of

3. Manmohan Singh meets Aung San Suu Kyi, *CNN-IBN*, May 29, 2012, see <http://ibnlive.in.com/news/manmohan-singh-meets-aung-san-suu-kyi/262470-3.html>, accessed on November 1, 2012.

the country.⁴ The civil unrest on the northern border of Myanmar makes it crucial for China to maintain good relations with its neighbour in order to warrant peace and security on its own Southern border. Meanwhile China had been granted the rights to lay a 1,100-km long crude oil pipeline from Kyaukpyu port on the western coast linking Kunming, right after entering Ruili, in the Yunnan Province of China.⁵ Other facilities such as crude oil unloading ports as well as oil storage facilities are also being built. The fact that the two countries share a border, automatically allows China to circumnavigate one of its major trading routes, i.e., the Malacca Strait.⁶ At this time of unrest that prevails in West Asia, China's access to Myanmar's natural resources also reduces its dependency towards the resources of West Asia. China had also been closely involved with the domestic politics in Myanmar and had good relations with the military junta that had been in rule for the past couple of decades. With Myanmar's restricted access to arms in the global markets, China stood by and offered a wide range of fighter aircraft, light tanks and anti-missile ships. Myanmar has been known to be a loyal customer of Chinese weapons since the early 1990s.⁷ Myanmar also serves as an important access to the Indian Ocean through the Bay of Bengal. An expansion westwards into the littoral areas of the Indian Ocean will be of strategic interest to China.

India and Myanmar both share a land as well as a maritime boundary. The cyclone Nargis that hit Myanmar in 2008 had its adverse effects on India's Eastern coast too.⁸ With the Bay of Bengal region being prone to more of such cyclones, geographical proximity ties both the countries together in terms of the effects of climate change. Myanmar has been crucial in containing the North-East insurgency by helping to capture and hand over

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4. Maija Yang, "Myanmar Minorities Caught in the Middle," *The Economist*, July 11, 2012, also see <http://www.economist.com/comment/1519436>, accessed on July 12, 2012.
 5. "China-Myanmar Pipelines to be Completed in May," *Xinhua News*, January 1, 2013, see http://news.xinhuanet.com/english/china/2013-01/21/c_132116981.htm, accessed on September 20, 2013.
 6. H. Shivananda, "China's Pipelines in Myanmar," *IDS Comment* (New Delhi: IDSA, January 2012).
 7. SIPRI Arms Transfer Database.
 8. George Pararas, "Cyclone Nargis of May 2-3, 2008 in Myanmar," see www.drgeorgepc.com/Cyclone2008Burma.html, accessed on October 18, 2012.

illegal insurgents into Indian custody. Hence the two have been conducting border exercises concerning security issues. Since Myanmar serves as a connection both to the South-East Asian region as well as the East Asian region, it becomes a crucial factor for India's Look East Policy. Myanmar has put forward a request for full membership within the South Asian Association for Regional Cooperation. China's growing influence in the country was considered to be one of the many reasons for the acceptance of Myanmar into ASEAN, which probably might be also the very reason for its willingness to join SAARC, i.e., to diversify its foreign policy and be less dependent on one country alone.⁹

Myanmar and India have also been involved in various initiatives such as Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and Mekong-Ganga Cooperation. However, the rule of the military junta in the country had always restrained relations between India and Myanmar. The recent political transition in the country only provides an impetus for the two countries to strengthen their relations, also keeping in mind that India is one of the largest democracies in the world.

The constant changes in the politico-security environment of Myanmar ensured that the country was never off the US radar. With the recent change of guard, Aung San Suu Kyi has approached the US for help in terms of its peaceful transition as well as political stability. US footprints have been growing in the country ever since. For starters, the US has already eased

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9. K. Yhome, "SAARC and Myanmar," *Analysis* (New Delhi: Observer Research Foundation, July 2008), see <http://www.orfonline.org/cms/sites/orfonline/modules/analysis/AnalysisDetail.html?cmaid=14854&mmacmaid=14855>, accessed on October 17, 2012.

and removed most of the sanctions and begun to invest into the country.¹⁰ The fact that Myanmar shares a land border with two of Asia's giants, India and China, land and maritime borders with South-East Asian countries and has access to the Indian Ocean makes it a country of great significance for the US. With the ease of sanctions and growing relations between the two countries, Myanmar can form a major part of the US pivot policy in Asia-Pacific. Apart from the Sino-US rivalry in the region being the very likely reason, the implementation of an effective democratic system in the country which is likely to be favourable to the US can be also be seen as yet another interest of the US.¹¹

With respect to Japan, the two countries have a history that goes way back to the nineteenth century. Japan and Myanmar were known to have very close trading ties which later came to a halt because of the inward looking policy that Myanmar resumed after the entry of the military backed government. With Myanmar being the largest country in mainland South-East Asia, it also serves as one of the biggest markets in the region. Japan was also known to have invested a great deal in oil production in Myanmar which still becomes a crucial factor for relations between the two.¹² A stable Myanmar would definitely be in the interest of Japan and hence Japan has always worked towards providing aid to the country. The US factor will also play an overarching role in this equation.

BRIEF HISTORY OF THE POLITICAL DYNAMICS OF MYANMAR

Myanmar (Union of Burma, as it was referred to then) achieved its independence from the British way back in 1948. Sao Shwe Thaik took over as the first President of the country along with his Prime Minister U Nu. The political system was that of a bicameral parliament with multiparty system. The democratic system did not last for long though. The military juntas came

10. "As Sanctions Ease, US Companies Start Investing in Burma," *Voice of America*, November 19, 2012, see <http://www.voanews.com/content/as-us-sanctions-against-burma-ease-american-companies-start-investing/1549041.html>, accessed on November 23, 2012.

11. *Ibid.*

12. Thanyarat Apiwong and Yoshihiro Bamba, "The Role of the Japanese in Myanmar: Economic Relations between Japan and Myanmar in Historical Perspective" (2009), see <http://libdspace.biwako.shiga-u.ac.jp/dspace/bitstream/10441/8174/1/jinbun59pp.9-.pdf>, accessed on November 23, 2012.

into power in 1962 through a coup d'état led by General Ne Win. The ruling juntas always ensured to keep as leaders, people who were capable of maintaining power in their own hands. Critics claim that their style of governance could be compared to that of the Soviet rule to a certain extent.¹³ General Ne strongly believed that the military was the only solution to uniting the country again. He made sure to enforce unity in the military and did not hesitate to remove people from authority if they were not in line with what he believed.¹⁴

Over the years, with the social infrastructure deteriorating, the country began to stagnate both politically and economically. Various protests claiming for a democratic system erupted amongst the citizens both young and small, which only resulted in further violence and chaos within the country. Myanmar witnessed a number of protests in 1962 and 1974, but each of it was suppressed by the military regime. Myanmar was largely isolated in the international arena and was accepted only by China. The protests of 1988 and 2007 were considered to be the largest pro-democracy protests to have ever occurred in Myanmar. Aung San Suu Kyi was under house arrest for over 15 years in fear of her role in intensifying the protests against the military regime. It was at this point that the country was slapped with the sanctions clause of the human rights violations. With Myanmar being home to a large number of ethnic

The year 2010 witnessed a breakthrough with the military junta voluntarily giving up their power. Elections were conducted in Myanmar, though only parties that were approved by those in power were allowed to contest. The current President Thein Sein was brought to power along with his party in March 2011. Despite criticism from the international arena, the current government has managed to bring about some reforms in the country.

13. Linnea M. Beatty, "Democracy activism and assistance in Burma," *International Journal* (Canadian International Council, 2010), vol. 65, no. 3.

14. Win Min, "Internal dynamics of the Burmese military: before, during and after the 2007 demonstrations," in Monique Skidmore and Trevor Wilson (eds.), *Dictatorship, Disorder and Decline in Myanmar* (ANU E Press: Australia, 2008) p. 29.

groups, who act as divergent forces from within, each fighting for their rights, it only caused more disunity amongst the people.¹⁵

The year 2010 witnessed a breakthrough with the military junta voluntarily giving up their power. Elections were conducted in Myanmar, though only parties that were approved by those in power were allowed to contest. The current President Thein Sein was brought to power along with his party in March 2011. Despite criticism from the international arena, the current government has managed to bring about some reforms in the country. The release of Aung San Suu Kyi did help the government gain a few extra brownie points in the eyes of the Western countries. The official visits to and from the country also highlight that Myanmar is ready to open itself to the outside world.

A number of questions have been raised on the role of the military in the current system. Analysts claim that Than Shwe, who was in power since 1992 and is also the chairman of the State Peace and Development Council, is still known to play a dominant role in the backdrop. He was also the person who selected Thein Sein for the post of President and ensured that he had a subtle military backing. These factors have defined the democratic transition as “a sham to cement the military rule.”¹⁶ President Thein recently rejected a plea by Aung San Suu Kyi to lobby for changes in the constitution so that she would be able to participate in the next presidential election.¹⁷ This only further questions the credibility of the democratic system that is in place in Myanmar.

ROLE OF EXTERNAL PLAYERS IN MYANMAR

In order to understand the power play that exists with respect to Myanmar, it first becomes crucial to understand the very meaning of the word “power

15. J. Mohan Malik, “Myanmar’s Role in Regional Security: Pawn or Pivot?” *Contemporary South East Asia* (ISEAS: June, 1997), vol. 19, no. 1, p. 54, see <http://www.jstor.org/stable/25798366>, accessed on November 23, 2012.
16. Baladas Ghoshal, “Political transition in Myanmar: Thinking outside the box,” *Jakarta Post*, May 31, 2011, see <http://www.thejakartapost.com/news/2011/05/31/political-transition-myanmar-thinking-outside-box.html>, accessed on September 18, 2013.
17. Jim Middleton, “Thein Sein rejects Aung San Suu Kyi demand: exclusive interview,” *Australian Network News*, June 10, 2013, see <http://www.abc.net.au/news/2013-06-09/thein-sein-rejects-aung-san-suu-kyi-demand/4742796>, accessed on September 20, 2013.

play.” While the Webster’s dictionary defines the word power play as “a military, diplomatic, political, or administrative manoeuvre in which power is brought to bear,”¹⁸ eminent scholar Victor D. Cha defines it as “the construction of an asymmetric alliance designed to exert maximum control over the smaller ally’s actions.”¹⁹ The two definitions clearly highlight the overarching neorealist tendencies of the countries involved. The second definition, though, gives a distinct picture of the entire scenario, with Myanmar being the smaller ally in this case. While countries do engage with each other for absolute gains, power play mostly evolves around the aspect of relative gains. It is here that the phrase “maximum control” becomes important. The irony lies in the fact that in the present times, soft power, which Joseph Nye described as “attractive power,” is the very means greater countries use to coerce or control smaller countries.

History shows that in most cases the engagement of an “n” number of external players in a country or region only leads to more instability. The onus thus lies on Myanmar to ensure to give external players just enough space to engage bilaterally and in the process guarantee its own strategic autonomy with respect to decision making.

Following are a few of the major external players that seem to be vying for larger roles in Myanmar:

CHINA

According to Evan S. Medeiros, China’s foreign policy strategy has five major objectives—“economic growth and development, countering constraints, resource diversification, reassurance (a benign and responsible international actor) and reducing Taiwan’s international space.”²⁰ The first three objectives best explain China’s activities in Asia-Pacific where the aim is to ensure that no nation is capable of constraining, hindering or

18. Power play, *Merriam Webster*, see <http://www.merriam-webster.com/dictionary/power%20play>, accessed on November 23, 2012.

19. Victor D. Cha, “Powerplay: Origins of US Alliance System in Asia,” *International Security* (MIT Press: Winter 2009), vol. 34, no. 3, p. 158, see <http://muse.jhu.edu/journals/ins/summary/v034/34.3.cha.html>, accessed on November 23, 2012.

20. Evan S. Medeiros, *China’s International Behaviour—Activism Opportunism, and Diversification* (RAND, California: 2009), p. 45.

President Thein Sein's visit to China early May 2011 witnessed a new phase in the bilateral relations between the two countries. The term "comprehensive strategic cooperative partnership" surfaced during the visit.

restricting China's influence in the region. It seeks to create an environment where countries in the neighbourhood are fully reliant and dependent on it to such an extent that their influence and power at no point of time is either questioned or contained. This only further reiterates their intentions of a unipolar Asia in a multipolar world. Keeping this in mind, the close engagement of India, US and Japan in Myanmar, is not in China's interest.

President Thein Sein's visit to China early May 2011 witnessed a new phase in the bilateral relations between the two countries.

The term "comprehensive strategic cooperative partnership" surfaced during the visit.²¹ Apart from the usual talks on maintaining stability on the borders and enhancing bilateral relations at all levels, Chinese President Hu Jintao also focused on increasing mutual strategic support and intensifying pragmatic cooperation.²² China was clearly changing its approach with the new government. The talks between the Chinese State Councillor and top diplomat, Dai Bingguo, and Myanmar opposition leader, Aung San Suu Kyi, were also of great significance.²³ China, which backed the military junta government in Myanmar, was never in contact with her during the military rule. This highlights China's interest to engage with the country and maintain good relations with it despite the political transition.

Myanmar witnessed the entry of the military junta into power in the late 1980s. Heavy sanctions were placed on the country thereafter by the US

21. "China, Myanmar forge partnership, ink deals on Myanmar president's maiden visit," *English People Daily*, May 28, 2011, see <http://english.peopledaily.com.cn/90001/90776/90883/7393589.html>, accessed on September 20, 2013.
22. Yun Sun, "China's Strategic Misjudgement on Myanmar," *Journal of Current Southeast Asian Affairs* (GIGA: Hamburg, 2012), vol. 31, p. 80, see hup.sub.uni-hamburg.de/giga/jsaa/article/download/513/5110, accessed on September 19, 2013.
23. K. J. M. Varma, "Wen Jiabo to skip Myanmar visit: Chinese envoy meets Suu Kyi," *DNA*, December 15, 2011, see http://www.dnaindia.com/world/report_wen-jiabao-to-skip-myanmar-visit-chinese-envoy-meets-suu-kyi_1626222, accessed on June 23, 2012.

and other Western powers, which had an enormous affect on its economy. China stepped in and began to increase its engagement with Myanmar right then and hence holds major stakes in the country even now. Amongst the many contracts signed between companies, one of the major ones was that of 1,100-km oil and gas pipelines extending from Kyaukphyu in Rakhine state to Yunnan province. Apart from easy access to the gas and mineral resources of Myanmar, these pipelines also help to avoid the jammed Strait of Malacca.²⁴ Chinese analysts say that with the completion of these pipelines, China will be able to expand its trade with South Asia and South-East Asia.²⁵ China has also built a deep sea port in Kyaukphyku, giving it yet another access point to the Indian Ocean. Apart from these projects, China has also been investing a great deal in the construction of many roads and railway lines thereby increasing connectivity into the Chinese mainland.²⁶

At the same time, events such as the suspension of the Myitsone dam along with Myanmar's growing ties with the West have begun to worry the Chinese government. The Myitsone dam was a hydroelectric project which was to be funded and constructed by a state-owned Chinese company. Apart from the potential environmental risks, the growing anti-Chinese sentiments amongst the people were attributed as one of the reasons for its suspension.²⁷ China now has to come to terms with the fact that it is no longer the one and only investor in Myanmar, and the future will certainly hold more challenges which it has to effectively deal with.

THE US

The visits of US President Barrack Obama and US Secretary of State Hillary Clinton to Myanmar were of great significance. President Thein Sein's recent visit to the White House was also a historic event. It was after 45 years that the

24. K. Yhome, "Myanmar and India's Security," in Satish Kumar (ed.), *India's National Security Annual Review 2010* (New Delhi: Routledge, 2011), p. 175.

25. No. 20, p. 78.

26. Jayadeva Ranade, "Myanmar-Chink in China's Armour," *National Defence and Aerospace Power*, January 2011, p. 1, also see http://independent.academia.edu/JayadevaRanade/Papers/971600/Myanmar-Chink_in_Chinas_Armour, accessed on June 24, 2012.

27. Thomas Fuller, "Myanmar Backs Down, Suspending Dam Project," *The New York Times*, September 30, 2011, http://www.nytimes.com/2011/10/01/world/asia/myanmar-suspends-construction-of-controversial-dam.html?_r=0, accessed on September 20, 2013.

Yet another major move taken by the US has been to waive the bans that were placed on Myanmar. This allows American business firms to begin investing into various projects in Myanmar. The waiver of sanctions on financial services will also allow for export of financial services to the country which will in turn boost its economy.

White House received a visit from the head of Myanmar. Likewise, Hillary Clinton's visit was the first American top-level visit to the country in about half a century.²⁸ In international relations, it is a known fact that top-level visits by diplomats clearly indicate a shift in foreign policy towards that country.

The US cut off all relations with Myanmar ever since the military junta refused to transfer power to the democratically elected government in 1988. They withdrew their diplomats in the country, slapped the country with political and economic sanctions, and even refused to call the country by its new name "Myanmar." On the contrary, the current Obama Administration has finally worked towards reviving US diplomatic relations with Myanmar. This sudden turn of events came in response to the country's new regime change and steps that focused towards such a change. The US agreed to send in their first ambassador to the country since 1990 and President Obama has also called for the release of over 651 prisoners in the country.²⁹ Though the US has already started working towards the normalisation of relations between the two countries, there still is a resistance as the US is not convinced of the credibility of the structure in place.

Yet another major move taken by the US has been to waive the bans that were placed on Myanmar. This allows American business firms to begin investing into various projects in Myanmar. The waiver of sanctions on financial services will also allow for export of financial services to the country

28. "Hillary Clinton in historic Myanmar Visit," *Telegraph*, November 30, 2011, see <http://www.telegraph.co.uk/news/worldnews/asia/burmamyanmar/8925044/Hillary-Clinton-in-historic-Myanmar-visit.html>, accessed on November 2, 2012

29. Michael E. Martin, "Burma's Political Prisoners and US Sanctions," *Congressional Research Service*, May 14, 2013, see <http://www.fas.org/sgp/crs/row/R42363.pdf>, accessed on September 21, 2013.

which will in turn boost its economy. Some bans such as that of arms sales still remain. American firms are not allowed to invest in companies owned or run by military forces.³⁰ It is precisely at this point that China ensures to stretch forth a helping hand and in turn pledge support.

US interest in Myanmar also emerges from the sudden rise of China in the region. Owing to its strategic position in Asia-Pacific, a close and stable Myanmar will certainly be of interest to the US. The US is also ensuring that the government of Myanmar is looking towards following the proper norms of democracy and that this regime is here to stay.

JAPAN

Myanmar's President Thein Sein visited Tokyo in April 2012, making him the first diplomat from Myanmar to visit Japan after 28 years.³¹ Japan's Prime Minister Yoshihiko Noda was claimed to have called the meet "historic" and declared that Japan and Myanmar are already looking forward to strengthening bilateral relations. He reassured that Japan would renew its financial assistance towards the country to help it during this process of transition. Noda also made it public that his country would cancel 60 per cent of the 500 billion yen debt that Myanmar was to repay and also restart the grant of loans in yen.³²

Japan was also known to be one of first the few countries in the Asia-Pacific region to officially resume economic relations with Myanmar after the current democratic government came into power. Japan has been looking to utilise Myanmar's cheap labour force and augment its network of factories which are spread from Thailand to Indochina.³³ Japan will be

30. Wyatt Olson, "US marks closer ties with Myanmar, but China's influence lingers," *Stars and Stripes*, May 20, 2013, see <http://www.stripes.com/news/us-marks-closer-ties-with-myanmar-but-china-s-influence-lingers-1.221789>, accessed on September 20, 2013.

31. "Myanmar President Thein Sein to visit Japan," *Channel News Asia*, April 18, 2012, see http://www.channelnewsasia.com/stories/afp_asiapacific/view/1195985/1/.html, accessed on November 2, 2012.

32. "Japan, Myanmar make rapid strides," *The Japan Times*, May 1, 2012, see <http://www.japantimes.co.jp/text/nn20120501f1.html>, accessed on October 24, 2012.

33. Thomas Fuller, "Long Reliant on China, Myanmar Now Turns to Japan," *The New York Times*, October 10, 2012, see <http://www.nytimes.com/2012/10/11/world/asia/long-reliant-on-china-myanmar-now-turns-to-japan-for-help.html?pagewanted=all>, accessed on November 4, 2012.

India has provided development assistance and also has extended a line of credit to Myanmar several times. Since 1993, India has made steady progress despite the military's antipathy towards offers of assistance. India gave Myanmar a \$10 million line of credit in 1997 even as the western bloc intensified its economic sanctions.

disposing its famous conglomerate, Japan Inc., a collaboration of some of the country's largest companies such as Mistubishi, Marubeni and Sumitomo, who are working in tandem with the Japanese Ministry of International Trade and Industry. This deal was put forward by President Thein to Japanese politician Hideo Watanabe in Naypyitaw, where he offered Japan a special economic zone at Thilawa, a place located near to Myanmar's largest city Yangon and a port to the Indian Ocean.³⁴ Hence Japan too has been pushing forward to a closer engagement with Myanmar.

Myanmar's overt plea to nations in and around the region for help in terms of its development not only highlights its eagerness to develop as a nation, but also reiterates its concerns on the growing influence of China in the region.

INDIA'S ROLE IN MYANMAR

India has provided development assistance and also has extended a line of credit to Myanmar several times. Since 1993, India has made steady progress despite the military's antipathy towards offers of assistance. India gave Myanmar a \$10 million line of credit in 1997 even as the western bloc intensified its economic sanctions.³⁵ India being the world's largest democracy was criticised in dealing with the military dictatorship but continued to pursue its independent policy towards Myanmar taking into account its strategic and long-term interest. India could also not ignore its vision of having a greater role in the stability of the neighbourhood.

34. "How Japan Inc. stole a march in Myanmar," *Reuters*, October 3, 2012, see <http://in.reuters.com/article/2012/10/02/japan-myanmar-idINDEE89109420121002>, October 29, 2012.

35. P. M. Heblikar, "India-Myanmar relations: New beginnings," *Daily News and Analysis* (Mumbai), October 11, 2011 for more see http://www.dnaindia.com/analysis/column_india-myanmar-relations-new-beginnings_1597364.

The transition to democracy is of great significance for India's relations with Myanmar. It will also impact the region as a whole. Apart from its previous line of credit amounting to US\$ 300 million, India provided Myanmar with a further line of credit of US\$ 500 million in 2011 in context of the visit by Thein that year.³⁶ Myanmar became a crucial part of the aid recipients list of India such that in the last published report after Afghanistan, Myanmar was the second largest recipient of Indian aid.

Indian Prime Minister Manmohan Singh, though, recently visited Myanmar, the first trip by an Indian Prime Minister after twenty-five years and had talks with Aung San, where they discussed security issues regarding the Indo-Myanmar border and signed more than twelve agreements.³⁷ India's contribution to Myanmar has been way too less in comparison with China. Apart from the construction and development of a number of roads to increase connectivity, India is looking towards building a highway that connects Moreh in Manipur to Mae Sot in Thailand through Myanmar.³⁸ This will definitely increase trade activities between the two countries. India is yet to engage in gas pipeline projects which in turn highlight how passive the nation's foreign policy has been. With Myanmar looking to decrease its dependency on China and the US looking to step in, India should make sure to utilise this time to increase its engagements in the country and build closer ties.

With Myanmar looking to decrease its dependency on China and the US looking to step in, India should make sure to utilise this time to increase its engagements in the country and build closer ties.

36. Sachin Parashar, "India extends credit line of \$ 500 m to Myanmar," *The Times of India* (New Delhi), October 15, 2011 for more see http://articles.timesofindia.indiatimes.com/2011-10-15/india/30283216_1_india-and-myanmar-myanmar-president-transit-transport-project.

37. "Indian PM Manmohan Singh in historic Burma visit," May 28, 2012, also see <http://www.bbc.co.uk/news/world-asia-18225010>, accessed on June 25, 2012.

38. Arvind Gupta, "Myanmar's Critical Role in Bolstering India's Look East Policy," *IDS Comment*, February 2, 2012, also see http://www.idsa.in/idsacomments/MyanmarsCriticalRoleinBolsteringIndiasLookEastPolicy_agupta_020212, accessed on June 21, 2012.

As a part of this larger strategy, the US and China will continue to engage closely with Myanmar in order to gain their strategic influence in the country. Japan's engagement with Myanmar becomes crucial as a part of this power play. Keeping in mind that Japan is a close ally of the US, while on the other hand with the growing Sino-Japan trade relations, its decision in this regard becomes crucial.

MYANMAR AND THE LIKELY SCENARIO OF REGIONAL GEOPOLITICS

US-CHINA BALANCE IN THE REGION

US engagement in the region has always been looked at with suspicion by China. The recent, frequent visits made by Secretary of State Hillary Clinton, Secretary of Defence Leon Panetta and President Obama to countries in the Asia-Pacific region clearly reinforce that their focus has shifted towards the Asia-Pacific. Admiral Robert Willard, the Commander of the US Pacific Command, in March 2010 during a US Congressional Committee claimed that the increasing Chinese military build-up in the Asia-Pacific was a matter of great concern for the US as well as its allies in the region which include South Korea and Japan as well as those in South-East Asia and Oceania.³⁹ The US has provided military equipment to the South-East Asian countries such as the Philippines, it has conducted exercises with Singapore and has also sent its marines to Darwin in order to increase its presence and influence in the region.⁴⁰ The US seems to be employing a strategy of offshore balancing in the Asia-Pacific.

As a part of this larger strategy, the US and China will continue to engage closely with Myanmar in order to gain their strategic influence in the country. Japan's engagement with Myanmar becomes crucial as a part of this power play. Keeping in mind that Japan is a close ally of the US,

39. Amitav Acharya, "The United States in Asia Pacific: The Changing Balance of Power," *Op-Eds*, Canada Asia View Points, April 29, 2010, see <http://www.asiapacific.ca/editorials/canada-asia-viewpoints/editorials/united-states-asia-pacific-changing-balance-power>, accessed on October 24, 2012.

40. Freya Petersen, "Indonesia calls US troops build up in Darwin 'too close for comfort,'" *Global Post*, November 19, 2011, see <http://www.globalpost.com/dispatches/globalpost-blogs/down-under/indonesia-australia-us-troops-darwin-down-under>, accessed on September 20, 2013.

while on the other hand with the growing Sino-Japan trade relations, its decision in this regard becomes crucial. Will Japan play it safe and ensure not to hamper the interests of the US and China, or take a completely different route in support of one of the two, still remains a matter of contention.

INDIA AND CHINA

As a result of the decision to open up to the outside world, Myanmar will in the future have more options to choose from in terms of development projects and attract other players. In the race to acquire the strategic edge in Myanmar, both India and China have placed huge stakes in the form of investments and other inducements to keep

Naypyidaw content with their respective governments. The announcement of the United States to resume normal relations and other allies of the US also showing signs of re-engagement will mean that India and China, the two prominent players will face more competition in Myanmar. India would have to engage Myanmar in an effective manner through sub-regional initiatives such as BIMSTEC so that it does not miss out on the opportunity to enhance the full potential of a great emerging opportunity in its own backyard. For strategic reasons, China will also try hard to consolidate its influence in the country.

Hence, as Myanmar sees changing times ahead, it will be more active to pursue its objectives of rejoining the international community. In its effort to do so, it will show more receptiveness to the global community by allowing more concessions so that it can project itself as a responsible state that has an investor-friendly environment. In this context, Myanmar, for the first time since its entry into the ASEAN, has been selected as the chair for the ASEAN meet in 2014. In this changing paradigm, India needs

India would have to engage Myanmar in an effective manner through sub-regional initiatives such as BIMSTEC so that it does not miss out on the opportunity to enhance the full potential of a great emerging opportunity in its own backyard. For strategic reasons, China will also try hard to consolidate its influence in the country.

Owing to its strategic position in the region, Myanmar is bound to be used as a playground by external players to serve their larger geopolitical interests. The onus thus lies on the country to maintain constructive and beneficial relations with them as well as set their limits in terms of engagement.

The government now has to brace this change and work towards ensuring that this transition is to remain and that the process of democratisation is a peaceful and stable one. The role of external powers becomes crucial in order to initiate and carry out the reconstruction process, but Myanmar should make sure to adopt and maintain a policy of non-alignment and also secure its strategic autonomy in decision making amidst this process of reconstruction.

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With regard to the role of external players, as mentioned before, it becomes crucial to participate and engage closely to ensure a stable Myanmar which will be in the interest of the entire region. Looking at it from an Indian perspective, a policy of non-alignment will definitely be of interest to India too, as the excessive engagement of external players in the region can also be a threat to India's national security.

to play its role in promoting the elections and nurturing the new-found democracy in Myanmar. This will not only strengthen India's position but will also put India in a comfortable spot with the other countries. It would open new avenues for India in the region as it could play a great role in promoting growth in Myanmar thereby having a win-win situation in terms of its relations as well as its global status.

CONCLUSION

The recent political transition in Myanmar is one of the first and initial steps to its progress.



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