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Forum for National Security Studies (FNSS)

11TH SUBROTO MUKHERJEE SEMINAR RAPPORTEUR'S REPORT

"THE CHALLENGE OF AIR POWER"

November 11-12, 2014

Day 2: November 12, 2014

SESSION IV: THE FUTURE

Chairman: Air Marshal VK Bhatia PVSM AVSM VrC* (Retd) (Former AOC-in-C WAC, SWAC, CAC)

The concluding session of the two-day seminar aptly focused on the challenge of the aerospace power that the IAF is likely to face in future, ranging from regional nuclear & missile issues to the IAF's role in safeguarding India's interests in the Indian Ocean Region and finally to the management of firepower vis-à-vis the issue of budget. The Chairman in his introductory remarks highlighted the potential of Aerospace operations due to their ability to operate with speed while providing a longer reach, carry out precision attacks with a 24/7 capability and lower collateral damage. Air Power most importantly has the ability to control the escalation ladder of a conflict. Looking forward to the future, he stressed the need for understanding the exact nature of challenges to be able to effectively exercise the potential of air power in overcoming them.

EMERGING REGIONAL NUCLEAR & MISSILE CAPABILITIES: Dr. Manpreet Sethi (Senior Fellow, CAPS)

Dr. Sethi discussed the contemporary nuclear strategies and missile capabilities of China and Pakistan, with respect to the possible implications for India. The following were some of the key observations made by the speaker: -



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Forum for National Security Studies (FNSS)

- On China's nuclear strategy, the speaker discussed how historical events established China's nuclear strategy of minimum deterrence and clarified that its 'no first-use' (NFU) policy was applicable only to non-nuclear states.
- Chinese are focussing on enhancing the survivability and penetrability of nuclear weapons through massive improvements in air and sea delivery platforms, development of counter-measures on missiles to counter BMD. They appear to be enhancing the deterrent capability through ambiguity. They are also developing asymmetric warfare capability (Cyber, EW, etc.) and moving towards highly accurate missiles having dual-use capability to carry both nuclear and conventional warheads.
- The speaker inferred that China had a lead over India in nuclear and missile capabilities. On the related question of Chinese technical advancements leading to a change in their NFU policy, it was observed that such advancements would be used only for enhancing their level of deterrence.
- Next, in the case of Pakistan, it was observed that the strategy of 'nuclear brinkmanship' would be ensured through the projection of irrationality. A 'first-use' doctrine was still the preferred policy choice for Islamabad giving credence to the Western theory that nuclear exchange between India and Pakistan was a real concern. The speaker went on to discuss how that strategy was being complimented with the building-up of the world's fastest growing nuclear arsenal, along with qualitative and quantitative improvements in its missile capability.
- Another important issue discussed was the purported attempt by Pakistan to introduce Tactical Nuclear Weapons (TNW), and their aspiration to develop a sea-based deterrence.
- The speaker concluded by highlighting the need for a rethink on our BMD, increasing missile accuracies and survivability of nuclear arsenals, and finally emphasising on the wisdom of our doctrine and policy of NFU.

THE CHALLENGE OF THE INDIAN OCEAN REGION FOR THE IAF: Air Marshal R K Dhir AVSM VM (SASO, HQ SAC)



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The speaker highlighted the geo-strategic significance of the Indian Ocean Region (IOR), while also bringing out the importance of the region from a military perspective and finally, listing the related challenges for the IAF in the IOR. Some of the salient points covered by the speaker included: -

- Talking about the geo-strategic significance of the IOR, the speaker pointed out that the Indian Ocean was “the most nuclearized and militarized ocean of the world”. The warm waters, growth of Asian economies and presence of natural/marine minerals, oil etc. in the ocean has made IOR the focal point of maritime trade in the world. It is estimated that 66% of the world’s oil, 33% of the world’s bulk cargo and 50% of the world’s container supplies flow through the Indian Ocean.
- Some of the other reasons that added to the strategic significance of the region included the presence of a large population that was wrought with armed internal and external conflicts, terrorism and the growing menace of pirates. The above reasons made the IOR significant for India as well as for China.
- Looking at the region from a military perspective, the speaker observed that there is a growing presence of extra-regional navies in the IOR, including the re-posturing of the US Naval Forces. There is a likelihood of competition between India and China for resources and dominance in the IOR, especially with the Chinese “string of pearls” strategy for establishing presence in the region and their plan for placing a Carrier Battle Group in the IOR by 2017-18.
- He stressed on the need to ensure protection of sea-lines of communication and Exclusive Economic Zones (EEZ), apart from the larger aims of protection of our territories.
- Elucidating on the challenges for the IAF, the speaker discussed the need for robust air defence, and real time detection of threats. While stressing on operational challenges, he outlined the need for identification of ships, intelligence gathering and strategic reach of the IAF.
- In his concluding remarks, the speaker reinforced the geo-strategic significance of the IOR and called for greater investment in development of infrastructure for safeguarding India’s interests in the region and transforming vulnerabilities in the region into strengths.



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CORE COMPETENCIES: FIREPOWER VS. BUDGETING: Air Marshal NV Tyagi PVSM AVSM VM VSM (Retd) (Former DCAS, Air HQ)

The last speaker of the session highlighted the trends in spending on air power capabilities, need for prudence and the way ahead for India. The following were some of the issues discussed by the speaker: -

- The speaker presented the trends in spending among the countries of the world. Asia was observed to be the “region that buys”, whereas U.S., Russia, Europe and China emerged as the “regions that sell”.
- On the issue of prudence, the speaker stressed on the mentality to buy the “best” could result in high spending. Additionally, he stressed the need for considering the operating costs as well as the life cycle costs. He corroborated this by offering a comparative case study of the ‘F-35’ and ‘Gripen NG’ fighters.
- There was a steady increase in the annual defence budget of India over the past decade, with defence allocations amounting to an average of around 2.1% of the overall budget. Following this, the speaker noted that if the current annual budget was considered over a period of 40 years, the fund available for the IAF would be enough to replace the IAF’s fleet and still be left with adequate balance.
- The speaker in his final remarks delved into the need to focus on indigenous development, production and adoption of prudence as a primary asset.

Q&A AND CONCLUSION

The issue of including the factor of availability/serviceability while assessing the overall costs of an aircraft was a much debated issue, with instances cited including the case of all the Mirage fighters undergoing servicing at the time of the 1999 Kargil conflict and the recent case of the availability of just 8 of the 109 Typhoons delivered to the German Air Force.

A question was also raised about the issue of Pakistan’s TNWs and need for any change in the Indian response. Dr. Sethi reiterated her argument about the lack of actual military credence of such weapons.



Centre for Air Power Studies (CAPS)

Forum for National Security Studies (FNSS)

She maintained that the Indian response should be driven in accordance with India's sound nuclear doctrine.

The concluding session delved into the future challenge for Aerospace power and the Indian Air Force. IAF's role in future would be crucial in serving as a critical platform for delivery of warheads, sustaining the credibility of our deterrence and to safeguard our strategic & national interests.

CLOSING SESSION

Valedictory Address: Air Marshal KK Nohwar PVSM, VM (Retd) (Additional Director General, CAPS)

Air Marshal Nohwar recalled the key issues raised during the seminar and the deliberations of the speakers that extolled the virtues of Air Power. He highlighted the key challenge for Aerospace Power was to be able to rise to whatever and whenever the situation demanded, in the shortest possible time in order to act swiftly and decisively every time. The salient issues raised during the seminar were as follows:

- ✓ The actions of the Indian Air Force during "*Operation Megh Rahat*" reinforced the Centrality of Air Power. The evacuation of 47,825 people from the Kashmir valley would not have been possible without Air Power. The crisis highlights the importance of management of meagre resources during the crises and he recommended that IAF shares its experiences with civil counterparts.
- ✓ There is an increased requirement for precision targeting due to change in nature of war, urban warfare and the need to prevent collateral damage since 95% people killed in wars/ anti-terrorist operations since 2001 were civilians.
- ✓ Sustainability and its cost implications are key to successful conduct of Air Operations.



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- ✓ Prediction that the Airborne Laser (ABL) would be available in the next five years would be a significant game changer in Air to Air combat.
- ✓ Need to have capability to monitor space assets and deputation of military representative in ISRO to monitor military assets.
- ✓ Training “Inspired Leaders” is the need of the hour for sixth generation leadership in the IAF. The future training should focus on imbibing intangible traits like team spirit without gender bias, officer like qualities, military discipline & ethos, decisiveness etc. The technology should be used to find smart solutions. A mechanism to have interaction with retired veterans is recommended to sensitise future leaders of the IAF.
- ✓ Good Logistics and pro-active sourcing strategies are keys to success of operations and should be factored by the maintenance branch of the IAF.
- ✓ Military ethos has impact on the discipline of the Armed Forces and decisions given by senior leadership of the Services should be given due consideration by the Tribunals for maintaining discipline in the Armed Forces.
- ✓ China’s edge in nuclear weapons could be countered by protecting and dispersing land, sea and aviation nuclear assets in order to have second strike capability.
- ✓ Pakistan’s irrational posturing appears to be a part of their strategy to create ambiguity and maintain deterrence.
- ✓ Piracy and protection of sea lanes of communication are the emerging challenges of the IOR. The challenge for the Air Force would be positive identification of the pirate ships, which calls for developing greater reach capability.
- ✓ There is need to move from “Indigenisation to Indigenous Production”. The loud and clear message about defence acquisitions from the seminar is to promote the notion of “Make in India”.



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