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Vol. 5 No. 3, Monsoon 2010 (July-September)

Editor's Note

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1. FORCE MODERNISATION CHALLENGES

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Military force modernisation throws up multiple challenges, especially for a developing country like India. Based on his vast experience and knowledge, Air Marshal **P.K. Mehra** PVSM, AVSM, VM, former AOC-in-C, South-Western Air Command, focusses on the more intractable issues that need to be resolved. These issues are aggravated in the absence of adequate design and development capabilities and inadequate technological and industrial capacity.

2. INDIGENISATION OF AIR-LAUNCHED WEAPONS

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Air-launched weapons against air as well as ground targets have been becoming increasingly sophisticated and complex. Inevitably, they demand fusion of different technologies and design expertise if a country has to make them indigenously. Group Captain **S. Bhanoji Rao**, VSM, argues persuasively for self-sufficiency in such weapons through indigenous design and production. He also argues that this can actually be carried out within the Air Force assets and capabilities, with minor assistance from other sources.

3. PLAAF IN TRANSITION 1979-93

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The PLA Air Force of the People's Republic of China underwent significant changes after the Sino-Vietnam War in 1979 where the PLA itself was seen to have failed to impose its military power on the Vietnam military. This triggered the four modernisations that Deng Xiaoping pursued. Wing Commander **Vishal Nigam** traces this crucial transition

period till China started getting military-technical assistance from Russia in terms of aircraft and weapons, much of it to be manufactured under licence. The result has been that this transition period has proved to be the foundation for the rapid modernisation of the Chinese Air Force.

4. CHINA'S ELECTRONIC AND CYBER WARFARE CAPABILITIES 77

China has undoubtedly built up its electronic and cyber capabilities as Wing Commander **Sanjay Poduval** writes. China has also declared in its official defence strategy, as spelt out in its White Papers on National Defence over the years, that it plans to fight a modern high-technology war on the basis of "informationisation" which would cover a vast ground in cyber and electronic warfare capabilities.

5. TOWARDS A NUCLEAR WEAPON FREE WORLD: INDIAN PERSPECTIVES 113

India has always stood for complete nuclear disarmament that must be universal and non-discriminatory. This was the basis for the "grand bargain" of the NPT resolution at the UN General Assembly, co-sponsored by India and passed unanimously in November 1965. Unfortunately, the NPT, as negotiated, created the gap between the haves and have-nots. Prime Minister Rajiv Gandhi put forward a comprehensive plan for a Nuclear Weapon-Free and Non-Violent World at the third Special Session on Disarmament in June 1988. Professor **Swaran Singh** traces the policy and initiatives of India, seeking a global Nuclear Weapon Free World, and its prospects after President Obama has lent his public support for nuclear disarmament.

6. NATIONAL SECURITY MECHANISM AND THE HDO 129

Most of the literature on national security management and/or the Higher Defence Organisation (HDO) deals with these two interlocking issues separately. Wing Commander **R. Venkataraman** examines the two critical issues in national security and its subset, national defence, together in an effort to explore the potential for enhanced synergy,

especially in cases like ours where the basic foundation has to be built on the parliamentary system of governance as has been practised in the largest democracy in the world.

7. TECHNOLOGY: A HISTORICAL PERSPECTIVE 155

Almost all the changes in matters of peace and war have been affected by the technology available at that time and employed in pursuit of national interests. Wars and use of military power have given technology advancement a major boost after the Industrial Revolution impacted the world in the 18th century, and since then, technological growth has been almost exponential. Wing Commander **A.K. Singh** examines the issue of technology in the historical context to provide a sound base for future studies which can point to the direction that technology and its impact is likely to take.