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Ambala base to be Rafale-ready

78-yr-old IAF station to get major infra push to receive first squadron of the fighter jet

Strategically vital air force facility

- *Ambala base is 220 km from Pakistan border and, thus, strategically most important*
- *Rafale jets can carry nuclear arms, which gives India greater 'potency' over Pakistan*
- *The delivery of the fighter jets is scheduled to begin from September 2019*
- *Hasimara base in West Bengal will house the second squadron of the Rafale jets*

The Indian Air Force has initiated major infrastructure upgrade at its frontline base here for deployment of the first squadron of the Rafale jets, which will give India greater 'potency' over Pakistan as these will be capable of carrying nuclear weapons and other missiles.

The government has already sanctioned Rs 220 crore to set up 14 shelters, hangers and maintenance facilities at the 78-year-old base for the Rafale jets whose delivery is scheduled to begin from September 2019, a senior IAF official said.

The Ambala base is considered one of the most strategically located bases of the IAF as the India-Pakistan border is around 220 km from it. Currently, the base has two squadrons of the Jaguar combat aircraft and one squadron of the MiG-21 Bison.

Several teams from French defence major Dassault Aviation, the manufacturer of Rafale, have already visited the Ambala Air Force base and finalised the requirement for the first squadron of combat jets.

The IAF is also carrying out infrastructure upgrade at its Hasimara base in West Bengal, which will house the second squadron of the Rafale jets, the official said. The Ambala as well as Hasimara stations will also have simulator-based training facilities for the air crew of Rafale jets. The IAF has already selected a batch of pilots to fly the jets and they are being given training by Dassault Aviation in France.

The Rafale squadron to be deployed in Ambala will be known as Golden Arrows which was originally based in Bathinda and was disbanded two years ago.

The Rafale combat jets will come with various India-specific modifications, including Israeli helmet-mounted displays, radar warning receivers, low band jammers, 10-hour flight data recording and infra-red search and tracking systems among others.

The features that make the Rafale a strategic weapon in the hands of Air Force, which is currently down to 34 squadrons as against a sanctioned strength of 44, includes its Beyond Visual Range (BVR) Meteor air-to-air missile with a range of 150 km. Its integration on the Rafale jets will mean the Air Force can hit targets inside both Pakistan and across the northern and eastern borders while staying within India's territorial boundary. — PTI

Mon, 02 Oct, 2017

Doklam effect? Armies skip traditional meet

The Indian and Chinese armies may have disengaged from their eyeball-to-eyeball confrontation on the Bhutanese territory of Doklam after hectic diplomatic parleys, but the distinct chill between the rival troops remains on the ground over a month later.

The two armies did not hold their traditional border personnel meeting (BPM) at the five designated places along the 4,057-km long Line of Actual Control to mark China's 68th national day on Sunday, as is the norm every year.

“The People's Liberation Army did not send us an invite for the ceremonial meeting at the five BPM points (Daulat Beg Oldi and Chushul in Ladakh, Bum La and Kibithu in Arunachal, and Nathu La in Sikkim) on October 1, “said a source.

There has also been “no forward movement “on the 7th edition of the annual 'Hand-in-Hand' exercise between the Indian Army and the PLA, which was to be held in China this month. “The exercise is unlikely this year, “the source added.

Sources said the two armies continued to maintain their stepped-up force levels near the Sikkim-Bhutan-Tibet trijunction after troops disengaged from the standoff site at Doklam (or the Dolam plateau) on August 28 after 73 days of tense confrontation.

The face-off had seen both sides move forward additional infantry battalions as well as armoured (tanks), artillery, missile and air defence units in a show of strength to back their small number of troops on the actual standoff site, as was reported by TOI.

“The PLA did halt construction of its motorable road through the standoff site towards the Jampheri Ridge (physically blocked by Indian soldiers after coming down from their adjacent Doka La post on June 16), but is maintaining its force-levels in the area,“ said another source.

The assessment is that the ground situation will remain same till the crucial party congress of the Chinese Communist Party from October 18, with Chinese President Xi Jinping set to get a second five-year term. “Let's see how the PLA behaves after the party congress is over, “said the source.

After the Doklam crisis erupted in mid-June, Indian troops had not crossed over to the Chinese side for the PLA's 90th anniversary celebrations on August 1. There are seven to eight occasions a year that the two armies hold ceremonial meetings at the different BPM points, which include speeches, cultural performances, exchange of gifts and tea, as a confidence building measure.

China has till now consistently ignored reminders from India about the annual 'Hand-in-Hand' exercise, another major military CBM, which was held for the first time in Kunming (China) in 2007. But after the second edition in Belgaum in 2008, the exercise was put on hold due to diplomatic spats over stapled visa and other issues in 2009-2010.

India & China New Players in Central Asia's 'Great Game'

By DipanjanRoy Chaudhury

While Beijing offers OBOR, New Delhi has embarked on Connect Central Asia policy

A great game is unfolding in resources-rich, but landlocked, Central Asia, where China through its one-belt-one-road (OBOR) initiative is attempting to harness maximum mineral and hydrocarbon wealth as well as grow the market for its goods. India, not to be left behind, has also embarked on a Connect Central Asia policy, trying to overcome a disadvantage it has: lack of direct connectivity to the region.

While oil and uranium rich Kazakhstan is an old partner, Uzbekistan, which has historical links with India, is emerging as the next big partner for New Delhi in the region. It has offered to provide special incentives and zones for Indian businesses, expand defence and counter-terror partnership with India and extend an opportunity to expand presence in the region and Afghanistan through mega connectivity initiatives. President Shavkat Mirziyoyev has invited Prime Minister Narendra Modi to enhance India's presence in five ex-Soviet Republics and Eurasia through Uzbekistan.

India's Inroads

UZBEKISTAN
 ZONES FOR INDIAN businesses, larger defence ties, Friendship Railway Bridge

PRESIDENT MIRZIYOYEV has urged PM Modi to enhance India's presence in 5 ex-Soviet Republics

KAZAKHSTAN

- ▶ Exploration and production of hydrocarbons
- ▶ Import of uranium
- ▶ Securing natural gas supply

TURKMENISTAN
 Making energy ties stronger

While Beijing has made inroads across Central Asia, India views itself as a stabiliser and security provider in the region and, with its growing economic clout, is an attractive economic power for the countries in the region, government officials here said.

India's interest in securing reliable energy supplies and trade through Central Asia remains substantial. Besides oil and gas, energy-hungry India is eyeing imports of uranium from both Kazakhstan and Uzbekistan. The requirements of energy security also postulate a continuing positive relationship with Moscow, the oldest player in the region.

India plans to create firm ties among the energy-exporting states of Central Asia, particularly Kazakhstan and Uzbekistan besides Turkmenistan. New Delhi is considering exploration and production of hydrocarbons in Kazakhstan and participation of its companies in the oil and gas sector. Kazakhstan has expressed interest in supplying gas to India.

Delhi is also exploring with Uzbekistan the possibility of extending the Friendship Railway Bridge to Herat in Western Afghanistan amid a push to the government's Afghan strategy, according to the one of the officials. With Uzbekistan being the region's biggest military power, Tashkent is also keen to expand its defence partnership with India,

officials said. India is also eyeing effective counter-terror partnership through the Shanghai Cooperation Organisation Counter-terror centre based in Tashkent, after it became a member of the bloc in June. China has made significant headway in the region, with \$10 billion in grants and aid to SCO members in Central Asia and developing regional linkages between Central Asia and its western regions. Central Asia is central to China's OBOR policy. India's lack of direct overland access to the region due to Pakistan's reluctance in allowing Indian goods to pass through its territory has hurt New Delhi's trade interests in the region. However, countries in Central Asia are keen to have India as one of their major partners to unleash their potential, said an official.

It's time to democratise science in India

By Shiv Visvanathan

The academies were playing plagiarist while the laymen were seeking to sustain scientific argument.

One of my great disappointments with science in India has been with the role of the national academies. Academies as representing the best of the profession should be conversant with both the logic of inner competence and the wider relations between science and society. The history of Indian academies has been generally dismal. The academies have become more sites of internal war between scientific factions like the Raman and Saha groups than efforts to add a sense of vocation to the profession. In fact, the academies split into factions representing regional interests rather than pursuing the interests of the profession. When Jairam Ramesh was minister for environment, he requested various academies to produce a report on biotechnology and agriculture. What he got was a piece of plagiarism filched from some piece of corporate reporting. The irony was not lost on the peasant and other social movements who did their best to put their scientific evidence forward. The contrast was stark. The academies were playing plagiarist while the laymen were seeking to sustain scientific argument.

Of late, things have been improving. The Indian Science Academy in Bengaluru has not only allowed its journal *Current Science* to be a focus for open debate, but is creating another journal to debate the links between science policy and society. As a professional initiative of its current president, this move is a welcome one. In fact, Ramakrishna Ramaswamy has been not only an outstanding mathematician, but, as a university don, deeply concerned with the fate of the university. Mr Ramaswamy's understanding of institutions is an acute one and his stands have been courageous. A recent speech he gave about the future of the university was moving and worrying as the current regime tries to paralyse the everyday functioning of research.

The BJP's misunderstanding of science stems not merely from its misreading of ancient science, which is bad scholarship, but from its incapacity to understand the research process as a continuous system which needs money and norms to sustain both discipline and curiosity. The tragedy of the Indian university has reached pathetic proportions as both the syllabus and research system go out of its control.

In this context, the academy's attempt to produce a document outlining a research code for science is welcome. The ethics document as an exercise is a beginning and one hopes that it becomes a template for a richer and more complex document. One also hopes it opens a conversation between science and civil society. I realise that professional autonomy is a crucial part of a framework of ethics but the threat here is not from the people, but from a state. In fact, the BJP regime's confusion of science and technology, and its attempt to create big science as a state spectacle destroys the little autonomies and diversities of science, which accounts for its many-sided creativity.

A debate, a conversation between science and society about ethics is essential. First, science is a part of a wider culture of rationality and reason, which the citizen must engage in. The roots of science, the logic of research, the interaction between science and technology after the industrial revolution needs to be understood. A citizen has to be involved in science and be sensitive to it. The interaction becomes more urgent as development projects like large dams, urban planning are foisted in the name of science. It is in the interest of the scientist to also participate, not only because science is no longer commons, but a piece of intellectual property. It is also subject to the constraints of corporate distortion, especially in medical research, and to the secrecy and security of defence research. Two things become urgently necessary to include within an ethical framework of science. An important set of guarantees has to be arranged both for the scientist as a dissenting imagination and as a whistleblower. Second, Indian science has to help revive the Pugwash movement against war. Pugwash, incidentally, as a conference, was set to begin in India. One needs to revive a new version of the Russel-Einstein manifesto.

One realises scientific ethics has a broad and narrow template. The narrower strand focuses on method and data, its integrity, replicability, focusing on issues of competence and the threat to plagiarism. The pressure to publish has also created an epidemic of secondary, second-rate journals, which is emasculating quality science.

The wider framework deals with issues of sustainability, peace, responsibility, access and intellectual property, where the scientist can no longer behave like an intellectual island. One needs to build life-sustaining models where science needs an understanding of itself beyond cost-benefit analysis. It has to consider the recent debates on the democratisation of knowledge and interrogate the conventional ideas about expertise, which is often another word for specialist illiteracy or Promethean hubris. The linkage between science and defence is imposing a cage of secrecy and irresponsibility around science where a cosmopolitan, ethical science has to transcend the narrowness and parochiality of national interest.

One has been lucky in recent decades that science has produced a tradition of great dissenters like chemist Linus Pauling, paediatrician Benjamin Spock and linguist Noam Chomsky. Science desperately needs such dissenting imaginations not only to challenge the state but to challenge a statist science. Turkey's attempt to remove the discoveries and debates about evolutionary theory from textbooks should be a warning.

Intellectually and cognitively, science has to cease being a hegemonic system and confront the reality of other knowledge and even the possibility of alternative sciences. Not all of the latter can be reduced to racial science or the ideology of Lysenkoism, which Stalin used to hunt down scientists like Nikolai Vavilov.

Fortunately, the opening of such questions came both from scientific movements led by Desmond Bernal and Joseph Needham, but also from one of the great interdisciplinary creations which has helped create an exciting field called science studies. The work of scholars like Thomas Kuhn, Martin Bernal, Bruno Latour, Sheila Jasanoff, Ziauddin Sardar and Ashis Nandy have added to a more textured and nuanced understanding of pluralist science. Any sense of ethics has to understand limits, uncertainty and complexity and the scientist's responsibility for working under such cognitive conditions.

The opening-up of science studies in India and the attempts to build a framework of scientific ethics creates a possibility for democratising science, making it more responsible. India has always had rich traditions of debate. Today, as a society, we need to explore these wider questions without getting caught in a fetishized attitude to IT or biotechnology. The time is ripe in India to question medical ethics, to interrogate nuclear energy, to intensify the understanding of ethics in nanotechnology and the creativity of ecology. A democracy that leaves science alone will not remain democratic for long.