

# समाचार पत्रों से चयित अंश Newspapers Clippings

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## **What is DRDO's inertial guided bomb and how it will boost India's defence capability**

India Friday successfully test fired an indigenously-made 500-kg class “inertial guided bomb” from a Sukhoi jet at the Pokhran test range in Rajasthan. The test has been pegged as a major achievement for the Defence Research and Development Organisation (DRDO) as the guided bomb achieved the desired range and also hit its target with precision.

“All the mission objectives have been met. The weapon system is capable of carrying different warheads,” a statement from the Ministry of Defence said.

Sources in the defence establishment said that the inertial guided bomb marks an upgrade from the existing laser-guided weapon delivery capability, which has certain limitations, such as range of delivery from the target and susceptibility to environmental conditions.

“It is also a testament to DRDO's capability to develop miniaturised inertial navigation systems that can function under tough conditions,” a source told The Print.

The Print explains the upgrade in weapon technology and its implications for the country's defence capability.

What is this bomb?

This 500-kg class precision bomb is guided to its target through the inertial guidance system, which allows precision targeting from long distances even under adverse visibility conditions.

According to Britannica, the inertial guidance system is an electronic system that continuously monitors the position, velocity and acceleration of a vehicle, usually a submarine, missile, or aeroplane, and provides navigational data or control without the need for communicating with a base station.

When an inertial navigation system is installed in a bomb, the system can help navigate the bomb to its designated target by continuously providing updated navigation inputs. Such systems have the unique ability to perform without depending on external inputs such as ground-based navigation aids as well as GPS, defence experts told ThePrint.

A recent example of such a bomb is the Israeli SPICE-2000 smart bombs that were used by the Indian Air Force in the Balakot attack in Pakistan. They had a glide range of around 60 km and used a sophisticated guided system — including inertial navigation, satellite guidance and electro-optical sensors, for accuracy.

Countries such as the United States and Israel have been using such guided bombs for some years, but it is a first for India, with the system being indigenously developed by the DRDO.

A senior IAF official explained that navigation has mainly two aspects. “Where you are at the moment and what is your destination are the two aspects of navigation,” the official said. “The weapon's current location is dictated by the aircraft's inertial navigation system. The destination is guided by feeding it with target coordinates and the desired weapon path is achieved by other control inputs,” the official added.

“Such a bomb does not have an engine of its own but runs on the inertia imparted to it by the mother aircraft.”

A retired IAF official, who did not wish to be identified, said: “Such a weapon can be fired even without a Global Navigation Satellite System (GNSS) input, denial of which is a high possibility in emerging forms of warfare.”

Indian fighter jets had inertial navigation systems earlier too, but the weapons were based on optical or laser guidance. However, this bomb uses a miniaturised Inertial Navigation Systems — indigenously developed by DRDO — as an integral component.

How does it boost country's defence capability?

Defence sources said the new capability, when operationally deployed, would allow an IAF aircraft to deliver weapons from longer ranges, thus allowing them to stay away from enemy air defence cover. "This would ensure higher battlefield survivability of the aircraft and ensure the safety of the pilots and the delivery platforms," the sources said.

It would also ensure high mission reliability and low collateral damage, which could be an effective strategic deterrence for an adversary, the sources added. This inertial guidance technology will also be useful for the development of other long-range precision-guided weapons.

While the DRDO is developing these high accuracy weapon delivery systems, capable of working on GNSS degraded and denied environments, getting accurate target coordinates is still a challenge.

A strong focus would also be required to ensure that accurate target coordinates are available to the user to ensure high mission reliability.

<http://www.defencenews.in/article/What-is-DRDO%E2%80%99s-inertial-guided-bomb-and-how-it-will-boost-India%E2%80%99s-defence-capability-584929>

## THE TIMES OF INDIA

Wed, 29 May 2019

# DRDO's surveillance system to bolster Army's defence system along the border

By Yogesh Kumar

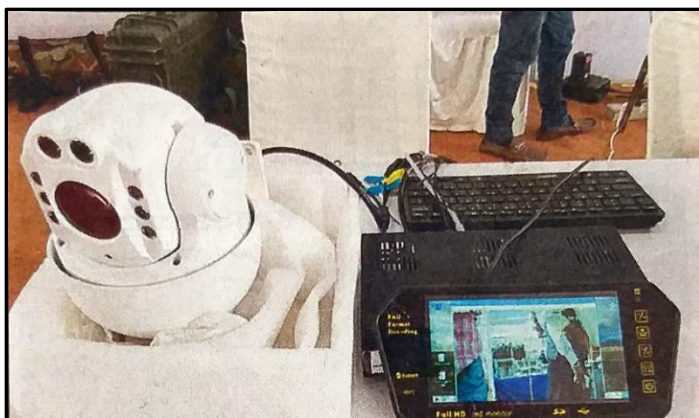
Dehradun: To bolster the Indian Army's defence and surveillance systems along the border, the Dehradun-based Instruments Research and Development Establishment (IRDE), an arm of the Defence Research & Development Organisation (DRDO), has developed a state-of-the-art surveillance equipment — Video and Image Processing Enhancement and Recognition System (VIPERS).

According to scientists at IRDE, VIPERS is an automated round-the-clock multi-sensor surveillance system capable of providing high-resolution imaging in any environment. It will also enable the army to get "clinical precision while firing".

"VIPERS is based on artificial intelligence and can recognise 20 different types of objects at a distance of up to 20 kilometre range. It is equipped with a convolutional neural network hardware chip which can capture photos at seven frames per second. Several chips can be teamed up to boost the performance of the automated surveillance in real time," said JP Singh, a senior scientist at IRDE who is heading the project team.

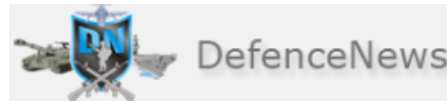
"VIPERS can work with day and night cameras, including Thermal Imagers, Active Laser, IR LED etc., to ensure flawless surveillance," added Singh.

The scientist further said that it took a few decades to shape up the system.



“The system has been developed after painstaking efforts of several years. My team is excited about the forthcoming field trials to be conducted by Indian Army next month which would test the entire range of features of the system and also help plan the next level of upgrade,” said Singh.

<https://timesofindia.indiatimes.com/city/dehradun/dr-dos-surveillance-system-to-bolster-armys-defence-system-along-the-border/articleshow/69548971.cms>



*Wed, 29 May 2019*

## **IAF to arm Russian-made Su-30MKI fighters with BrahMos-A missiles**

About 40 Russian-made Su-30MKI fighter jets of India’s Air Force will be armed with BrahMos-A air-launched missiles in the next two or three years, CEO and Chief Designer of Russia’s Research and Production Association of Machine-Building Alexander Leonov said on Tuesday.

"As for the plans, the serial production has been launched and rearmament will be carried out, as our Indian colleagues have promised on many occasions. About 40 planes as the first batch will be equipped with BrahMos missiles. Of course, this will require some time, no less than two or three years, to re-equip the planes and produce air-launched BrahMos missiles," the chief executive said.

Manager for Marketing at the Russia-India BrahMos Aerospace Joint Venture Praveen Pathak told TASS last week that the BrahMos-A air-launched missile, which the JV was developing, had hit a ground target for the first time during a test launch. In 2017, the BrahMos-A missile was test-launched for the first time, successfully hitting a naval target.

The chief executive of the Research and Production Association of Machine-Building said that the two test launches were "very important" as they had been held both against a naval and a ground target. "The universal nature of the BrahMos missile has been fully confirmed," Leonov said.

The BrahMos missile has been developed by Russia’s Research and Production Association of Machine-Building (the town of Reutov near Moscow) and India’s Defense Research and Development Organization (DRDO).

The missile’s name comes from the names of two rivers: the Brahmaputra of India and the Moskva of Russia. The missile’s first launch took place on June 12, 2001 from a coastal launcher. The missile’s production has been arranged at enterprises in Russia and India.

<http://www.defencenews.in/article/IAF-to-arm-Russian-made-Su-30MKI-fighters-with-BrahMos-A-missiles-584938>

## Indian Army deploys US-, Italy-trained snipers with deadly new rifles along LoC

*Elite units deployed along the LoC have been given the new .338 Lapua Magnum Scorpio TGT rifle by Beretta and the .50 calibre M95 rifle by Barrett*

*By Snehash Alex Philip*

New Delhi: Elite units of the Indian Army, equipped with deadly new sniper rifles, have been deployed along the Line of Control with Pakistan after special training from American and Italian experts.

Sources in the Army told The Print that units carrying the Beretta .338 Lapua Magnum Scorpio TGT and the Barrett .50 calibre M95 have been deployed at the LoC ahead of the infiltration season, which is expected to start soon.

Specials units, along with some regular soldiers from the LoC battalions, have been trained by experts from abroad on the use of these weapons and the different kinds of ammunition to be used based on operational requirements.

Sources said since these rifles have a much longer range and power than the ageing Russian Dragunov that the soldiers were using until now, specialised training had to be given so that targets could be taken out at over 1,000 metres with precision.

### **What's special about the new rifles**

The US-made Barrett M95 is an anti-material rifle which has a range of 1,800 metres. An anti-material rifle means the bullet can actually pierce through metal.

The gun, which is in use with many special forces around the world, is a bolt-action sniper rifle chambered in a .50 Browning Machine Gun cartridge (12.7×99mm).

With an unloaded gun weighing about 10 kg, the M95 first came out in 1995, and is part of the Barrett M82 family, the first notable American made .50 calibre anti-material rifles introduced in 1982.

The rifle feeds from a five-round detachable box magazine, and is lighter and more compact than earlier products.

The other rifle handed to troops along the LoC is the Victrix Armaments .338 Lapua Magnum Scorpio TGT, owned by Italian firm Beretta.

The Scorpio TGT uses the .338 Lapua Magnum (8.6×70mm or 8.58×70mm), a rimless, bottle-necked, centre-fire rifle cartridge.

It was developed in the 1980s as a high-powered, long-range cartridge for military snipers. It was used in the Afghanistan war and the Iraq war.

Although the .338 Lapua Magnum was initially developed to penetrate body armour at 1,000 metres, it has been used effectively to 1,500 metres and beyond, and holds the distinction of being part of some of the record-breaking sniper shots in war.

At least 30 countries use the .338 Lapua Magnum sniper rifles, and over a dozen manufacturers produce guns, in multiple configurations, in this calibre.

<https://theprint.in/defence/indian-army-deploys-us-italy-trained-snipers-with-deadly-new-rifles-along-loc/241829/>

# Outgunned by Pak F-16s, IAF plans to re-arm its Sukhois with Israeli Missiles

*The Indian Air Force is looking at the I-Derby variant of the Israeli missile which was unveiled at the Paris Air Show in 2015*

*By Vishnu Som*

New Delhi: In two years from now, the Indian Air Force's frontline Sukhoi-30 fighters may be re-armed with Israeli Derby air-to-air missiles after the jet's Russian-made R-77 missiles were found wanting in air combat operations over the Line of Control on February 27 this year.

Sources in the Indian Air Force told NDTV, "We already have the missile as part of the SPYDER (Surface-to-Air Missile) system. Integration (with the IAF's Su-30s) is the next step."

Retaliating to the IAF strike on the Jaish-e-Mohammed training facility in Balakot on February 26, the Pakistan Air Force aggressively positioned a large formation of 24 fighters near the Line of Control (LoC). A handful of these jets managed to cross the LoC to fire precision-guided glide bombs towards Indian military positions in the Rajouri sector.

Eight Indian Air Force fighters, including two Sukhoi-30 MKI jets, were vectored to intercept the Pakistani formation when they detected the launch of several US-made AIM-120 C5 Advanced Medium Range Air-to-Air Missiles (AMRAAM) in their direction.

"The PAF surprised the IAF by launching air-to-air missiles from inside Pakistan-occupied Kashmir," says Sameer Joshi, a Kargil veteran. "The AMRAAM effectively outranged the IAF air-to-air missiles which did not get a command to launch," he said.

Among the Indian Air Force's fighters which were targeted were two Sukhoi-30s which managed to evade the AMRAAMs which were fired at close to their maximum range of 100 kilometres. Fully defensive and desperate to escape the incoming AMRAAMs, the IAF Sukhoi-30s escaped being shot down but were unable to retaliate the F-16s because they were out of position and their own missiles, the Russian R-77s, did not have the range to realistically engage the Pakistani fighters. IAF sources told NDTV that the Russian missiles do not match its advertised range and cannot engage targets which are more than 80 kilometres away.

To meet its requirements, the IAF is looking at the I-Derby variant of the Israeli missile which was unveiled at the Paris Air Show in 2015. Integrating the missile into the Russian fighter will be a challenge and, according to sources, will require Israeli expertise, particularly in developing a data-link between the Sukhoi-30 and the missile, once it is fired. A fighter jet communicates with the missile through the data link and passes on updated vectors (location) of the fighter which has been targeted.

The Indian Navy was the first to integrate an older variant of the Derby missile with its now-retired fleet of Sea Harrier fighters. The missile is also the primary air-to-air weapon of the indigenous Tejas fighter which has entered service with the Indian Air Force. The Derby is also a component of the IAF's SPYDER surface-to-air missile batteries, and are considered several generations ahead of the legacy Russian systems which it has replaced.

## HIGHLIGHTS

- 1 IAF's Sukhoi-30s may be re-armed with Israeli Derby air-to-air missiles
- 2 IAF sources say Russian missiles do not match its advertised range
- 3 I-Derby missile is a more advanced than the missiles presently in service

However, the I-Derby missile, now being looked at, is a considerably more advanced than the missiles presently in service. An article in Aviation Week says, "The new (missile) seeker is lighter and more compact than its predecessor, thus clearing valuable space which has been used by the missile designers to increase the propulsion system. This new addition increases the range of the I-Derby ER beyond 100 km., significantly more than its current "short/medium" range capability."

The I-Derby isn't the only missile the air force is looking at to modernise its Sukhoi-30 fleet. The European MBDA manufactured Advanced Short Range Air-to-Air Missile (ASRAAM), the first of which were acquired for the air force's Jaguar fleet in 2014 as part of a 250 million pound deal, has been tested in wind tunnels on models of the Su-30 by the National Aerospace Laboratories in Bengaluru.

Once fully integrated, it will replace the R-73 short range air-to-air missile presently in use on the Sukhoi-30 fleet.

Simultaneously, the IAF is evaluating the indigenous Astra air-to-air missile for the Sukhoi-30. IAF sources told NDTV, "The Astra is in development. We have ordered fifty (missiles) of the limited series production." Ultimately, though, the air force wants an extended-range variant of the missile. "It will take ten years to get the Astra Mk2 in our inventory," say sources, a reason why integration of the I-Derby is being seen as a priority.

<https://www.ndtv.com/india-news/outgunned-by-pakistan-f-16s-iaf-plans-to-re-arm-its-sukhois-with-israeli-missiles-2044172>



Wed, 29 May 2019

## Post Balakot, Indian Air Force zeroes in on key vulnerability

*Shortage of Airborne Warning and Control System crucial*

*By Dinakar peri*

New Delhi: Drawing lessons from the Balakot air strike, the Indian Air Force (IAF) has identified a shortage of Airborne Warning and Control System (AWACS) aircraft to provide round-the-clock surveillance as a major deficiency, IAF officials said, speaking on condition of anonymity. The air strike and the aerial engagement that followed in February were discussed in detail at the recent Air Force Commanders' conference.

"The biggest lesson of February 27 was the need to have a core of high-end fighters for short skirmishes," a senior IAF official said. "If we had the technological advantage, we could have imposed costs on the adversary," the official asserted, adding, "We need to undertake resource optimisation."

For that, the IAF is banking on the soon-to-be-inducted Rafale fighters, the tender currently under way for a new fighter aircraft and the indigenous Light Combat Aircraft (LCA) MK-2 that is being developed, even as upgrades to the existing platforms make up for the shortages in the interim. "We also need to get better propaganda weapons," the official said, without elaborating.

### **Remedial measures**

While aircraft induction is a long-term measure, in the short term, the IAF has identified AWACS, Software Defined Radios (SDR) and close-in weapons systems as immediate requirements. The process for their procurement is already in advanced stages. "We did not feel that we need anything

new,” the official said, adding that everything had been thought of. “The process is on, that has to be hastened.”

### **Advantage Pakistan**

Pakistan currently has an advantage as they have more AWACS. “They have seven AWACS and could keep one on our side at all times,” the official said.

In contrast, the IAF operates three Israeli Phalcon AWACS and two indigenous Netra Airborne Early Warning and Control (AEW&C) system developed by the Defence Research and Development Organisation (DRDO). Also, the platforms are not available all the time.

The IAF was now set to take the third Netra system (mounted on Embraer aircraft) from the DRDO, the official said.

The source said IAF is now taking the third Netra from DRDO for their use. Separately, a proposal for two more Phalcon AWACS has been in the works for a long time. There was progress on it recently and the proposal is now “pending final approval of the Cabinet Committee on Security (CCS).”

A deal for SDRs has been signed with Elbit Systems of Israel and the process for close-in weapons is at the technical evaluating stage.

<https://www.thehindu.com/news/national/post-balakot-indian-air-force-zeroes-in-on-key-vulnerability/article27278034.ece>

## **THE TIMES OF INDIA**

*Wed, 29 May 2019*

# **Now, BSF to get dog squads with high-tech cameras**

*Shortage of Airborne Warning and Control System crucial*

*By Dinakar peri*

Dehradun: The Border Security Force (BSF) is planning to equip a select group of its canine force, with hi-tech surveillance cameras that would fit on the dog’s collar. The move is intended to get the exact details of the enemy target during patrolling in difficult terrain along the border.

A senior BSF official told TOI that the high-resolution cameras that are proposed to be used by the dog squads are currently being examined. “Dogs having surveillance cameras have a great potential to minimise casualty in anti-terror operations and patrolling in difficult terrains,” said the BSF official based in Delhi, requesting anonymity.

The official added that after selection of the camera equipment, BSF would start 'confidential trials' in border areas. "A meeting has been held with experts last month to work out the technical standards. We plan to get hi-tech cameras capable of sending live footage wirelessly to a designated moving port for monitoring."

The BSF has a special dog training centre in Tekanpur (MP) where the canine squad is groomed and then moved to different central and state police organisations. “At present, the dogs are being trained for sniffing explosive, narcotics and infantry patrolling and poison detection,” said another BSF official.

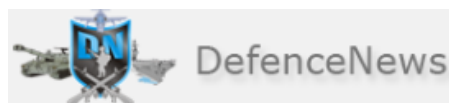
Brigadier (retd) Govind Singh Sisodia, a former Army officer who has worked with the National Security Guard (NSG), said, “Specially-trained dogs with surveillance cameras fitted would prove to be very useful in patrolling and in hostage crisis situations like that of Mumbai 26/11 attacks, where the hotel area was huge and the buildings had several floors. ”

He added that dogs with surveillance cameras have been used in the past by the German army as well. “The dog squad, has an innate ability of understanding the targets. Dog handlers usually rely on



the dog's movement for decoding but if there is a surveillance camera, then they would be able to get a swift assessment of the enemy and the ground situation," said Brig Sisodia.

<https://timesofindia.indiatimes.com/city/dehradun/now-bsf-to-get-dog-squads-with-high-tech-cameras/articleshow/69548045.cms>



Wed, 29 May 2019

## Turkish consortium to sign pact with HSL to build five fleet support ships

In a major boost to develop Indian Navy, Hindustan Shipyard Limited, a Ministry of Defence Enterprise, will sign a contract with a consortium formed by five leading shipyards in Turkey for technical collaboration to construct five Fleet Support Ships worth more than Rs 16,000 crore.

A high-level delegation from Turkey held talks with the HSL top management here on Tuesday prior to the exchange of documents. The steel cutting is expected by end of 2020.

Earlier, HSL had shelved the plan for forging a strategic partnership with Hyundai Heavy Industries owing to the insistence for building the first ship in South Korea and source major components required for the project from there.

After building the first ship in four years, the remaining will be built in a gap of 10 months each.

### Global Bidding

In the global competitive bidding process for technical collaboration, eight companies had responded and three of them were found technically qualified.

The Fleet Support Ships will ferry dry items such as food and ammunition for replenishment.

"As per the latest development, the Turkish conglomeration named TAIS and HSL will roll out the first ship in four years. The project will give a big fillip to the MSME sector. All the five ships will be built in Visakhapatnam," HSL Chairman and Managing Director Rear Admiral L.V. Sarat Babu told The Hindu.

He further said that they would sign the contract with TAIS in a month followed by a formal agreement with the Navy for building the ships.

### Technical Support

Anadolu Shipyard, the lead member of TAIS with more than 30 years of experience will offer support to HSL for designing and building the Fleet Support Ships. Each ship will have a displacement capacity of 45,000 DWT (deadweight tonnage). As part of the deal, the 'know-how and know-why' will be transferred to HSL.

The project will increase the manpower by three-fold and give a big boost to local firms involved in fabrication, blasting, piping, cable installation and outfitting to meet requirement for the HSL project.

<http://www.defencenews.in/article/Turkish-consortium-to-sign-pact-with-HSL-to-build-five-Fleet-Support-Ships-584939>

## India needs its own Space Force

India is setting up a military space agency called the Defence Space agency (DSA) that's expected to command of all the space assets of India's army, navy and air force.

For nearly the last decade, a debate has taken place in India highlighting the need to establish a Space Command to address military needs. For all these years, India has had a Military Space Cell, a tri-service organization under the aegis of the Integrated Defence Services, or IDS. Formation of this organization was announced on June 10 2008, by the then-defense minister.

The idea of DSA was mooted a few years back, possibly with a view to make an incremental increase in the space-related defense infrastructure. Hence, instead of having a Space Command headed by a three-star general, it was thought suitable to create a DSA headed by a two-star general. All these structures had relevance when India was not a military power with anti-satellite (ASAT) capability. However, now that India successfully conducted its March 27 ASAT, can DSA take India's military space agenda further, or there is a need to establish a separate ecosystem for this?

For all these years, military space — or, more specifically, usage of space assets to enhance military functioning — was the requisite which policymakers in India were required to address. However, today that is not the case. Now, by demonstrating an ASAT, India has added one more dimension to its military policy and this is about space deterrence. Over the years, the idea of nuclear deterrence has established itself objectively in the security realm. That may not be the case with the space deterrence and some haziness could exist. To ascertain the notion of space deterrence, it is important to develop a context. Theoretical postulations based on theories of international relations may take time to evolve. However, India could quickly establish a practical context for itself to situate its ASAT capability in the strategic domain. For this purpose, India needs to leapfrog from a Defence Space Agency to an Indian Space Force.

On Jan. 11, 2007, China conducted its first anti-satellite missile test by destroying one of its own satellites at an altitude of 865 kilometers. This test was not a transparent act announced in advance by China's government. The world came to know about via U.S. space surveillance capacity to track the space debris generated by such tests. This test has polluted the orbital commons, posing a debris-strike threat to various satellite systems. China got severely criticized for conducting this test.

Since 2007, China has continued with its counter-space technology program, but has refrained from carrying out additional debris-creating tests. It appears China had very little conceptual clarity about what should be their next steps after the 2007ASAT test. Additionally, global criticism could have made it difficult for China to think of any follow-up. China has yet to institutionalize any transparent space security architecture.

Luckily, India is in a diametrically opposite situation: India's test has created much less debris, most of which is in lower altitude and likely to dissipate shortly. India has a transparent agenda for the conduct of activities in space and is totally against weaponization of outer space.

Today, with an ASAT test under its belt, India has clearly identified space as a strategic domain in its overall security architecture. Obviously, using satellite technology for military purposes becomes only one of the aspects of its overall space security architecture. For India, the time has come to make a clear distinction between its military and civil space programs.

For the foreseeable future, there is no need for India to conduct any debris-creating ASAT tests to further establish its space agenda in the strategic realm. However, from a space security perspective, it is important for India to evolve a mechanism for the generation of space situational awareness (SSA).

Owing to the expense of such system, it is important for India to take initiative for the creation of a multilateral SSA mechanism.

For establishing a strategic space program, India needs to develop various counter-space capabilities like electromagnetic pulse systems, lasers, jamming techniques and cyber options. In addition, satellite-hardening technologies and space debris removal techniques are required to be mastered, too. Spaceplanes, satellite swarms and launch-on-demand services are required for network-centric warfare. India should also develop the ability for the human spacecraft to move from one orbit to another. New quantum-based communications systems and cells for studying space weather forecasting are the requirements of the present and the future.

Lastly, if India is ‘dreaming big’ with ASAT, then it has to also ‘think big’ to make its space security agenda more inclusive and an important constituent to this could be an establishment of Indian Space Force.

<http://www.defencenews.in/article/India-needs-its-own-Space-Force-584936>

**hindustantimes**

Wed, 29 May 2019

## **India, China should sign friendship treaty, free trade deal: Chinese envoy**

*Luo is on his way back after a nearly three-year stint as the Chinese envoy to India and is expected to be promoted as a vice foreign minister. His lengthy article in Chinese for The Paper possibly indicates Sino-India bilateral ties are likely to remain positive as the two countries prepare for Xi’s India visit later this year*

*By Sutirtho Patranobis*

India and China should discuss signing a “good neighbourly” treaty of friendship, explore signing a bilateral trade deal, look at “early harvest” solutions for the festering border dispute and work on the China-India model of cooperation, outgoing Chinese envoy, Luo Zhaohui has suggested.

“After experiencing the extraordinary development of the ‘honeymoon period’, ‘ice period’ and ‘recovery period’, Dong Lang (2017’s Doklam military standoff) caused Sino-Indian relations to fall into a trough. With President Xi Jinping and Prime Minister Narendra Modi’s ‘Meeting in Wuhan’ as a symbol, the relations between the two countries have returned to a healthy and stable development track,” Luo wrote in an article for state-controlled news app, The Paper, seen as a news app for China’s millennials.

Luo is on his way back after a nearly three-year stint as the Chinese envoy to India and is expected to be promoted as a vice foreign minister. His lengthy article in Chinese for The Paper possibly indicates Sino-India bilateral ties are likely to remain positive as the two countries prepare for Xi’s India visit later this year.

Luo mentioned that PM Modi and Xi have met three times since Wuhan to “lead the waves of the two countries’ relations” and at least three Chinese ministers have visited India in the last one year.

“At present, more than 1,000 Chinese companies are doing business in India and have created 100,000 jobs. Xiaomi, VIVO, OPPO and other Chinese mobile phone brands have occupied half of the Indian market,” the senior diplomat wrote.

The two countries have handled sensitive issues like India’s boycott of the Belt and Road Initiative cooperation forum and the issue of the listing of the Pakistan-based terrorist, Masood Azhar in a “mature way”, he wrote.

Luo added that Beijing and New Delhi could share their experiences in developing ideas like the BRI, the Bangladesh, China, India, Myanmar (BCIM) corridor and India's "Eastward Policy".

"The "China-India+" cooperation model can be extended to any direction of mutual interest," Luo wrote.

He suggested that in the near future the two countries could focus on four major aspects of ties: signing the China-India Good-Neighbourly Treaty of Friendship and Cooperation, exploring bilateral free trade agreement arrangements, launching early harvest negotiations on the border issue, and realising the "One Belt, One Road" initiative and the integration of national development strategies of India.

At the same time, Luo added that it was important to control differences, enhance mutual trust, complementary advantages, healthy competition, and jointly promote the construction of the Sino-Indian community of destiny as well as the common destiny of the Asian community.

India was among the first countries to recognise the People's Republic of China when it came into existence in 1949.

Writing about that, Luo mentioned that New Delhi and Beijing will celebrate the 70th anniversary of establishing diplomatic ties this year. Calling it an "extraordinary year", Luo wrote that both countries should learn from the past, understand the trends of current ties, deepen strategic mutual trust and expand pragmatic cooperation.

<https://www.hindustantimes.com/world-news/india-china-should-sign-friendship-treaty-free-trade-deal-chinese-envoy/story-Tl7eZ84D7szngiiMKA0FGM.html>

## पंजाब केसरी

Wed, 29 May 2019

### जिबूती में भारत-फ्रांस का बड़ा नौसैनिक अभ्यास

नई दिल्ली, (भाषा): रणनीतिक रूप से स्थित अफ्रीकी देश जिबूती में भारत और फ्रांस ने बड़ा नौसैनिक अभ्यास किया और इस दौरान गहरे समुद्र में दोनों नौसेनाओं ने उच्च स्तरीय अंतर संचालन क्षमता और सहयोग का प्रदर्शन किया। नौसैन्य अभ्यास 'वरुण' का पहला चरण गोवा के तट पर हुआ था और दूसरा चरण जिबूती में हुआ जहां चीन ने करीब दो साल पहले अपना पहला विदेशी सैन्य अड्डा बनाया था।

फ्रांसीसी दूतावास ने एक बयान में कहा, "वरुण 19.2 नाम से भारत-फ्रांस नौसैन्य अभ्यास का दूसरा चरण 22 से 25 मई के बीच संपन्न हुआ और इसमें हिंद महासागर में तैनात एक फ्रांसीसी परमाणु पनडुब्बी और एक भारतीय पनडुब्बी ने हिस्सा लिया।" इसमें कहा गया कि इस दौरान जटिल और रणनीतिक क्षेत्र में किया गया यह अभ्यास अपनी क्षमताओं को आंकने और क्षमता का प्रदर्शन करने जैसा है।