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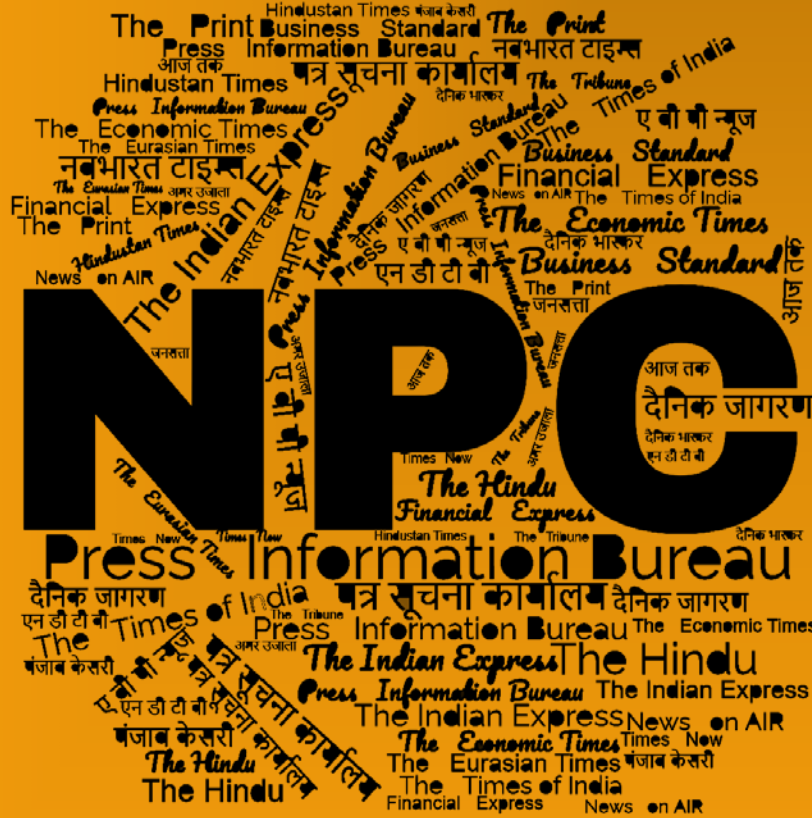
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# समाचार पत्रों से चयित अंश Newspapers Clippings

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### **Surface-to-Air Missile | DRDO Working to Fix a Few Glitches**

The indigenous Quick Reaction Surface to Air Missile (QRSAM) being developed by the Defence Research and Development Organisation (DRDO) is set to be tested again in April with some changes suggested by the Army. “The mission reliability has to be improved and some glitches have to be fixed. The DRDO is already working on it,” a defence source said. The QRSAM with a range of 25-30 kms is a pressing requirement for the Army. The missile was last tested in September 2022 with six flight-tests conducted from Integrated Test Range (ITR) Chandipur, off Odisha as part of evaluation trials by the Army.

The DRDO had stated then that the tests were conducted in the final deployment configuration consisting of all indigenously-developed sub-systems, including the missile with indigenous Radio Frequency (RF) seeker, mobile launcher, fully automated command and control system, surveillance and multi-function radars. The QRSAM is designed to operate on the move with search and track capability and fire on short halt, a requirement for the Army’s Air Defence to move along with offensive formations. The Army has two regiments of the indigenous Akash SAM also at a range of 25 kms and along with the QRSAM falls in the short range SAMs. A Medium Range SAM is being developed by the DRDO in collaboration with Israel Aerospace Industries (IAI). The maiden launch of MRSAM Army Version was conducted in December 2020. “The MRSAM has entered production. Its induction is on and is ready for deployment,” sources stated.

#### **Air Defence functions**

Air Defence functions in three levels – gun/missile system, medium range and high range. Within this the Air Defence guns are of two types, AD Gun Missile system, AD self propelled guns. The Army is looking for AD guns in both the categories. In the medium segment, it has the indigenous Akash SAM while MRSAM fits in the high range. Upgrading air defences and fielding a layered comprehensive air defence solution has emerged a priority as a fallout of the war in Ukraine. As reported by The Hindu earlier, long range missiles and Unmanned Aerial Vehicles (UAV) have been identified as future threats with calls for a mitigation strategy as part of integrated air defence, as part of lessons for Army’s air defence from the ongoing Ukraine war.

<https://www.thehindu.com/news/national/indigenous-quick-reaction-surface-to-air-missile-to-be-tested-again-in-april/article66485697.ece/amp/>



**Press Information Bureau**  
**Government of India**

**Ministry Of Defence**

*Wed, 08 Feb 2023*

## **Major Boost to ‘Aatmanirbharta’ in Defence: MoD Signs Contract with L&T for Procurement of 41 Indigenous Modular Bridges, Worth over Rs 2,585 Crore, for Corps of Engineers of Indian Army**

In a major boost to indigenisation of defence equipment under Prime Minister Shri Narendra Modi’s vision of ‘Aatmanirbhar Bharat’, Ministry of Defence has approved the proposal for indigenous manufacture of 41 sets of Modular Bridges for the Corps of Engineers of the Indian Army. These game-changing bridges have been designed and developed by Defence Research and Development Organisation (DRDO) and shall be produced by Larsen & Toubro (L&T) as DRDO-nominated production agency. The contract for the procurement of Modular Bridges was signed with L&T on February 08, 2023 at an estimated cost of over Rs 2,585 crore.

Each set of Modular Bridge shall consist of seven carrier vehicles based on 8x8 Heavy Mobility Vehicles and two launcher vehicles based on 10x10 Heavy Mobility Vehicles. Each set shall be capable of mechanically launching a single span fully decked 46-meter assault bridge. The bridge can be employed over various types of obstacles like canals & ditches with quick launching and retrieval capabilities. The equipment is highly mobile, versatile, rugged and capable of keeping pace with wheeled and tracked mechanized vehicles.

The modular bridges will replace the manually--launched Medium Girder Bridges (MGB) that are currently being used in the Indian Army. The indigenously designed and manufactured Modular bridges shall have many advantages over the MGB such as increased span, less time for construction and mechanical launching with retrieval capability. The procurement of these bridges will give a major boost to the bridging capability of the Indian Army on the Western Front. The project will showcase India’s progress in designing and developing world class military equipment and pave the way for enhancing defence exports to friendly countries.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1897438>

# Business Standard

Thu, 09 Feb 2023

## **India has Emerged as Strong Nation, can Face any Challenge: Rajnath Singh**

Defence Minister Rajnath Singh on Wednesday asserted that India has emerged as a strong nation that can face any challenge. Asserting that the BJP will secure at least 50 seats in the elections to the 60-member assembly in Tripura on February 16, the Union minister called the seat-sharing agreement of the Congress and the CPI(M) a "jugalbandi between a flute that does not produce sound and a sitar with torn strings". Addressing an election rally in Barjala area of Agartala, the senior BJP leader said that the Indian Army can kill Pakistan-backed terrorists on either side of the border.

"India was earlier known as a weak nation. But now, the whole world is aware that India is a strong country. We are now ready to face any challenge. "The Indian Army easily neutralises Pakistan-backed terrorists entering our sovereign territory. When required, we even entered Pakistan and liquidated these terrorists. We can kill these terrorists on either side of the border," he said. Singh said Tripura was once a hotbed of insurgency but the situation has changed completely under the BJP rule. Noting that peace is the primary condition for development, Singh said the BJP government will "not tolerate violence in any form".

Singh claimed that currently, nobody in the country dies of hunger but news of starvation deaths was heard of before 2014. The Union minister claimed that before the BJP came to power in the state in 2018, the rural areas of Tripura were plunged into darkness, and even there were massive power outages in state capital Agartala but now the entire state is well-electrified. He said the state now has a good network of roads, better internet connectivity and an international airport.

[https://wap.business-standard.com/article-amp/current-affairs/india-has-emerged-as-strong-nation-can-face-any-challenge-rajnath-singh-123020801662\\_1.html](https://wap.business-standard.com/article-amp/current-affairs/india-has-emerged-as-strong-nation-can-face-any-challenge-rajnath-singh-123020801662_1.html)

# THE ECONOMIC TIMES

Wed, 08 Feb 2023

## **Western Sanctions will not Disrupt India-Russia Defence Partnership: BrahMos Chief**

The India-Russia defence partnership will "never" be disrupted by the Western sanctions on Moscow, BrahMos Aerospace chief said on Wednesday, saying it's the "trust" that makes this partnership work. The West, led by the US, has imposed crippling sanctions on Russia for its invasion of Ukraine in February 2022. BrahMos Aerospace is a joint venture between India and Russia that specialises in nuclear-capable supersonic missiles. The company currently manufactures the BrahMos missile and is currently developing the BrahMos II, a hypersonic cruise missile. The West's attempts will not stop the Russia-India defence partnership, nor will it impact the company's operations, BrahMos Aerospace Indo-Russian Joint Venture Managing

Director and CEO AtulDinkarRane told TASS, the official news agency of Russia."My personal gut feeling - it is never!" Rane said when asked whether Western countries could halt India-Russia defence and security cooperation.

"And if someone tries, he will only fail. The relationship between the Indian scientists and Russian technologists is so deep right now that it's not going to be possible to break it. Even if someone tells us by law - no more talking with Russia, you will start talking to someone else - but we'll always say it was easier to work with the Russians," Tass quoted him as saying.Rane asserted it is the trust between India and Russia that will help this partnership work despite sanctions from the West."The trust which we have developed between the two partners, ... that trust is good enough for us to work, and we are working forward -- despite all these sanctions," Rane said.Russia has traditionally been India's main arms supplier.

Unlike many other leading Western powers, India has not directly criticised Russia for its invasion of Ukraine and it abstained from a vote at the UN platforms in condemning the Russian aggression.India has been pressing for the resolution of the crisis through diplomacy and dialogue.Rane also said that many foreign countries express their interest in purchasing various versions of the BrahMos cruise missile."The Philippines is the first order that we got," Rane said, adding that five countries have currently placed their orders."So far, I can say that they are from South East Asia, the Middle East and Latin America."He added that BrahMos Aerospace plans to start shipping missiles to the Philippines in the middle or the second half of this year.

[https://m.economictimes.com/news/defence/western-sanctions-will-not-disrupt-india-russia-defence-partnership-brahmos-chief/amp\\_article/show/97741970.cms](https://m.economictimes.com/news/defence/western-sanctions-will-not-disrupt-india-russia-defence-partnership-brahmos-chief/amp_article/show/97741970.cms)



*Wed, 08 Feb 2023*

## **Aero India 2023: Defence Ministry to Organise CEO's Roundtable**

The Ministry of Defence is organising a CEOs Roundtable on February 13, the inaugural day of Aero India 2023, under the chairmanship of Minister of DefenceRajnath Singh.The Roundtable will see participation from officials, delegates, and global CEOs from 26 countries including global investors such as Boeing, Lockheed, Israel Aerospace Industries, General Atomics, Liebherr Group, Raytheon Technologies, Safran, General Authority of Military Industries (GAMI) etc.Domestic PSUs like Hindustan Aeronautics Limited (HAL), Bharat Electronics Limited (BEL), Bharat Dynamics Limited (BDL), BEML Limited, and Mishra Dhatu Nigam Limited will also participate in the Roundtable.

The five-day event will be inaugurated by Prime Minister NarendraModi and will include aerial displays by aircrafts along with a large exhibition and trade fair of aerospace companies. This year, the exhibition is expected to be the biggest airshow with the highest rate of participation and will feature top international think-tanks, major aerospace companies and world leaders.

<https://www.thehindu.com/news/national/karnataka/aero-india-2023-defence-ministry-to-organise-ceos-roundtable/article66486255.ece/amp/>

Wed, 08 Feb 2023

## **‘Make in India for India and for the World’: Thales Set to Showcase Latest Capabilities at Aero-India 2023**

French aerospace major Thales group which is eyeing major expansion in India, for the first time will have a Human Resource Team at the 14th edition of Aero-India 2023 next week.

With its focus on “Make in India for India and for the world” and also ‘Aatmanirbhar Bharat’, this initiative will give them an opportunity to meet engineers who are interested in joining their team and during discussion will also share various career opportunities at their engineering centres located in Bengaluru and Noida.

According to an official company statement, at the 14th edition of Aero-India, aimed at supporting the modernization of the Indian Armed Forces it has plans to get all its flagship capabilities including Air, Naval and Land Defence, and Space and Aerospace.

The company which is celebrating its 70th anniversary of its presence in India is moving forward on its ‘Make in India’ roadmap as part of the Prime Minister Narendra Modi’s Aatmanirbhar Bharat vision

### **Make in India**

According to the company’s statement every year its ‘Make in India’ programme is growing and to play a greater role in world markets, Thales is also helping the Indian industry.

It has also steadily built advanced in-country capabilities across manufacturing through collaborations and local teams.

Today the European Group is working with 75 suppliers and generated more than 1900 indirect jobs in India. It has local joint ventures and other partnerships with Bharat Dynamics (BDL) to manufacture 60 percent of the Laser Beam Riding MANPAD (LBRM) system. This product is expected to be displayed alongside other defence equipment with local content.

From air defence capacities from sensors to effectors; as a systems integrator, the will also showcase its entire range of radars and very short range air defence systems. It also includes Laser Beam Riding, MANPAD, and more.

Airborne optronics capability which is good for unmatched image quality, its 2-in-1 targeting & reconnaissance pod TALIOS (Targeting Long-range Identification Optronic System) will be on display.

This time it will introduce SYNAPS A which is the airborne member of the SYNAPS software-defined radio family. This is designed to support Identification Friend of Foe (IFF); C4I systems and battlespace digitisation.

Also featured this time under the navigations segment is the TopAxyz inertial navigation system which can be used for land, naval and air transport.

According to the company statement the Group covers the full range of maritime security and naval combat – from Open Ocean to the shorelines. Also showcased will be Sonoflash which is a new generation of sonobuoy. This sonobuoy helps to strengthen anti-submarine warfare capabilities.

In the Aerospace sector the company will feature AVANT Up. This is its latest evolution of industry leading in-flight entertainment (IFE) solutions.

### **Space & Drones**

Will showcase earth observation space capabilities. In compliance with national and international regulations Thales will present its drones like Spyrainger, counter-UAV solutions that detects, classifies and neutralises micro- and mini-drones to protect people, secure critical infrastructure and events.

### **Comment of VP and Country Director India, Thales**

Ashish Saraf, Vice President and Country Director – India, Thales said that the company is eager to pursue its long standing commitment to India and to partner in India's `Atmanirbhar Bharat's vision.

<https://www.financialexpress.com/defence/make-in-india-for-india-and-for-the-world-thales-set-to-showcase-its-latest-capabilities-at-aero-india-2023/2975790>

## **THE ECONOMIC TIMES**

*Wed, 08 Feb 2023*

### **US Embassy Officials Visit Indian Navy Base Operating Leased Predator Drones**

The US officials have visited a key Indian Navy base that operates the leased American Predator drones, highlighting the close synergy between the two countries in building credible defence cooperation. During the visit, US Embassy Staff were briefed by the Indian Navy about the capabilities of the remotely piloted aircraft and its various sensors, their roles in aiding Indian Navy surveillance tasking, maintenance, and logistical support, General Atomics Aeronautical Systems (GA-ASI) said in a media release. "The visit by Staff of the US Embassy in India to witness MQ-9 operations from an Indian Naval Base, highlights the close synergy between our two countries in building credible defence cooperation for achieving and maintaining peace in the Indian Ocean Region," VivekLall, chief executive, General Atomics Global Corporation, said in a statement. India has leased General Atomics Aeronautical Systems (GA-ASI) manufactured MQ-9 Remotely Piloted Aircraft Systems (RPAS) for over two years.

"We were truly impressed by the collaboration we witnessed between the Indian Navy and GA-ASI. The MQ-9 is a proven ISR platform, and the Indian Navy has deployed it to its full potential," said RaghavanSrinivasan, Commercial Attache, US Embassy New Delhi. "The camaraderie between the Indian Navy personnel and GA-ASI crew is evident, despite the tempo of operations and pressures of long-range maritime surveillance," Srinivasan said.



GA-ASI manufactures the world's most advanced RPAS, which are equipped with cutting-edge technology and are operated by a complex ground system of interconnected control stations and operational centers, the media release said on Tuesday. The MQ-9s are supplied to India by GA-ASI as part of a Company-Owned, Company-Operated (COCO) lease agreement, it said, without divulging the number of units leased to the country.

GA-ASI is the world's leading manufacturer of RPA systems, radars, and electro-optic and related mission systems solutions. MQ-9s are operated by the United States, the UK, France, Italy, the Netherlands, and Spain. GA-ASI's newer variant has been acquired by the UK and on order for Belgium.

[https://m.economictimes.com/news/defence/us-embassy-officials-visit-indian-navy-base-operating-leased-predator-drones/amp\\_articleshow/97716920.cms](https://m.economictimes.com/news/defence/us-embassy-officials-visit-indian-navy-base-operating-leased-predator-drones/amp_articleshow/97716920.cms)



*Wed, 08 Feb 2023*

## **French Defence Firm Thales to Exhibit Solutions for Indian Army, Navy, Air Force, at Aero India**

French aerospace and defence firm Thales will be exhibiting a host of military and commercial aviation and earth observation hardware at the Aero India 2023 event that is to take place in Bengaluru from February 13 to 17. Radars, Very Short-Range Air Defence Systems (VSHORADS), anti-drone systems, and mini-unmanned aerial vehicles are the categories of products that will be showcased in the week-long defence and aerospace exhibition, which is said to be the largest in Asia. The company said that it has a workforce of more than 1800 employees in the Indian cities of Noida and Bengaluru, where their Global Engineering Centres focus on hardware, software and systems engineering capabilities for both civil and defence sectors, serving global needs.

"Working today with 75 suppliers, generating more than 1900 indirect jobs in India, Thales has expanded locally with joint ventures and other partnerships, such as with Bharat Dynamics Limited to manufacture 60 per cent of the Laser Beam Riding Man-portable air defence system (MANPAD LBRM) system, a top product that Thales will display at the show alongside other defence equipment with local content." In layman's terms, MANPAD are portable, shoulder-fired surface-to-air missiles that pose a threat to low-flying aircraft and helicopters.

"Thales will showcase its airborne optronics capability: the 2-in-1 targeting & reconnaissance pod TALIOS (Targeting Long-range Identification Optronic System), Under the navigations segment, the TopAxyz inertial navigation system for air, naval and land transport will be featured. In support of the Indian Navy, Thales will showcase Sonoflash, a new generation of sonobuoy that strengthens anti-submarine warfare capabilities", the company said.

For the Indian civil aviation sector, Thales looks to offer its 'AVANT Up', an inflight entertainment solution. On the drones and anti-drone systems front, the firm will be exhibiting the Spyranter drones, counter-unmanned aerial vehicle solutions that detect, classify and neutralise micro- and mini-drones to protect people, secure critical infrastructure, etc.

“As we celebrate 70 years in India, Thales is eager to pursue its long-standing commitment to partner with India in its big ambitions, including the ‘Aatmanirbhar Bharat’ (self-reliant India) vision. We are fully committed and mobilised to continue supporting the modernisation and indigenisation efforts that are underway in the Indian aerospace and defence sector,” said Ashish Saraf, Thales' India VP and Country Director.

<https://www.wionews.com/india-news/french-defence-firm-thales-to-exhibit-solutions-for-indian-army-navy-air-force-at-aero-india-560040/amp>



*Thu, 09 Feb 2023*

## **The Fine Print in the Indo-US Pact, iCET**

*By Arun Prakash*

In his 2019 book, *The Hundred Year Marathon*, Michael Pillsbury, a foreign policy strategist, who has held positions in the US administration and Senate, says, “...not only has China’s rise happened right under our noses, but also the US and the West have helped the Chinese accomplish their goals from the beginning... For decades, the US government freely handed over sensitive information, technology, military know-how and expert advice to China.” Ominously, he adds, “The American public is unaware of the extent of covert cooperation between Washington and Beijing over the past forty years.”

If Pillsbury’s account is to be believed, the dramatic ascent of a prosperous, technologically advanced and militaristic China — leaving India far behind in its wake — owes much to the close multidimensional cooperation extended to it by the US since the 1980s. In which case, the recent unveiling of a US-India Initiative on Critical and Emerging Technologies (iCET) comes half a century too late for India. Seen in the light of President Biden’s 2021 undertaking to transfer multiple advanced technologies, including submarine nuclear propulsion to Australia, it starkly highlights the absence of any significant offer of high tech by the US to India, despite bilateral ties, growing steadily in warmth and closeness.

There has, however, been no dearth of accords and agreements, with lofty titles, framed to enhance Indo-US cooperation in the security and technology domains. Some examples: “Next Steps in Strategic Partnership” in 2004; “Defence Framework Agreement” in 2005: the pathbreaking “Indo-US Civil Nuclear Agreement” in 2008; launching of the “Defence Technology and Trade Initiative” in 2012; accord of “Major Defence Partner” status by US Congress in 2016; and institution of “2+2 talks” in 2018. The signing of the fourth and last of the key “foundational agreements” in 2020 was supposed to have eliminated the final impediment to closer security cooperation. However, after nearly two decades of this pretentious “pas de deux”, all that the Indo-US “strategic partnership” had delivered was \$22 billion worth of military hardware, purchased by India via the foreign military sales programme.

In a determined bid at the highest level to address this state of stasis, a communique following the May 2022 Biden-Modi quadrilateral summit in Tokyo announced “the launch of a US-India Initiative on Critical and Emerging Technologies spearheaded by the National Security Councils

(NSC) of the two countries”. Following this, a team of top Indian scientists, including the heads of ISRO and DRDO, recently held the first formal talks in Washington with their US counterparts; both teams being led by respective NSAs.

Pitched at the exalted level of the two NSCs, the iCET could become a “game changer” in catalysing Indo-US technology cooperation by persuading the US to lift existing export control restrictions, and encouraging the private sector of both countries to cooperate in sensitive sectors. The most important outcome, however, would be to dispel the cloud of mistrust that has hung over this relationship and to demonstrate a mutual commitment to investing in advanced technologies, such as quantum computing, AI and space, as well as the critical field of semiconductor design and manufacture.

While many of these emerging technologies have huge future potential, both in the civil sector and the security domain, there are other areas — less esoteric but equally important — in which India’s defence industrial complex has been struggling for decades and on which iCET must focus urgently.

This issue is best illustrated by citing the cautionary tale of the six-decade-long association of India’s massive defence industrial complex, comprising the DRDO, defence public sector undertakings (DPSU) and the (erstwhile) Ordnance Factory Board, with the Soviet/Russian arms industry. Commencing in the mid-1960s, our DPSUs built, under licence, 800 or more fighters of the MiG series along with about 2,000 aero engines as well as a few thousand battle-tanks, armoured vehicles and their engines.

While the DPSUs consistently claimed transfer of technology (ToT) in the process of licenced production, the fact is Indian engineers and designers acquired only the “knowhow” of methods and procedures required for assembling or building aircraft, aero engines and armoured vehicles from parts or material supplied. We neither asked nor were offered (by the Soviets/Russians) the “know-what” and “know-why” involving the principles and laws that would have enabled us to design and build our own weapon-systems. As a direct consequence of this oversight or lapse, India has remained amongst the world’s largest importer of arms; buying from abroad weapons ranging from rifles and machine guns to battle tanks and fighters, and prime movers from diesel and aero engines to nuclear reactors.

While the iCET promises a long overdue transformation, four aspects demand wariness on India’s part. First, even though ownership of technology in the US may lie with the private sector, the US Arms Export Control Act not only requires clearances from the Departments of State and Defence for ToT but also imposes certain restrictions on the recipient state.

Second, an unstated but significant, long-term objective of the iCET is, surely, to wean India off its dependency on Russian military hardware. This is likely to face stiff resistance on various grounds from Moscow as well as from domestic quarters, but national interest must prevail. Over the past 60 years, neither the quality of Soviet/Russian hardware nor the product support has ever matched that of its western counterparts, and the disruption caused by the Russia-Ukraine conflict will further aggravate the situation. The time has come for India to break free of Russia’s apron strings and regain “strategic autonomy” in international affairs.

Third, while India is in dire need of technology, the US industry remains firmly focused on trade. India will, therefore, need to leverage its considerable purchases in the arms, energy, civil aviation, nuclear and other sectors in a holistic manner to extract technology from the US.

Finally, we must bear in mind that merely switching from Russian to American military hardware will be a case of “jumping from the frying pan into the fire”. Atmanirbharta must remain our ultimate aim.

<https://indianexpress.com/article/opinion/columns/the-fine-print-in-the-indo-us-pact-icet-8432798>



Wed, 08 Feb 2023

## US Forces Returning to Philippines to Counter China Threats

Once-secret ammunition bunkers and barracks lay abandoned, empty and overrun by weeds — vestiges of American firepower in what used to be the United States’ largest overseas naval base at Subic Bay in the northern Philippines. But that may change in the near future. The US has been taking steps to rebuild its military might in the Philippines more than 30 years after the closure of its large bases in the country and reinforcing an arc of military alliances in Asia in a starkly different post-Cold War era when the perceived new regional threat is an increasingly belligerent China.

On February 2, the longtime allies announced that rotating batches of American forces would be granted access to four more Philippine military camps aside from five other local bases, where US-funded constructions have picked up pace to build barracks, warehouses and other buildings to accommodate a yet-unspecified but expectedly considerable number of visiting troops under a 2014 defence pact.

Manila-based political scientist Andrea Chloe Wong said the location of the Philippine camps would give the US military the presence it would need to be a “strong deterrent against Chinese aggression” in the South China Sea, where China, the Philippines and four other governments have had increasingly tense territorial rifts — as well as a potential Chinese invasion of Taiwan, which Beijing views as its own territory to be brought under Chinese control, by force if necessary.

Around the former US Navy base in Subic, now a bustling commercial freeport and tourism destination northwest of Manila, news of the Philippine government’s decision to allow an expanded American military presence rekindled memories of an era when thousands of US sailors pumped money, life and hope into the neighbouring city of Olongapo. “Olongapo was like Las Vegas then,” Filipino businessman AJ Saliba told The Associated Press in an interview in his foreign currency exchange and music shop along what used to be Olongapo’s garish red-light strip.

“Noisy as early as noon with neon lights turned on and the Americans roaming around. Women were everywhere. Jeepney drivers, tricycles, restaurants, bars, hotels — everybody was making money — so if they will return, my God, you know, that’ll be the best news,” he said. US Defence Secretary Lloyd Austin said during his visit in Manila last week that Washington was not trying to re-establish permanent bases, but that the agreement to broaden its military presence under the Enhanced Defence Cooperation Agreement was “a big deal.”

Visiting American military personnel could engage the Philippine military in larger joint combat-readiness trainings, provide help in responding rapidly to disasters and press efforts to help modernize Manila's armed forces, Austin and his Philippine counterpart Carlito Galvez Jr. said.

"This is part of our effort to modernize our alliance, and these efforts are especially important as the People's Republic of China continues to advance its illegitimate claims in the West Philippine Sea," Austin said at a news conference in Manila. Chinese Foreign Ministry spokesperson Mao Ning said the US military's strengthening in the region was escalating tensions and risking peace and stability. "Regional countries need to remain vigilant and avoid being coerced or used by the US," Mao told reporters February 2 at a briefing in Beijing.

Austin and Galvez did not reveal the four new locations where the Americans would be granted access and allowed to preposition weapons and other equipment. The Philippine defence chief said local officials, where the Americans would stay, had to be consulted. In November, then-Armed Forces of the Philippines Chief of Staff Lt. Gen. Bartolome Bacarro disclosed that the sites included the strategic Subic Bay, where the Navy base was once a boon to the local economy. But two senior Philippine officials told the AP that Subic, where a Philippine navy camp is located, was not among the current list of sites where Washington has sought access for its forces, although they suggested that could change as talks were continuing.

The two officials spoke on condition of anonymity because they were not authorised to discuss the issue publicly. Subic freeport administrator Rolan Paulino said he has not been notified by the government that the former American naval base has been designated as a potential site for visiting US forces.

A renewed US military presence at Subic, however, would generate more jobs and raise additional freeport revenues at a crucial time when many Filipinos and businesses are still struggling to recover from two years of COVID-19 lockdowns and an economic recession wrought by coronavirus outbreaks, Paulino said. "I see them as tourists," he said of the US forces whose presence could boost economic recovery.

About the size of Singapore, the former American Navy base at Subic with its deep harbours, a ship repair yard and huge warehouses had been used to support the US war effort in Vietnam in the 1960s and '70s. It was shut down and transformed into a commercial freeport and recreational complex in 1992 after the Philippine Senate rejected an extension of US lease.

A year earlier, the US Air Force withdrew from Clark Air Base near Subic after nearby Mount Pinatubo roared back to life in the second-largest volcanic eruption of the 20th century and belched ash on the air base and outlying regions.

The American flag was lowered for the final time and the last batch of American sailors left Subic in November 1992, ending nearly a century of American military presence in the Philippines that began in 1898 when the US seized the archipelago in a new colonial era after Spain held the Southeast Asian nation as a colony for more than three centuries.

Washington granted independence on July 4, 1946, but maintained military bases and facilities, including Subic. China's seizure in the mid-1990s of Mischief Reef, a coral outcrop within the exclusive economic zone of the Philippines that extends into the South China Sea, "provided the first hint that the allies may have been too quick to downgrade their relationship," said Greg Poling, director of the Asia Maritime Transparency Initiative at the Washington, D.C.-based Center for Strategic and International Studies. The Philippine Constitution prohibits permanent

basing of foreign troops in the country and their involvement in local combat but allows temporary visits by foreign troops under security pacts such as the 2014 Enhanced Defence Cooperation Agreement and a 1998 Visiting Forces Agreement.

The 1998 agreement allowed a large number of American forces to be deployed in the southern Philippines to help provide combat training and intelligence to Filipino forces battling the then-al Qaida-linked Abu Sayyaf group, which was blamed for deadly bombings and mass kidnappings for ransom, including three Americans — one of whom was beheaded and another shot and killed in a Philippine army rescue. The third survived.

There is still, however, domestic opposition to a US presence in the Philippines, which left-wing groups have criticised as neo-colonialism, reinforced by the 2014 killing of a Filipina transgender woman by a US Marine, Wong said.

Governor Manuel Mamba of northern Cagayan province, where Bacarro said the US has reportedly sought access for its forces in two local military encampments, vowed to oppose such an American military presence. Cagayan, located on the northern tip of the main Luzon island, lies across a narrow sea border from Taiwan, the Taiwan Strait and southern China. "It'll be very dangerous for us. If they stay here, whoever is their enemy will become our enemy," Mamba told the AP by telephone, adding the Philippines could be targeted by nuclear weapons if the conflict over Taiwan boils over.

<https://indianexpress.com/article/world/us-forces-returning-to-philippines-to-counter-china-threats-8432058/lite/>

## Business Standard

*Thu, 09 Feb 2023*

### **China Conducted Spy Balloon Programme for Several Years: Pentagon**

The Chinese balloon shot down off the South Carolina coast was part of a large surveillance programme that China has been conducting for "several years", the Pentagon said Wednesday. When similar balloons passed over US territory on four occasions during the Trump and Biden administrations, the US did not immediately identify them as Chinese surveillance balloons, said Brig. Gen. Pat Ryder, the Pentagon press secretary. But he said "subsequent intelligence analysis" allowed the US to confirm they were part of a Chinese spying effort and learn "a lot more" about the programme. He refused to provide any new details about those previous balloons. When pressed, Ryder would only say that the balloons flew over "sites that would be of interest to the Chinese". One of the possible incidents was last February.

Maj. Gen. Kenneth Hara, the adjutant general in Hawaii, tweeted about a balloon over Kauai a year ago. He said US Indo-Pacific Command "detected a high-altitude object floating in the air in the vicinity of the Hawaiian Islands" and sent up aircraft to intercept it. He said they visually confirmed it was an unmanned balloon with no identification markings.

Ryder declined to say whether this was one of the four previous incidents that the US had discussed. Pacific Air Forces, the Air Force command in the Indo-Pacific, said that balloon was not shot down. The recent balloon was shot down by a US military fighter jet on Saturday. The

Navy and Coast guard are still working to recover pieces of the downed balloon so they can be analyzed.

Ryder said North American Aerospace Defense Command began tracking the recent balloon as it approached US airspace. It passed north of the Aleutian Islands on January 28 and moved largely over land across Alaska and then into Canadian airspace before crossing back into the US over northern Idaho on January 31, US officials have said. Top administration officials were briefing members of Congress on the Chinese balloon surveillance programme in classified sessions on Wednesday and Thursday.

Avril Haines, director of national intelligence; Deputy Secretary of State Wendy Sherman; Gen. Glen VanHerck, head of US Northern Command; and Colin Kahl, the under-secretary of defence for policy, were among those expected to brief lawmakers. Secretary of State Antony Blinken said the US has briefed dozens of countries on the programme, which officials said has been active over five continents. "The United States was not the only target," he said at a news conference with visiting NATO chief Jens Stoltenberg. Blinken said he and Stoltenberg had spoken about the "systemic and tactical challenges" that China poses to the alliance and the importance of combatting them. The foreign countries would include nations the US believes have been surveilled in the past as well as NATO allies. Those briefings were continuing Wednesday, and the State Department has sent a cable to all US embassies and consulates outlining the administration's case against China and instructing American diplomats to discuss these points with their host governments.

However, the cable is less specific than what has been briefed to allies and partners. Off the South Carolina coast, meanwhile, Navy divers began pulling pieces of the downed Chinese spy balloon from the depths of the ocean floor on Tuesday, using sophisticated reconnaissance drones dubbed the Kingfish and the Swordfish to locate the debris. Ryder said agents from the FBI and the Naval Criminal Investigative Service are cataloguing the debris and transporting it for further processing.

[https://wap.business-standard.com/article-amp/international/china-conducted-spy-balloon-programme-for-several-years-pentagon-123020900042\\_1.html](https://wap.business-standard.com/article-amp/international/china-conducted-spy-balloon-programme-for-several-years-pentagon-123020900042_1.html)



*Thu, 09 Feb 2023*

## **Russia's New Anti-Radiation Missile, Possibly 'Supersonic Death' KH-31 PD, Highly Effectiveness in Ukraine**

*By Ashish Dangwal*

The air-launched anti-radiation missile designed and manufactured by Russia's Tactical Missiles Corporation has demonstrated high effectiveness in Ukraine due to its new multipurpose warhead, reported TASS.

The report, citing a source in the domestic defense ministry, claimed that an air-launched anti-radiation missile was equipped with a "top-notch" multipurpose warhead that could engage any target.

The missile in question has demonstrated its remarkable effects on the battlefield against Ukrainian targets. “The previous missile of this type had three different warheads employed depending on the designated target,” the source told TASS.

According to another source in the domestic defense ministry, who spoke to TASS in October 2022, the air-launched anti-radiation missile manufactured by Tactical Missiles Corporation demonstrated its above 98% efficiency in the special military operation in Ukraine.

The report did not mention the name of the new air-launched anti-radiation missile.

However, the military output catalog of the company indicates that the new weapon could be the air-launched, high-speed anti-radiation Kh-31PD missile meant to attack enemy radar installations and surface-to-air missile systems.

The missile, which can be air-launched from an altitude of 15 kilometers and carries a 110-kilogram warhead, can engage targets at a maximum distance of 250 kilometers. The Kh-31P missile was its forerunner.

The report noted that the entire family of cutting-edge air-launched weapons developed and manufactured by Tactical Missiles Corporation was tested successfully in Ukraine.

The new missile’s principal modifications reportedly include replacing three selective heads with a single broadband that jams the spectrum of applied and projected frequencies used by a possible adversary’s air defense systems.

The Kh-31PD, a longer-range variant of the Kh-31P, can be launched primarily from fighter aircraft like the Su-30MK, Su-34, Su-35, MiG-29K, MiG-29KUB, and MiG-35.

### **Russia’s Anti-Radiation Missile**

In November 2022, RUSI noted that Su-30SM and Su-35S jets frequently fired the Kh-31P and Kh-58 anti-radiation missiles to disable Ukrainian SAM radars.

Commanders of the aviation and air defense units of the Ukrainian Air Force reportedly revealed several times that Kyiv had lost several SA-11 and SA-8 SAMs to the Kh-31P and Kh-58 missiles fired by Russian jets.

Along with the continued extensive use of Kh-31P and Kh-58 ARMs by VKS aircraft, Russian forces also efficiently coordinated operations with hunting complexes of Orlan-10 UAVs to disable the Ukrainian defense system.

The Kh-31, which Russian pilots refer to as “Supersonic Death,” is nearly impervious to enemy anti-aircraft defenses due to its incredible speed and ability to launch a counterattack, according to an earlier report from The EurAsian Times.

The Kh-31 missile primarily comes in two versions: the Kh-31A and the Kh-31P. The Kh-31A (Active) is an anti-shipping cruise missile (ASCM) type that locates its target area using inertial guidance.

The missile is capable of engaging ships displacing up to 4,500 tons. The Kh-31P is an anti-radiation missile (ARM) variant designed to destroy active (radiating) adversary radars. It is meant to disable air operations control radars, early warning radars, and medium and long-range SAM systems.



Russia has also produced a missile variant with a deadlier (heavier) warhead. The Anti-Shipping Cruise Missile (ASCM) configuration called Kh-31AD was first displayed at MAKS 2019. It was designed to destroy landing ships.

The missile's modern ARM derivative, Kh-31PD, is also deployed in Ukraine. Compared to the American AGM-88 HARM, the Kh-31 is a substantially larger missile. The D variant's 110-kilogram warhead weighs much more than the HARM's 68-kilogram warhead.

The D variant has far more momentum when impacting a target thanks to its 1000 m/s speed, which is significantly higher than the HARM's 600 m/s speed. As a result, the destruction brought on by the Kh-31 would be far greater than that by HARM.

The American missile's AGM-88E variant is otherwise more sophisticated than the Kh-31. This variant of the American missile is more challenging to avoid than the Kh-31.

The AGM-88E is not blinded if an enemy disables the SAM radar. It records the location of the enemy radar and utilizes its own high-resolution (millimeter wave) radar to "see" the target radar.

<https://eurasianimes.com/russias-new-anti-radiation-missile-possibly-supersonic-death-kh-31-harm-highly-effectiveness-in-ukraine/>



*Wed, 08 Feb 2023*

## **Iran Flaunts American Phantom Jets that can Take-off from Underground Bases, Bomb Targets & 'Harass' Enemies**

*By Parth Satam*

Recently, Iran unveiled an underground military facility amid rising military threats from its regional adversaries. Many mocked the country's aging Phantom jets that were procured from the US and publicized widely on social media.

However, the Islamic Republic of Iran Air Force's (IRIAF) F-4E Phantom II jets can still strike a blow by taking off from the secret underground runways, conduct swift attacks with the right combination of missiles and then speed back to base before coming under fire.

The 1970s Cold War vintage jets, hungry for authentic spares and a technical nightmare to maintain as the country has been under American sanctions since the 1970s Islamic Revolution, also operate other US jets like the F-5 Tiger II, F-14 Tomcat, and Russian-origin MiG-29, Su-24 Fencer and the Su-22 Fitter.

There are about 60 F-4s with the IRIAF as their frontline fighter, acquired when the monarch Mohammad Reza Shah Pahlavi was in power until he was deposed in 1979, rising led by Ayatollah Ruhollah Khomeini.

The two-seat, twin-engine, all-weather interceptor rose to fame in the Vietnam war, where it was used as a fighter bomber.

By March, IRIAF is likely to acquire nearly two dozen Russian Su-35S Flanker E fighters, giving its air dominance and ground attack capabilities a massive boost against prime rival Israel. Even the Israeli air force extensively used its F-4s in the Arab-Israeli wars of 1967 and 1972, while Iran used its F-4s in the eight-year Iran-Iraq war.

### **US Sanctions Hits Maintenance, Spare Parts**

The F-4s have been maintained with indigenous upgrades like glide weapons, anti-ship missiles, and reportedly some improved electronic components and avionics that, although not as sophisticated as Western or Russian systems, have managed to keep the aircraft from becoming completely obsolete.

Previous photos have shown US-made Mk-82 dumb bombs, AGM-65 Maverick air-to-ground missiles, and Paveway II laser-guided bombs.

It is estimated that to prevent wear and tear due to constant use and training sorties, Iran flies them very sparingly and might use them in combination with its regional proxies around Israel in Syria and Lebanon in a way that makes up for its weak airpower.

### **Combined Conventional & Unconventional War**

A Defense Intelligence Agency (DIA) report said that the IRIAF's possible missions are centered around "air intercept, ground attack, and close air support" with some aircraft "capable of mid-air refueling." "The IRIAF's F-4 serves as Iran's primary attack aircraft," the DIA said, calling it an "aging decades-old aircraft."

"To supplement its long-range strike capabilities, Iran could also attempt to use its regional proxies and limited air strike capability to attack an adversary's critical infrastructure. Iran's F-4 Phantoms could (be used) to attack its regional adversaries. However, these older platforms would be more vulnerable to air defenses than modern combat aircraft," the DIA report added.

Iran has ties to many militias and banned organizations like Hezbollah in Lebanon, the Shia-dominated Popular Mobilization Forces (PMF) in Iraq, and the Houthis (Ansar Allah) in Yemen.

The F-4s key strength is its speed, which at Mach 2.5, can choose to speed away from adversary aircraft. Between 1959 and 1962, the F-4 Phantom II broke 16 records until the F-15 Eagle arrived on the scene.

As of 2021, 63 years after its first flight, the F-4 is also operated by South Korea, Greece, and Turkey. The aircraft has most recently been in service against the Islamic State.

Iran has adopted a fortress doctrine, using an extensive network of hidden underground air and military bases to protect itself from Israeli and US strikes. The change to an offensive posture took shape over the last ten years following the civil war in Syria, the rise of ISIS, and the hardline confrontation by Israel.

This is reflected in Iranian Armed Forces Chief of Staff Maj Gen Mohammad Bagheri's statement when he was quoted on the sidelines of the unveiling of the Oghab-44 base. "Any attack on Iran from our enemies, including Israel, will see a response from our many air force bases, including Eagle 44," he said.

The bases allow the planes to remain completely undetected from prying US and Israeli satellites and take off without warning, hitting ground and naval targets. This tactical advantage, in

complete surprise, can be utilized by technologically inferior militaries like Iran, using third-generation fighters to achieve many strategic goals.

In June 2022, Iran revealed another well-developed underground facility called the Strategic UAV Base 313, believed to be located somewhere in the Zagros mountain range along the Persian Gulf coastline.

The news documentary showed Ababil-5 and Kaman-22 drones, Fotros surveillance and combat drones, Mohajer-6 S drones armed with Almas (diamond) anti-tank missiles, Karrar, Omid, and Arash class suicide drones at the base.

<https://eurasianimes.com/iran-flaunts-american-phantom-jets-that-can-take-off-from/>

## Science & Technology News



*Wed, 08 Feb 2023*

### **ISRO and Indian Navy Conduct Key Trials for Gaganyaan Mission**

The Indian Space Research Organisation (ISRO), along with the Indian Navy, has conducted an important trial for the Gaganyaan, human space flight mission. On Tuesday, they carried out initial recovery trials of the Crew Module in the Navy's Water Survival Test Facility (WSTF) in Kochi.

“The trials were part of the preparation for crew module recovery operations for the Gaganyaan mission that will be carried out in Indian waters with the participation of Indian Government agencies, the overall recovery operations being led by the Indian Navy,” the space agency said.

A Crew Module Recovery Model (CMRM), that simulates the mass, center of gravity, outer dimensions, and externals of the actual Crew Module at touchdown, was used for the trials. The sequence of operations required for the recovery of the Crew Module were carried out as part of the trials.

According to ISRO, as the safe recovery of the crew is the final step to be accomplished for any successful human spaceflight, it is of paramount importance and it has to be carried out with the minimum lapse of time.

“Hence the recovery procedures for various scenarios need to be extensively practiced by carrying out a large number of trials. The Standard Operating Procedures (SoP) for recovery of Crew and Crew Module need to be finalised. The recovery trials will be initially carried out in a closed pool followed by trials in a harbor and in the open sea,” said ISRO

ISRO's recent operation form the initial recovery trials of Crew Module in a closed pool. Different phases of recovery trials starting with the recovery of the Crew Module to the flight crew training are planned at WSTF.

WSTF, Kochi, is a state-of-the-art facility of the Indian Navy that provides realistic training of aircrew for escape from a ditched aircraft under varied simulated conditions and crash scenarios. WSTF simulates different sea state conditions, environmental conditions, and day/night conditions.

“These trials assist in validating the SoP, and training recovery teams as well as the flight crew. They provide valuable inputs for the utilization of recovery accessories. The feedback from the recovery team/trainers helps improve the recovery operations SoP, design various recovery accessories, and finalize the training plan,” ISRO added.

The Gaganyaan project envisages demonstration of human spaceflight capability by launching a crew of three members to an orbit of 400 km for a three day mission and bringing them back safely to earth, by landing in Indian sea waters.

The first trial (uncrewed flight) for Gaganyaan is being planned by the end of 2023 or early 2024. This will be followed by sending Vyom Mitra, a humanoid and then with the crew onboard.

<https://www.thehindu.com/sci-tech/science/isro-and-indian-navy-conduct-key-trials-for-gaganyaan-mission/article66485991.ece/amp/>



*Wed, 08 Feb 2023*

## **ISRO Schedules SSLV-D2 Launch on Friday**

The Indian Space Research Organisation will undertake the second developmental flight of Small Satellite Launch Vehicle (SSLV) on Friday from Sriharikota, the space agency announced on Wednesday.

The SSLV-D2 will soar into the skies at 9:18 am from the first launch pad at the Satish Dhawan Space Centre and attempt to put three satellites into a 450 km circular orbit during its 15 minute flight, the Indian Space Research Organisation (ISRO) said.

The three satellites are ISRO's EOS-07, US-based firm Antaris' Janus-1 and Chennai-based space start up SpaceKidz's AzaadiSAT-2.

The first test flight of SSLV had ended in partial failure on August 9 last, as the rocket failed to inject its satellite payload in their intended orbits.

SSLV caters to the launch of up to 500 kg satellites to low earth orbits on 'launch-on-demand' basis. It provides low-cost access to space, offers low turn-around time and flexibility in accommodating multiple satellites, and demands minimal launch infrastructure. It is configured with three solid propulsion stages and a velocity terminal module. It is a 34 m tall, 2 m diameter vehicle having a lift-off mass of 120 tonnes.

EOS-07 is a 156.3 kg satellite which has been designed, developed and realised by ISRO. New experiments include mm-Wave Humidity Sounder and Spectrum Monitoring Payload. While, Janus-1, a 10.2 kg satellite, belongs to Antaris, USA. A 8.7 kg satellite, AzaadiSAT-2, is a combined effort of about 750 girl students across India guided by Space Kidz India, Chennai.

An investigation into the failure of SSLV-D1 by ISRO revealed that the mission failed after the upper stage of the launch vehicle injected the satellite into a highly elliptical unstable orbit due to a shortfall in velocity.

It also revealed that there was a vibration disturbance for a short duration on the Equipment Bay (EB) deck during the second stage separation. The vibration affected the Inertial Navigation System (INS), resulting in declaring the sensors faulty by the logic in the Fault Detection & Isolation (FDI) software.

The failure detection logic identified a degraded accelerometer and isolated it for improved mission performance.

During the second stage separation, all six accelerometers experienced measurement saturation due to high vibration levels for a short duration. This malfunction initiated a salvage mode with the purpose of saving the mission, but it could not inject the satellite into a safe orbit.

<https://www.moneycontrol.com/news/india/isro-schedules-sslv-d2-launch-on-friday-10035591.html>

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