

# समाचार पत्रों से चयित अंश Newspapers Clippings

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## MoD clears Rs. 38,000cr order for 83 LCAs

*The ministry said the LCA “is going to be the backbone of the Air Force in the future”, with officials confident that the LCA Mk II will see an order book of at least 200 jets. The order has given a boost to HAL, whose order book will cross Rs. 1 lakh crore once the contract is inked with the IAF*

*By Manu Pubby*

New Delhi: The defence ministry has given the go-ahead for a Rs. 38,000 cr acquisition of next-generation Light Combat Aircraft that have been developed indigenously, with the production likely to see private sector manufacturing components of the jets.

The defence minister Rajnath Singh-led Defence Acquisition Council (DAC) has approved the contract and price for acquiring 83 of the aircraft. The approval of the Cabinet Committee on Security (CCS) is expected shortly.

The fighters will be manufactured by Hindustan Aeronautics Limited and will add to the 40 that are already on order. The first squadron of fighters is already in place. The new jets will be significantly more capable than the first batch ordered and will have an enhanced radar, an electronic countermeasures suite and the capability to launch a variety of beyond-visual-range weapons.

The ministry said the LCA “is going to be the backbone of the Air Force in the future”, with officials confident that the LCA Mk II will see an order book of at least 200 jets. The order has given a boost to HAL, whose order book will cross Rs. 1 lakh crore once the contract is inked with the IAF.

“This procurement will be a major boost to 'Make in India' as the aircraft is indigenously designed, developed and manufactured with participation of local vendors apart from HAL,” the defence ministry has said.

The HAL plans to outsource a big part of the estimated Rs. 38,000 cr contract to the private sector as it wants to double its annual production capability to meet the requirements of the air force, as well as the upcoming order for 200 more jets.

The first of the upgraded fighters will be delivered within three years and a significant amount of manufacturing will go to private sector companies including Larsen and Toubro, Dynamics, VEM Technologies and Alpha Design, HAL chairman R Madhavan told ET.

The outsourcing of at least 35% of the work order will come as HAL puts in place infrastructure to double its capacity for producing 16 of the fighter jets every year. The two biggest enhancements the new version of the jets will have is the integration of an Active Electronically Scanned Array (AESA) radar and an Electronic Warfare Suite.

Orders have already been placed with an Israeli manufacturer for the AESA radar but in the future, the ingenious radar (named Uttam) that is currently under development will be equipped. The fighters will be configured to fire a range of beyond visual range air-to-air missiles of Russian and Israeli origin but the game changer will be the next generation home developed Astra missile.

With the legendary MiG 21 fleet expected to be grounded within four years, the LCA will replace the Russian origin jets at forward airbases.

*(This story has not been edited by economictimes.com and is auto-generated from a syndicated feed we subscribe to.)*

<https://economictimes.indiatimes.com/news/defence/mod-clears-38k-cr-order-for-83-lcas/articleshow/74699637.cms>

## Defence council finalises proposal for 83 Tejas jets

*HAL is expected to deliver the first LCA Mk-1A to the IAF three years after the deal is signed*

*By Sushant Singh, Krishn Kaushik*

New Delhi: The Defence Acquisition Council (DAC), chaired by Defence Minister Rajnath Singh, has paved the way for procurement of 83 Tejas Mk-1A Light Combat Aircraft (LCA) from Hindustan Aeronautics Limited (HAL), Bengaluru, by finalising contractual and other issues related to the biggest deal for the indigenous combat aviation industry — charting a path for the Indian Air Force (IAF) of the future. The proposal now awaits the Cabinet's nod.

HAL is expected to deliver the first LCA Mk-1A to the IAF three years after the deal is signed. Production will start by 2023 and a full squadron delivered by 2025 if a contract is signed soon. The delivery of 83 aircraft is expected to be complete by 2029.

The order is crucial for maintaining the strength of fighter squadrons in the IAF which is down to 30 against an authorised 42 squadrons. Even if these Tejas Mk-1A supplies happen on time, IAF will be left with an alarmingly low 26 squadrons by 2021, rising to 30 by 2027. The IAF last had 42 fighter squadrons in 2002 — each squadron generally has 18 aircraft.

The proposal, worth Rs 38,000 crore, will now be placed for consideration of the Cabinet Committee on Security (CCS). The DAC had approved the procurement of 83 Tejas jets in November 2016, and one year later, the Indian Air Force had also issued a single-vendor tender to HAL in December 2017.

It had been pending for over two years over cost negotiations, with HAL initially asking for around Rs 50,000 crore for the 83 indigenous fighters.

IAF had objected to the high price cited by HAL, arguing that it was asking for Rs 463 crore for each Tejas Mk-1A whereas it supplies the more modern Russian Sukhoi fighter jet at Rs 415 crore per aircraft. The price was also around Rs 100 crore more than the earlier version of Tejas, leading to prolonged and often acrimonious negotiations between IAF and HAL.

The order for 83 Tejas Mk-1A is seen to be critical for the HAL to prevent a complete halt of production at its facilities. As per current contracts, HAL's order books will run out beyond 2021-22 and this order will allow the public sector facility to continue its production.

With the induction of 83 aircraft, IAF will have a total of 123 Tejas fighter jets, making up six of its squadrons.

The IAF had placed an order for 20 Tejas fighters in the Initial Operation Clearance (IOC) configuration on HAL, 16 of which have been inducted in the No. 45 squadron of the IAF, starting July 2016. The next order placed by the IAF is for 20 fighters in Final Operation Clearance (FOC), which underwent test flying on Tuesday for the first time in Bengaluru.

This procurement is seen as a major boost to 'Make in India' as the aircraft is indigenously designed, developed and manufactured with participation of several local vendors apart from HAL.

The Tejas indigenous fighter project was first conceived in 1984, benchmarked against the Mirage-2000, with a view to replace IAF's ageing Mig21 fleet. The order for first 20 Tejas Mark1 (IOC) was placed in 2006, and the jet inducted in the IAF in 2016.

<https://indianexpress.com/article/india/defence-council-finalises-proposal-for-83-tejas-jets-6320958/>

## वायुसेना को मिलेंगे 83 आधुनिक तेजस विमान, राजनाथ सिंह के नेतृत्व में डीएसी ने दी मंजूरी

**रक्षा मंत्रालय ने भारतीय वायुसेना के लिए 83 घातक तेजस युद्धक विमान हासिल करने को मंजूरी दे दी है। डीएसी इन विमानों को हासिल करने के लिए 1300 करोड़ रुपये मंजूर किए हैं।**

नई दिल्ली: 'मेक इन इंडिया' प्रोजेक्ट के तहत रक्षा मंत्रालय ने भारतीय वायुसेना के लिए 83 घातक तेजस युद्धक विमान हासिल करने को मंजूरी दे दी है। रक्षा मंत्री राजनाथ सिंह के नेतृत्व में रक्षा अधिग्रहण परिषद (डीएसी) ने यह फैसला लिया है। अब यह प्रस्ताव मंजूरी के लिए सुरक्षा मामलों की कैबिनेट कमेटी के सामने रखा जाएगा। डीएसी ने घातक रक्षा उपकरण हासिल करने के लिए 1300 करोड़ रुपये मंजूर किए हैं। यह रकम वायुसेना के हॉक एमके-32 विमानों के ट्विन डोम स्टीम्यूलेटर और एरियल फ्यूज खरीदने में खर्च की जाएगी।

सूत्रों का कहना है कि हिंदुस्तान एयरोनाटिक्स लिमिटेड (एचएएल) के बनाए अत्याधुनिक एमके1ए वर्जन के 83 तेजस विमानों को वायुसेना के लिए निर्मित किया जाएगा। इससे पहले एचएएल को शुरुआती कनफिगरेशन वाले 40 तेजस विमान देने का आर्डर मिला था। रक्षा मंत्रालयकी विज्ञप्ति के अनुसार राजनाथ सिंह की अध्यक्षता में हुई डीएसी की पहली बैठक में रक्षा विभाग (डीओडी) और सैन्य मामलों के विभाग (डीएमए) के दायित्वों को अलग-अलग किए जाने पर सहमति दी गई है।

इससे सेना के कामकाज में बेहतर तालमेल बनेगा और अधिग्रहण विंग को तेजी से विमान मिलेंगे। इस कदम से रक्षा उपकरणों और हथियारों के सौदों में कीमतों को लेकर अधिक पारदर्शिता आएगी और समयबद्ध तरीके से समझौते होंगे। तेजस के अत्याधुनिक वर्जन एमके1ए के 83 विमान के भारत में बनने से 'मेक इन इंडिया' की मुहिम को खासा बढ़ावा मिलेगा। रक्षा मंत्रालय के अनुसार 1300 करोड़ रुपये में घातक रक्षा उपकरण हासिल होंगे।

<https://www.jagran.com/news/national-central-government-clears-procurement-of-83-tejas-jets-for-iaf-20122193.html>

## hindustantimes

Thu, 19 March 2020

### Tejas Mark II to have ability to conduct Balakot-like operations

*The Mark II, fitted with heavier GE 414 engine, will roll out  
in 2022, take to the skies in 2023 and join IAF by 2026*

*By Shishir Gupta*

New Delhi: The indigenous Tejas Mark II fighter jet will have the capacity to conduct operations such as the one the Indian Air Force undertook in Balakot, with beyond-visual-range missiles with a greater reach and virtually jam-proof AESA radars in order to be suitable replacements for the Indian

Air Force (IAF)'s aging Mirage 2000 fighters, according to the agency overseeing the development the aircraft. The Mark II, fitted with heavier GE 414 engine, will roll out in 2022, take to the skies in 2023 and join IAF by 2026.

Satisfied with performance of Tejas MK I in its full operational configuration on Tuesday, Girish Deodhare, Program Director (Combat Aircraft), Aeronautical Development Agency said that the MK II will have double the range of its predecessor and fitted with Astra II BVR air-to-air missiles with a range of at least 150 km. "While Tejas MK I is for combat air patrol within the Indian territory, MK II will have the capacity to conduct Balakot-like surgical strikes in enemy territory as it will carry heavy standoff weapons like Crystal Maze and Spice missiles," added Deodhare. On February 26, 2019, IAF's Mirage 2000 entered Pakistani territory to target a Jaish-e-Mohammed (JeM) terror training camp at Jabba Top in Balakot, Manshera in retaliation for the terror group's suicide attack on a CRPF convoy in Pulwama, Jammu & Kashmir.



While work on MK II is proceeding apace, ADA, in consultation with IAF will also freeze the design of its twin-engine advanced medium combat aircraft (AMCA) in the next three months. IAF, last November gave a written commitment to DRDO that it would buy the fifth-generation AMCA to strengthen its strike capabilities. AMCA is expected to roll out in 2024 and take to the skies the following year. The Tejas MK II is a 4.5 generation aircraft.

According to Deodhare, Hindustan Aeronautics Limited (HAL) will produce 16 FOC 9(Final Operational Clearance) Tejas plus eight trainers before the reverse integration of IAF's Tejas in initial configuration is taken up. "HAL has done a commendable job to produce a FOC Tejas within a year of the design being frozen. This will help up in faster development of MK II as this only involves in upscaling of the existing platform with superior armaments, radar and avionics," he said.

For the MK II, ADA in collaboration with its parent DRDO is developing the indigenous active electronically scanned array (AESA) radar, which is not only difficult to detect but also has high resistance to jamming by the enemy during engagement. As of now, the Tejas MK I platform has been integrated with Israeli Derby BVR missiles with enhanced range so that enemy planes are picked up and targeted even as they cross the Indian border.

<https://www.hindustantimes.com/india-news/tejas-mark-ii-to-have-ability-to-conduct-balakot-like-ops/story-kMUDWj7o7GkrK2WTsAsGEM.html>



*Thu, 19 March 2020*

## **HAPP coming up with new project**

Tiruchirapalli: The Heavy Alloy Penetrator Project (HAPP), a defence establishment here, is poised to start a new FSAPDS (Fin Stabilised Armour Piercing Discarding Sabot) ammunition hardware project code-named 'mango.'

The infrastructure for the new project is being created on the premises of HAPP that has so far manufactured ammunition hardware 120mm FSAPDS for Arjun tank among other products.

Currently, the 125mm FSAPDS meant for firing with Depth of Penetration of 515 to 550 mm through T-72A and T-90S Bhishma tank barrels is undergoing trials. The product was developed through in-house Research and Development activities, Yadvendra Somra, General Manager, HAPP,

told media persons on the sidelines of the photo exhibition conducted on Wednesday as part of Ordnance Factories' Day celebration.

As for the FSAPDS 'mango' project, the new ammunition hardware with additional lethal features will be manufactured from the next financial year, Mr. Somra said.

A new indent has been placed by the Indian Navy for manufacture of 800 units of RGB (Rocket Guided Bomb) 60 anti-submarine rockets per year. The RGB 60 with extended range was also developed in-house in collaboration with the Defence Research and Development Organisation (DRDO) laboratory at Pune. The production will commence in four months, Mr. Somra said.

The exhibition, organised as a low-key affair in view of the COVID 19 scare, was designed to encourage students to pursue career in armed forces, Additional General Manager S.A.N. Murthy said. The exhibition served as an opportunity for people in the surroundings to know about the products manufactured in the establishment, Mr. Murthy said.

<https://www.thehindu.com/news/cities/Tiruchirapalli/happ-coming-up-with-new-project/article31101187.ece>

## THE ECONOMIC TIMES

Thu, 19 March 2020

### **OFB exports its newly developed 52-calibre barrels to Bofors**

*The OFB chairman said that it has exported two 52-calibre barrels to Swedish arms manufacturer Bofors AB, from which it had imported 155 mm howitzer guns in the mid-80s*

The Ordnance Factory Board (OFB), which is celebrating its 219th foundation day on Wednesday, has exported its newly developed 52-calibre barrel for 155 mm artillery guns to Bofors Test Center, its chairman Hari Mohan said.

He said that OFB has exported two 52-calibre barrels to Swedish arms manufacturer Bofors AB, from which it had imported 155 mm howitzer guns in the mid-80s.

"We have made a prototype which is truck-chassis mounted," Mohan told newsmen here.

In the last 14-15 years, the OFB has done "immense progress" in the field of high-calibre barrels, be it for tanks, medium and heavy artillery guns, and the barrel of Dhanush artillery gun has been indigenously developed, he said.

"Now we are embarking upon a barrel further increasing it to 52-calibre. The range of 155 mm Dhanush gun is 38 km. The Bofors gun barrel is 39-calibre, while that of Dhanush is 45-calibre," he said.

Mohan said the OFB has already designed and manufactured 52-calibre barrel, an important component of a full-fledged gun, and mounted one on a truck.

"We have exported these to Bofors and 52-calibre barrels have been taken by its test centre, which is using these for validation of 155 mm ammunitions being developed by global OEMs," he said.

More than 150 rounds of shells have been fired from these 52-calibre barrels, he said.

"The barrel is behaving better than expected and the Bofors Test Center is extremely happy," he said.

Apart from the barrel, Bofors is also taking the breech mechanism and muzzle brakes and all the three are being used, he said on Tuesday.

"We indigenously developed the technology for 155mm/52-calibre barrels and exported these to Bofors Test Center," OFB chairman said.



He said the OFB, which had initially handed over six Dhanush artillery guns to the Indian Army, will, in a few weeks, supply another six such guns.

<https://economictimes.indiatimes.com/news/defence/ofb-exports-its-newly-developed-52-calibre-barrels-to-bofors/articleshow/74696331.cms>



Thu, 19 March 2020

## Don't forget that India's aircraft carrier Vikrant served in battle against Pakistan

*How did that go down?*

*By Sebastien Roblin*

- *key point: Carriers have fought many times in many wars around the world. Here is India's story and experience with using an aircraft carrier.*

In the wake of the commissioning of China's second aircraft carrier, it's worth remembering that the People's Republic of China is actually only the third Asian state to operate its own aircraft carrier. The first was Japan, which after a long hiatus following its World War II misadventures, is only just getting back into carrier operations.

Meanwhile, not only has the Indian Navy operated the powerful vessels for nearly sixty years, it also used them effectively in a map-changing war in 1971.

This first appeared in 2019 and is being reposted due to reader interest.

Back in 1957, New Delhi purchased the British Royal Navy's *Hercules*, a Hermes-class light fleet carrier that was 75 percent complete when her construction was frozen in May 1946.

*Hercules* was towed to Belfast, Northern Ireland, where shipbuilder Harland and Wolff completed her in a configuration modernized for jet fighter operations with an angled flight deck and steam catapults. She was finally commissioned as the *Vikrant* ("Courageous") in Indian Navy service on March 4, 1961.

As a light carrier, *Vikrant* was considerably smaller compared to her contemporaries, measuring only 210 meters long and displacing 17,600 tons. But her limited deck space was fine, as the Indian Navy was also busy building its naval air arm from scratch, procuring the first of 66 Hawker Sea Hawk jet fighters—mostly second-hand British and German aircraft—as well as 17 tubby piston-engine Breguet Alize anti-submarine aircraft.

After receiving training in the UK, an Indian Sea Hawk pilot performed the service's first carrier landing on May 18, 1961. However, *Vikrant* subsequently sat out a 1965 conflict with Pakistan as she was undergoing a refit.

### **Conflict in the Bay of Bengal**

By 1971, war clouds were again on the horizon between India and Pakistan due to Islamabad's brutal repression of East Pakistan. This prompted millions of refugees to flee into India, prompting New Delhi to begin supporting insurgent supporting independence of the region from West Pakistan.

By late 1971, the government of Indra Ghandi was set on supporting Bengali revolutionaries seeking to eject the Pakistani military entirely.

Though only three of *Vikrant*'s four boilers were functioning, limiting her maximum speed to just 17 knots, naval command insisted she must participate in the coming conflict, lest a second no-show deal a blow to the Navy's morale.

The *Vikrant*'s role was to maintain a naval blockade of East Pakistan—preventing the Pakistani Army from dispatching reinforcements or evacuating by sea. Once the ground campaign began—a lightning campaign in which helicopters and amphibious tanks were used to leap-frog across Bangladesh's many rivers—the *Vikrant*'s air wing would focus on hammering Pakistani naval assets and port facilities.

The air wing's main combat strength came from INAS 300 "White Tiger" squadron, equipped with eighteen Sea Hawk fighter bombers. With a maximum speed of 600 miles per hour, these would have been outclassed had they encountered the handful of F-86 Sabre's the Pakistani Air Force had deployed to East Pakistan, but their true potential lay as stable ground-attack platforms armed with four 20-millimeter Hispano cannons, and up to four 500-pound bombs or sixteen 5" rockets.

The lumpy three-ma Alize patrol planes of INAS 310 "Cobra" Squadron were foremost designed to search for submarines using air-dropped sonobuoys and surface-search radar (to catch subs that were surfaced or snorkeling to recharge batteries) and then sink them with depth charges and homing torpedoes. However, they also could be adapted to a more conventional attack role carrying 68-millimeter rockets and bombs.

The Alizes could fly long distances with their range of 1,000 miles, but would take a while doing so: though their maximum speed was 290 miles per hour, they frequently cruised at only half that. Their radars proved useful for maintaining the blockade by monitoring shipping traffic in lengthy patrols.

A third unit, INAS 321 "Angels" Squadron, operated Alouette III helicopters in the search-and-rescue and resupply role.

### **Ghazi Hunts Vikrant; Vikrant Hunts Ghazi**

The Pakistani Navy concluded a lack of facilities and geographic vulnerability made it impractical to deploy major warships to East Pakistan, so its presence there was limited to squadron of four gunboats as well as smaller armed boats capable of navigating Bangladesh's many rivers. Thus, the major naval battles of Indo-Pakistani war were fought on India's western flank.

However, the Pakistani Navy had one joker up its sleeve: the submarine *PNS Ghazi*, a former U.S. Tench-class submarine from World War II. Pakistan hoped that a lucky torpedo or two from *Ghazi* might sink *Vikrant*, turning its losing hand in the Bay of Bengal into a winning one—or at least constrain *Vikrant*'s operations.

The Indian Navy was also aware of *Ghazi*'s presence in the sector and made sinking her a priority.

The website *Mission Vikrant 71* collects numerous fascinating anecdotes that convey the experience of the sailors and aviators onboard the *Vikrant*—including one account by pilot Richard Clarke describing Indian anti-submarine operations.

On the second day of the war on December 4, the *Vikrant* was cruising off the Andaman islands when her lookouts reported spotting a periscope. Clarke scrambled his Alize into the sky loaded with depth charges and headed towards a "distinct ripple." He released the depth charges on target and was received by jubilant crew upon landing on deck.

But Clarke recalled that upon being summoned for debriefing, "I very sheepishly had to tell the Fleet Commander that there in fact there was no submarine in the crystal clear blue waters below the ripple when I flew over it. But I realized this only seconds before the depth charges exploded"

In fact, on December 3 *Ghazi* failed to locate *Vikrant* and instead moved to deploy mines at the entrance of Visakhapatnam port, the site of the Indian naval HQ. Around midnight on December 3-4 mysterious circumstances caused the submarine to sink with the loss of all 92 aboard.

Whether this was a result of depth charges launched by the Indian destroyer *Rajput*, a collision with the sea floor while attempting to dodge those depth charges, or due to a mishap during minelaying remains controversial.



Either way, the sinking left *Vikrant* with a free hand. Starting December 4, her Sea Hawks and Alizes flew nearly 300 sorties hammering Chittagong, Cox's Bazar and Khulna, sinking numerous small ships and setting fuel stores on fire. One tanker in Chittagong was blasted into three segments.

The carrier also used electronic warfare to locate Pakistani gun boats and dispatch air strikes to sink them.

The carrier-based warplanes encountered heavy anti-aircraft fire, and often returned pocked with shrapnel and bullet holes—though none were lost in the fourteen-day war.

As the Indian Navy began dispatching small amphibious landing forces to cut off retreating Pakistani troops, it also needed intelligence to determine appropriate landing zones. Therefore, Alizes also flew low and slow photo reconnaissance missions with a crewmember using a hand operated F24 camera to obtain the necessary information to plan the landing operations

Cut off from reinforcements, with riverine assets largely sunk from the air (and even one occasion, by amphibious tanks), and unable to evacuate by sea, Pakistani army forces in East Pakistan surrendered on December 16, resulting in the creation of present-day Bangladesh.

Afterwards, according to 300 squadron officer Gurnham Singh, when one of the carrier's Alouette helicopters was dispatched ashore on a resupply mission—pilots from 300 squadron requested the chopper crew return with some war booty: spicy Chittagong pickles. This wish was granted when the chopper returned bearing 30 kilos of the spicy pickles plus paratha flat breads.

To this day, the *Vikrant*'s combat operations in the Bay of Bengal remain the only carrier-based combat operations undertaken by an Asian state since World War II.

<https://nationalinterest.org/blog/buzz/dont-forget-india%E2%80%99s-aircraft-carrier-vikrant-served-battle-against-pakistan-134252>



*Thu, 19 March 2020*

## Sanctions are preventing India from buying a suite of new Russian weapons

*Unintended consequences?*

*By Sebastien Roblin*

- **Key point:** *The Indian Air Force needs new gear.*

As we enter the 2020s, the Indian Air Force will continue to shrink in size to twenty-six out of a required forty-two squadrons due to retirements of aging Cold War Russian MiG-21 and MiG-27 jets.

While the IAF is mulling purchases of additional advanced Western jet fighter like the Dassault Rafale, Saab JAS 39 Gripen, the Lockheed F-21 or Boeing Super Hornet, it's meanwhile turning to its long-running relationship with Moscow to patch up the growing gap in its air defenses—even if that means it risks running afoul of U.S. CAATSA sanctions imposed on countries that import Russian weapons.

While a companion article looks at major new arms purchases by the Indian Army and Navy from Russia, this piece will survey three different buys the Indian Air Force is making entering the 2020s to stem the bleeding away of its combat strength.

### **S-400 Surface-to-Air Missile Systems**

India is proceeding with the purchase of five regiments of S-400 surface-to-air missiles in a \$5.43 billion, paid in Euros in order to bypass CAATSA sanctions. In 2019, New Delhi made a down

payment worth \$800 million, and initial deliveries will arrive in October 2020, with the order completed between in 2023 and 2025.

This come even after the U.S. kicked Turkey out of the F-35 program in the summer of 2019 for procuring S-400s from Russia—and has voiced its objections to the new deal. But real U.S. sanctions on India as building a closer defense relationship with New Delhi remains a priority in Washington.

India was more interested in the S-400 than the U.S. Patriot or THAAD systems because it can threaten aircraft up to 250 miles away due to its powerful radar radars and missiles designed to engage different targets. By contrast, the U.S. systems are effective across a smaller radius.

Thus, the S-400 will free up IAF fighters from performing routine air defense patrols—especially following a Pakistani incursion into Indian airspace that ended with the loss of an Indian fighter.

U.S. officials have refused to back down from threats to level CAATSA sanctions on India for the deal. But when the same official tells The Diplomat that there is “no blanket application” of CAATSA sanctions, one can sense the threat may have no teeth due to Washington’s eagerness to court Indian support in strategic competition with China.

Time will tell if that changes—particularly if Modi’s controversial policies threaten to cause India to lose support in U.S. Congress.

### **Su-30MKI Flankers**

Arguably the chief striking power of the Indian Air Forces comes from its force of over 250 twin-engine Su-30MKI Flanker jets, tailored to support Indian weapons and avionics. (India’s new Rafale jets are more advanced, but much fewer in number.)

India’s Flankers are fast, extremely maneuverable due to their thrust-vector engines, and can carry formidable sensors and weapons, including the Brahmos supersonic cruise missile which can threaten both maritime and land targets from standoff distances.

However, Indian Su-30s have also suffered a fair number of technical problems and accidents in Indian service. Thus a new order to license-build twelve more Su-30MKIs is not about expanding the fleet, but replacing losses from accidents to maintain a total force of 272 aircraft.

### **MiG-29UPG Fulcrum**

India also operates three squadrons of lighter-weight MiG-29UPG Fulcrum tactical fighters, upgraded with additional fuel stores, new radars, and modernized avionics and air-to-ground capabilities. The MiG-29 is highly agile but hasn’t been as successful abroad as the Flanker.

Nonetheless, India is following a lead on a Fulcrum bargain: twenty-one Soviet-era MiG-29 airframes that reportedly were never flown. India has reportedly verified the condition of the MiG-29, a wise move given a prior failed attempt to sell dilapidated MiG-29s to Algeria.

In a reportedly \$847 million deal in order to fulfill an “urgent” operational requirement, MiG will upgrade the jets to the MiG-29 UPG standard and deliver them to India for \$847 million over the next 18 months.

Though the MiG-29UPG is longer exactly a cutting-edge aircraft, the offer around \$40 million per aircraft is about half the price of a new 4.5-generation jet, and thus represents a relatively cheap way for the IAF to quickly field an additional fighter squadron.

After all, twenty-six squadrons does not compare that well with to Pakistan’s twenty squadrons given the disparity between the two country’s populations—let alone China’s 1,700 combat aircraft.

<https://nationalinterest.org/blog/buzz/sanctions-are-preventing-india-buying-suite-new-russian-weapons-133982>