NewsMail Today facbook twitter googlepluse Indian Army may acquire 39 American Apache choppers to enhance fire power at Pakistan, China borders Highly placed sources in the Army told Mail Today that the combat helicopters for its aviation wing will enhance the firepower of its strike forces along the borders with China and Pakistan.

Ajit Kumar Dubey | Posted by Ashna Kumar New Delhi, May 20, 2017 | UPDATED 06:06 IST A +A -

American Apache chopper

HIGHLIGHTS

1Army pushing for proposal to buy 39 Apache attack helicopters from the US. 239 choppers to be part of Army Strike Corps along Pakistan, China borders. 3Air Force has signed contract for 22 Apache choppers to be delivered by 2019. The Indian Army is planning to pitch for acquiring a fleet of lethal Apache attack helicopters in a key meeting with Defence Minister Arun Jailtley scheduled this weekend. Highly placed sources in the Army told Mail Today that the combat helicopters for its aviation wing will enhance the firepower of its strike forces along the borders with China and Pakistan.

Aggressive air support is crucial for advancing ground troops in a short-term strike. "The Army wants the latest version of the American Apache 64D attack choppers from the US through the Foreign Military Sales case for its aviation arm," the sources said. The Army seeks to buy 39 units at a cost of more than Rs 12,000 crore. If the procurement gets the ministry's approval, it will make the Army one of the biggest operators of these choppers in the country; the Air Force recently finalised a contract for 22 of these flying machines.

The Army has been in a bitter tug of war with the Air Force over the control of attack helicopters for it feels that its own personnel flying the choppers would be in a better position to help ground forces during a conflict because they understand land warfare better than the Air Force personnel.

#### IAF DOES NOT WANT TO SHARE

"We had requested the IAF to give the 22 Apaches to us but they did not agree. Even the proposition of sharing 50 per cent of these assets with us was not agreed upon by them," an Army officer said.

About the plan to acquire 39 choppers, the sources said the choppers would be divided into three squadrons of 10 each and would be deployed along both the China and Pakistan with the Strike Corps. The Army is in the process of modernising its chopper fleet as it is leading the acquisition process for procuring 200 Kamov light choppers for itself and the Air Force to replace its fleet of vintage Cheetah and Chetak helicopters for operations in high-altitude military bases.

The Army has already placed orders for a number of indigenous attack helicopter variants which will include around 60 Rudra helicopters which are weaponised versions of the HAL-made ALH Dhruv choppers. "We would also be the biggest operators of the indigenously developed Light Combat Helicopter (LCH) being developed by the Hindustan Aeronautics Limited as the 97 of them would be

deployed with different Corps headquarters," the sources said.

Based on a study by a recently retired Director General of Military Operations (DGMO), it was felt that the force required at least three squadrons of these advanced Apache helicopters with the strike corps with three choppers each with every squadron as reserve. The Army operates a larger fleet of light utility choppers than the Air Force and has been asking for control over medium lift and attack choppers since the 1990s.

In 2012, then National Security Advisor Shiv Shankar Menon decided that all future acquisitions of attack choppers would be for the ground force. However, the IAF refused to part with the Apaches saying it had started the acquisition process before 2012. The IAF already operates two squadrons of the Russian-origin Mi-25 and Mi-35 attack helicopters which are deployed close to the frontlines on the Pakistan border and frequently take part in war games with the Army.

Boeing's sourcing from India has more than doubled since 'Make in India', says **Dennis Swanson, Vice President, Boeing Defense, Space & Security in India**. In an email interview with **Economictimes.com's Smriti Jain & Ruchi Bambha**, Swanson says India is one of the most important markets for Boeing internationally and that the company supports Modi government's drive towards improving the ease of doing business. Edited Excerpts:

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New Delhi: The Indian Army is planning to pitch for acquiring a fleet of lethal Apache attack helicopters in a key meeting with Defence Minister Arun Jailtley scheduled this weekend. Highly placed sources in the Army told Mail Today that the combat helicopters for its aviation wing will enhance the firepower of its strike forces along the borders with China and Pakistan.

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After a three-year delay, the government has finally cleared the purchase of new attack and heavy lift helicopters from the US. The \$2.5 billion deal for a new fleet of 15 Chinook and 22 Apache choppers are a huge boost for the air force & the contract is likely to be expanded to larger number in coming years. The private sector will benefit as the contract will bring in over \$600 million into the defence & aerospace sector as offsets for the deal. Besides, both helicopters are game chan ...

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Defence Minister Manohar Parrikar, currently on his second visit to the US in eight months, will be visiting the Boeing's facility in Philadelphia on August 31 to get an update on the CH-47F Chinook heavy-lift helicopters being manufactured for India.

In order to scale up Indian Air Force capabilities, the government had last year placed order for 15 Chinook helicopters along with 22 AH-64E Apache Longbow attack helicopters, also being manufactured by Boeing.

The order is valued at over US \$2.5 billion. Alongside, the private sector in India will benefit as the deal will bring around \$600 million into the defence and aerospace sector as offset for the deal.

The Chinook helicopters are slated to be inducted into the Indian Air Force in 2019.

The US is currently the biggest supplier of weapons and military equipment to India, having won orders worth over \$13 billion during the last seven years.

The induction of Apache attack and Chinook heavy lift helicopters will prove to be a game changer for the capabilities of the Indian Air Force.

The **Boeing AH-64 Apache** is an American four-blade, twin-turboshaft attack helicopter with a tailwheel-type landing gear arrangement and a tandem cockpit for a two-man crew. It features a nose-mounted sensor suite for target acquisition and night vision systems. It is armed with a 30 mm (1.18 in) M230 chain gun carried between the main landing gear, under the aircraft's forward fuselage. It has four hardpoints mounted on stub-wing pylons, typically carrying a mixture of AGM-114 Hellfire missiles and Hydra 70 rocket pods. The AH-64 has a large amount of systems redundancy to improve combat survivability.

The Apache is a twin-engined army attack helicopter developed by McDonnell Douglas (now Boeing). It entered service with the US Army in 1984 and has been exported to Egypt, Greece, Israel, the Netherlands, Japan, Saudi Arabia, United Arab Emirates (UAE) and the UK.

## "The Apache was first used in combat in 1989."

The US Army has more than 800 Apaches in service, and more than 1,000 have been exported. The Apache was first used in combat in 1989 in the US military action in Panama. It was used in Operation Desert Storm and has supported low intensity and peacekeeping operations worldwide including Turkey, Bosnia and Kosovo.

The first Apache Longbow was delivered in April 1997 to the US Army.

The AH-64D Longbow was deployed by the US Army in Afghanistan as part of Operation Anaconda, in support of Operation Iraqi Freedom and, from June 2003, in South Korea.

The AH-64D Longbow is fitted with the Longbow millimetre wave fire control radar and the Longbow Hellfire missile. 501 AH-64A Apaches upgraded to AH-64D standard have been delivered to the US Army. Deliveries completed in August 2006. An additional 13 new-build Apaches were initially ordered, along with another 11 in November 2006. The US Army ordered 96 additional remanufactured helicopters in January 2007 and 18 new-build helicopters in April 2007.

## "Boeing will produce 51 AH-64D Apache Block III helicopters for the US Army."

During the same year, 30 AH-64Ds were ordered by the UAE. The first new-build AH-64D was delivered to the US Army in June 2007 and the first of the additional remanufactured helicopters in October 2007.

The US Army awarded a \$247m contract to Boeing in October 2010 to start low rate initial production (LRIP) of the AH-64D Apache Block III helicopter. Boeing will produce 51 AH-64D Apache Block III helicopters for the US Army under the LRIP contract. The first AH-64D Apache Block III helicopter was delivered to the US Army in October 2011.

### International Apache orders and deliveries

The Longbow has been ordered by the Netherlands (30, deliveries complete), Singapore (20 deliveries complete, first delivered in May 2002), Israel (designated "Seraph" nine new, nine remanufactured, first delivered April 2005) and Egypt (35, remanufactured, deliveries

completed in January 2007).

The Royal Netherlands Air Force received its first AH-64D Apache and first AH-64D Apache Block III aircraft in May 1998 and in May 2012 respectively.

Related project

## HAL Rudra (ALH WSI) Attack Helicopter

Rudra is an attack helicopter manufactured by Hindustan Aeronautics Limited (HAL), for the Indian Army.

A number of AH-64A helicopters have been upgraded to AH-64D

standard for South Korea. 30 UAE Apaches are being upgraded to AH-64D Longbow standard, and deliveries began in May 2008. In June 2006, Saudi Arabia requested the upgrade of 12 Apaches to standard and, in September 2008, the sale of 12 new AH-64Ds. In October 2008, Taiwan requested the sale of 30 AH-64D Block III Apaches.

In August 2001, the AH-64D was selected by the Japanese Ground Self-Defence Force with a requirement for 55 helicopters. The Apache for Japan is designated AH-64DJP and is armed with Stinger air-to-air missiles.

In September 2002, Kuwait ordered 16 AH-64D helicopters. The first was delivered in February 2007. The Kuwaiti Apaches are equipped with BAE Systems HIDAS defensive aids system. In September 2003, Greece signed a contract for 12 (plus four options) AH-64D Longbow, also to be fitted with HIDAS. The first was delivered in January 2007.

In June 2011, Taiwan placed a \$2.5bn order for 30 AH-64D Apache block III helicopters. The helicopters are scheduled to be delivered between 2013 and 2014.

### **AH-64A/D** Apache upgrades

The first of the upgraded block II Apaches was delivered to the US

Army in February 2003. Block II included upgrades to the digital communications systems of 96 A-model Apaches to improve communications within the "tactical internet". In October 2007, Boeing delivered the first extended block II to the US Army.

In July 2005, the US Army awarded Boeing a development contract for block III improvements, which entered service in 2011. In December 2009, the maiden flight test of AH-64D Apache with block III structures were completed.

A 30mm automatic Boeing M230 chain gun is located under the fuselage. It provides a rate of fire of 625 rounds a minute. The helicopter has capacity for up to 1,200 rounds of ammunition.

The AH-64D is armed with the Lockheed Martin / Boeing AGM-114D Longbow Hellfire air-to-surface missile which has a millimetre wave seeker which allows the missile to perform in full fire and forget mode. Range is 8km to 12km.

# "The helicopter has capacity for up to 1,200 rounds of ammunition."

The Apache can be equipped with air-to-air missiles (Stinger, AIM-9

Sidewinder, Mistral and Sidearm) and the advanced precision kill weapon system (APKWS), formerly known as Hydra, family of guided and unguided 70mm rockets. Plans to arm the Apache with the advanced precision kill weapon system (APKWS) II, a laser-guided version of the Hydra were shelved in the FY2008 budget. The US Army awarded BAE Systems a development contract for the APKWS II in April 2006.

British Army AH mk1 helicopters are armed with the CRV7 70mm rocket system from Bristol Aerospace of Winnipeg, Manitoba.

The Longbow Apache carries the combination of armaments chosen for the particular mission. In the close support role, the helicopter carries 16 Hellfire missiles on four four-rail launchers and four air-to-air missiles.

#### Sensors

The AH-64D Longbow Apache is equipped with the Northrop Grumman millimetre-wave Longbow radar. The Longbow fire control radar incorporates an integrated radar frequency interferometer for passive location and identification of radar-emitting threats. An advantage of millimetre wave is that it performs under poor-visibility conditions and is less sensitive to ground clutter. The short wavelength allows a very narrow beamwidth, which is resistant to countermeasures.

### Related project

### Apache AH Mk1 Attack Helicopter

The Apache AH Mk1 is an attack helicopter produced by AgustaWestland under license from Boeing, for the British Army.

The Longbow Apache can effect an attack in 30 seconds. The radar dome is unmasked for a single radar scan and then remasked. The processors determine the location, speed and direction of travel of a maximum of 256 targets.

The target acquisition designation sight, TADS (AN/ASQ-170), and the pilot night vision sensor, PNVS (AN/AAQ-11), were developed by Lockheed Martin. The turret-mounted TADS provides direct-view optics, television and three-fields-of-view forward-looking infrared (FLIR) to carry out search, detection and recognition, and Litton laser rangefinder / designator. PNVS consists of a FLIR in a rotating turret located on the nose above the TADS. The image from the PNVS is displayed in the monocular eyepiece of the Honeywell integrated helmet And display sighting system, IHADSS, worn by the pilot and copilot / gunner.

Lockheed Martin has developed a new targeting and night vision system for the Apache, using second-generation long-wave infrared sensors with improved range and resolution. The new system is called Arrowhead and has a targeting FLIR with three fields of view, a dual field-of-view pilotage FLIR, a CCD TV camera, electronic zoom, target tracker and auto-boresight.

## "Lockheed Martin has developed a new targeting and night vision system for the Apache."

Arrowhead entered production in December 2003 and the first unit was delivered to the US Army in May 2005. The first Arrohead system was integrated to the Apache helicopter in June 2005. A total of 704 US Army Apaches were to be equipped with Arrowhead by 2011. The 500th delivery was made in 2008 and the remaining deliveries were completed as scheduled. The US Army has also placed follow-on contracts for additional Arrowhead fittings to its fleet of Apaches, increasing the total number of Arrowhead integrations for the US Army.

A contract to equip the UK AH Mk1 helicopters with Arrowhead was placed in May 2005. The first two were delivered in November 2008 and deliveries concluded in 2010.

### Countermeasures

The Apache is equipped with an electronic warfare suite consisting of: AN/APR-39A(V) radar warning receiver from Northrop Grumman (formerly Litton) and Lockheed Martin; Lockheed Martin AN/APR-48A Radar Frequency Interferometer Electronic Support target acquisition system; AN/ALQ-144 infra-red countermeasures set from BAE Systems IEWS (formerly Sanders, a Lockheed Martin company); AN/AVR-2 laser warning receiver from Goodrich (formerly Hughes Danbury Optical Systems then Raytheon); AN/ALQ-136(V) radar jammer developed by ITT; and chaff dispensers.

http://www.army-technology.com/projects/apache/