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Sukhoi-30 MKI Equipped with the BrahMos Missile

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Why in News



A squadron of fourth-generation fighter jets **Sukhoi-30 MKI equipped with the BrahMos missile** was inducted in the Southern Air Command, Thanjavur.

- The induction will help India to maintain its air and maritime dominance in the **Indian Ocean Region (IOR)**.
- Sukhoi 30 jets have been modified to carry **BrahMos air-to-surface missiles** giving them the **capacity to conduct long-range precision strikes**.

Integration of Su-30 MKI and BrahMos

- **Hindustan Aeronautics Limited (HAL)** and BAPL (BrahMos Aerospace Pvt Ltd) in 2014 signed a contract to modify two Su-30 MKI aircraft for integrating with the missile.
- It was for the **first time in the world** that such a heavyweight missile was integrated on a fighter aircraft.
- All weather Brahmos gives the Sukhois a combat radius of almost 1,500 km without mid-air refuelling.
- Brahmos is the **heaviest weapon** to be deployed on Su-30 MKI fighter aircraft, with a weight of 2.5 tonnes.

BrahMos Missiles

- BrahMos missile is a **supersonic cruise missile** which features Indian propulsion system, airframe, power supply, and other major indigenous components.
- **BrahMos** is a **joint venture** between the **Defence Research and Development Organisation of India (DRDO)** and the NPOM of Russia.
Brahmos is named on the rivers Brahmaputra and Moskva.
- It is a two-stage (solid propellant engine in the first stage and liquid ramjet in second) air to surface missile with a flight range of around 300 km.
However, India's entry into the **Missile Technology Control Regime (MTCR)** has extended the range of the **BrahMos** missile to reach 450 km-600km.
- Brahmos is a multiplatform i.e it can be launched from land, air, and sea and multi capability missile with pinpoint accuracy that works in both day and night irrespective of the weather conditions.
- It operates on the "Fire and Forgets" principle i.e it does not require further guidance after launch.
- Brahmos is one of the fastest cruise missile currently operationally deployed with speed of Mach 2.8, which is 3 times more than the speed of sound.

Source:IE