Air-to-Air missile Astra successfully flight tested from Su-30 MKI

News

Air-to-Air missile Astra has been successfully flight tested off the coast of Odisha. The missile was launched today from Su-30 MKI as a part of User trials. The live aerial target was engaged accurately demonstrating the capability of first indigenous air-to-air missile.

Air-to-Air Astra:

- It is a beyond-visual-range air-to-air missile (BVRAAM)
- Astra is capable of engaging targets at varying range and altitudes allowing for engagement of both short-range targets (up to 20 km) and long-range targets (up to 80 km) using alternative propulsion modes.
- It is indigenously developed by DRDO.
- It is a single stage solid fuelled missile.
- It is radar homing supersonic missile having maximum speed of Mach 4 (four times speed of sound).
- It has advance on-board electronic counter-measures that jam radar signals from enemy radar, making tracking of the missile difficult.

Su-30 MKI:

- The Su-30MKI procured from Russia and licence manufactured by Hindustan Aeronautics Limited (HAL) is the mainstay of the IAF’s fighter squadron.
- The Sukhoi Su-30 is a twin-engine, two-seat supermaneuverable fighter aircraft capable of attaining speeds of Mach 2 (double the speed of sound or 2,120 kmph) at high altitudes and can carry guns, missiles, bombs, rockets and other weaponry.

Brahmos:

- Supersonic cruise missile
- Designed and developed by BrahMos Aerospace, a joint venture of India and Russia
- It has derived its name from the names of two rivers, India’s Brahmaputra River and Russia’s Moskva River.
- It operates on fire and forget principal
- Capable of being launched from land, sea, sub-sea and air against sea and land targets
- Carrying capacity : 300 Kg (both conventional and nuclear)
- Speed : Mach 3 (that is, three times the speed of sound)
- Max Range : 290 Km. Its range was extended to 450 km and plan is to increase it to 600km.
It is a two-stage missile, the first one being solid and the second one ramjet liquid propellant. BrahMos missile already has been inducted into the Indian Army and Navy.