Integrated Air Command and Control System (IACCS)

***Prelims**: Current events of national and international importance.*

Why in News?

Recently, At the media briefing on Operation Sindoor, military officers displayed a picture of the Integrated Air Command and Control System (IACCS) node of the Indian Air Force (IAF).

- It is an *automated command and control system*.
- **Developed by** - Bharat Electronics Limited (BEL), the public sector aerospace and defence electronics company.
- **Objectives** – To ***integrate data from all air defence assets***, including ground-based radar, airborne sensors, civilian radar, communication nodes, and the various command and control centres of the IAF.
- **Importance** - Consolidated dataset along with real-time updates, provides a comprehensive picture and overall *situational awareness during air operations*.
- The total battlefield picture *enables central control and decentralised execution* at various levels.
- By *reducing reaction time*, it allows military commanders to make early decisions on identification and assessment of threats, and to direct air defence assets to carry out kills.
- It helps in effective airspace management and reduces redundancy.
- It will help achieve the critical integration of all air defence assets to *ensure coordinated responses* from air defence platforms across the 3 Services.

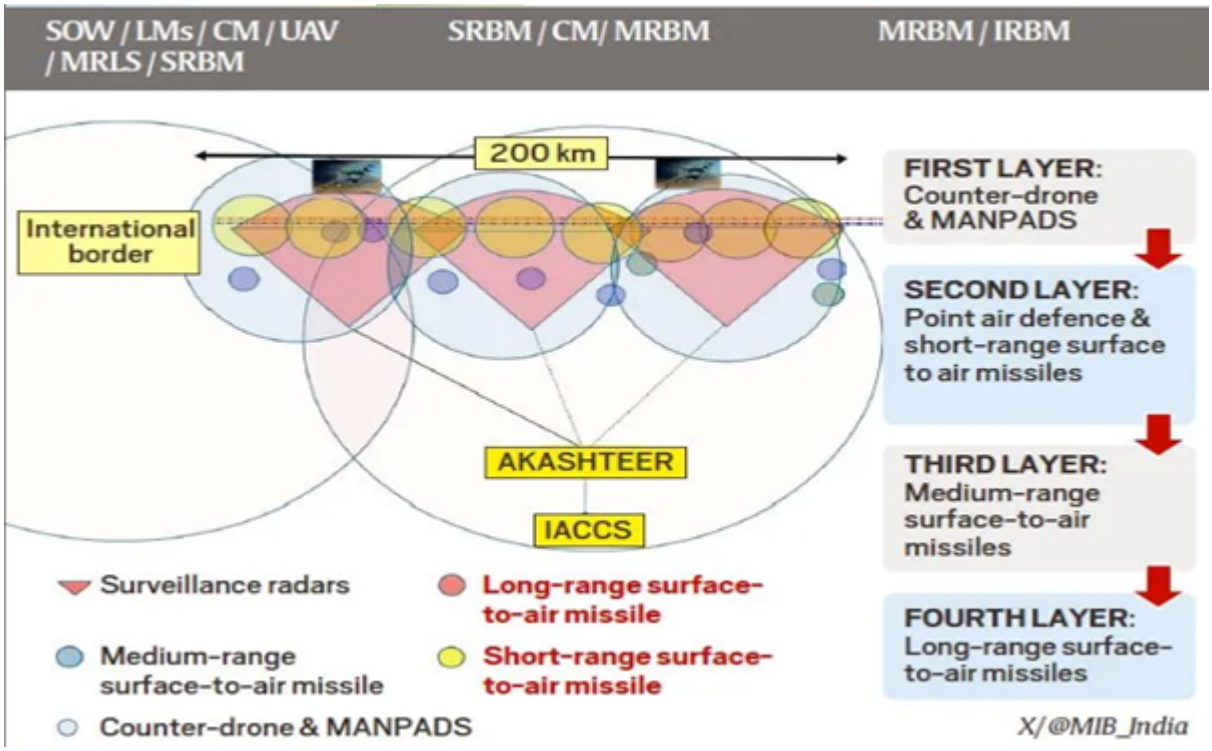
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• It is an *air defence control and reporting system* that connects the units of its air defence. • **Developed by** – BEL. • **Role** – It would enable the *monitoring of low-level airspace* over battle areas, and effectively control ground-based air defence weapon systems. • It operates at a comparatively small scale at present. • It is in the *process of being integrated with IACCS* for effective coordination between the Army and Air Force air defence operations.

Multi-layered Deployment of Air Defence Assets

***Air defence systems** use a complex system of radar, control centres, defensive fighter jets, and ground-based air defence missile, artillery, and electronic warfare systems to neutralise a range of threats from the sky, including enemy aircraft, drones, and missiles.*

- **Point defence** – It comprises low-level air defence guns and shoulder-fired weapons.

- **Area defence** - It comprises fighter aircraft and long-range missiles.
- **Air defence grid** – It comprises a range of surveillance radar.
- There are ***4-layer air defence umbrella*** in Indian military system.



Reference

The Indian Express| Air Defence Shield of Indian Military System

Related News – Air Defence Systems

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