

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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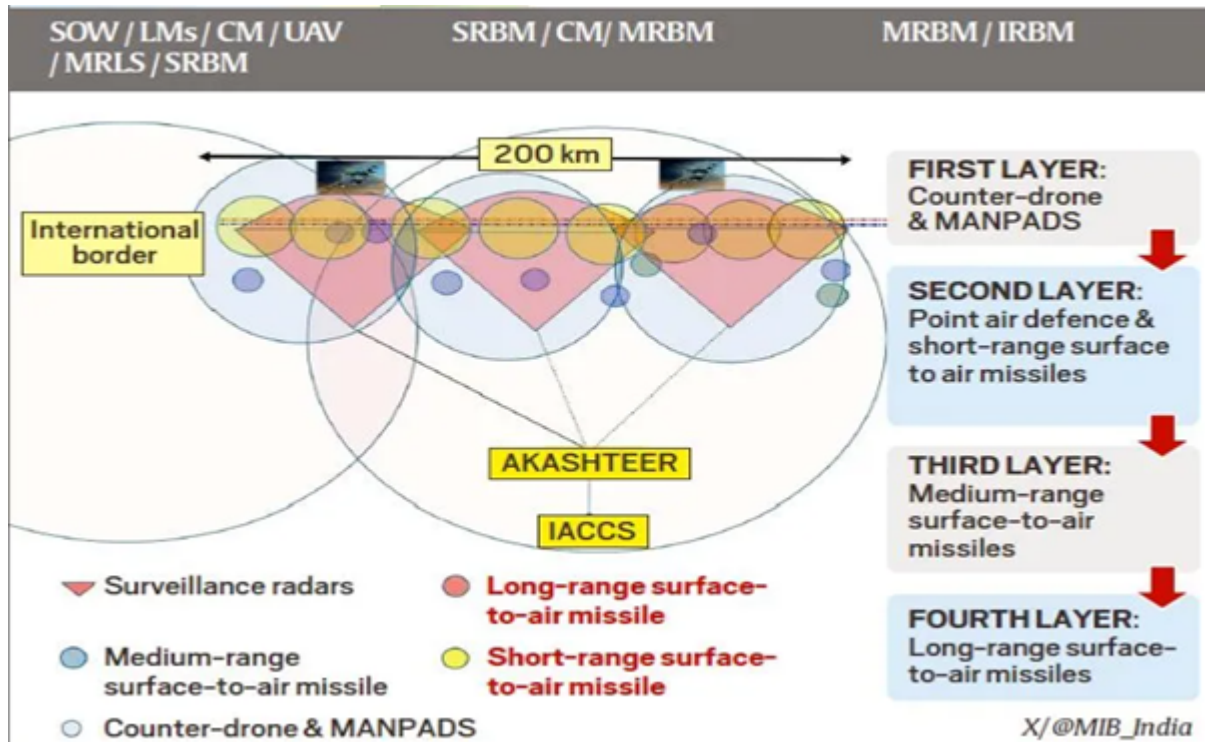
- It is an air defence control and reporting system that connects the units of its air defence.
- **Developed by** - BEL.
- **Role** - It would enable the monitoring of low-level airspace over battle areas, and effectively control ground-based air defence weapon systems.
- It operates at a comparatively 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](#)

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