

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 <u>automated command and control system</u>.
- **Developed by** Bharat Electronics Limited (BEL), the public sector aerospace and defence electronics company.
- Objectives To <u>integrate data from all air defence assets</u>, 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 <u>situational awareness during air operations</u>.
- The total battlefield picture <u>enables central control and decentralised execution</u> at various levels.
- By <u>reducing reaction time</u>, 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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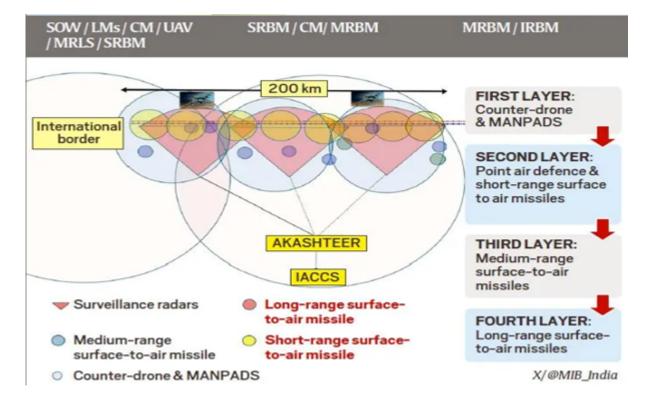
- It is an <u>air defence control and reporting system</u> that connects the units of its air defence.
- **Developed by** BEL.
- **Role** It would enable the <u>monitoring of low-level airspace</u> over battle areas, and effectively control ground-based air defence weapon systems.
- It operates at a 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

