Air Defence Tactical Control Radar

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Source: *DRDO*

Air Defence Tactical Control Radar was on display during the 71st Republic Day celebrations

About Air Defence Tactical Control Radar

- **It is developed by DRDO**
- It is developed for the Indian Army for volumetric surveillance, detection, tracking and friend/foe identification of aerial targets of different types and transmission of prioritized target data to multiple command posts/weapon systems.
- The radar is **capable of detecting very small and low flying targets.**
- The system employs state of the art Active Phased Array Technology with Digital Beam Formatting distributed Digital Receivers and IFF Mark XII
- The Radar System, power & cooling systems, operator shelter, communication equipment etc. is configured on two High Mobility Vehicles.
- The Radar **can be deployed in plain lands, deserts and in the mountain regions** for the purpose of tactical early warning for Ground-based Weapon Systems.
- With advanced signal processor and data processing systems combined with digital multi-beam processing, the radar **can perform multiple functions, through multiple target tracking and target acquisition.**
- ADTCR **gives a true air picture with precise target parameters** including the target range, height, speed, and IFF status.
- The radar is fully performable through and efficient

Man-machine interface from the operator workstation and also from the remote display.

- The track data can be transmitted to multiple weapon systems and command posts up to 20 km away through the line and radio links.
- The system is d**esigned for survivability in intense environmental and EW conditions**, and the operations cabin is protected **against nuclear, biological and Chemical weapons.**

Technologies:

- Rotating Active Phased Array with Digital Beam Forming
- Electronic scanning in Azimuth and elevation
- Distributed multiple Transmit/Receive modules based architecture
- Multifunction capability with advanced signal and data processor