

# RAC 3D INTERMEDIATE RANGE TACTICAL 3D SURVEILLANCE RADAR

EXTENDED AIR DEFENSE MISSIONS

AIR COMMAND AND CONTROL MISSIONS

BATTLEFIELD SURVEILLANCE AND COORDINATION MISSIONS

COMBINED COMMAND AND CONTROL MISSIONS



  
**ThalesRaytheonSystems**

# RAC 3D INTERMEDIATE RANGE TACTICAL 3D SURVEILLANCE RADAR

## Description:

### Detection

The RAC 3D is a three dimensional, multi-mode, radar for the co-ordination of medium-range, short-range and very-short range air defense weapon systems. It provides a 3D air picture up to 100 km. Highly mobile and optimized for detecting low observable targets, the RAC 3D is capable of operating under the most severe weather, jamming and propagation conditions. The RAC 3D detects and classifies modern threats, including medium to very low-altitude hovering helicopters.

### Co-ordination

The defense of strategic sites, as well as the protection troops on the move requires a multi-layered air defense. Associated with its integrated Command and Control (C2), the RAC 3D operates as a multi-mission system fully interoperable with higher levels of command such as national air defense or allied networks.



The RAC 3D system activates weapon control orders and provides target-weapon pairing to co-ordinate any mix of MSAM, SHORADS and VSHORADS.

The RAC 3D is also used as a gap-filler system for low altitude air defense.

### Proven efficiency

Currently in production, the RAC 3D equips Armies and Air Forces in a number of European countries. More than 50 systems are already fielded, and the RAC 3D has successfully participated in extensive NATO trials.

### Features:

- C-band
- Large operating bandwidth: 600 MHz

### Operational use

- Unattended
- Networked or stand-alone with optional Advanced Weapon Control Post (AWCP) integrated in the radar shelter

### Detection envelope

- Instrumented range: 100 km
- Ceiling: 30,000 feet
- Elevation coverage: > 45°



### Accuracy/Discrimination on combat aircraft

- Range: 20 m/150m
- Azimuth: 0.4°/4°
- Elevation: 0.5°

### IFF System

- Co-mounted secondary radar
- Modes: 1, 2, 3/A, C, Secure
- Fully solid-state



### Transportability

- One C-130 type aircraft

### Deployment

- Unprepared site
- Assembly/disassembly: 15 minutes/2 people

### Miscellaneous

- Mast erected antenna up to 13 meters above ground level

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