



TRS-15

3D Mobile Medium Range Surveillance Radar

The TRS-15 S-Band 3D Mobile Medium Range Surveillance Radar is a source of radar information for Air Defense command and control systems. With additional sea channel functionality, the radar can play the role of the sensor for coastal missile units.



Advantages:

- ability of detection of low flying targets
- high mobility
- short deployment time
- high immunity against clutter and jamming
- effective correlation of primary and secondary plots
- ability of cooperation with remote control consoles
- ability of processing of high level classified information

The air targets are located in three dimensions using the stacked-beam monopulse technique in elevation and mechanical scanning in azimuth. The radar can also provide digital output of plots, tracks and IFF data.

The effective operation of the radar in the presence of jamming and clutter is achieved by using advanced, adaptive signal processing techniques, including adaptive clutter map, automated monitoring jamming, selection of less jammed frequency, staggered frequency repetition.

The TRS-15 radar system consists of antenna vehicle and display vehicle fitted with standard ISO 6 m locks and two power generator trailers. The antenna array can be deployed within 20 minutes by a crew of three using the antenna mast hydraulic system. The radar is fitted with an antenna levelling system and GPS-based positioning system.

Detection performance	Coverage	Accuracy (RMS)	Resolution
Instrumented detection range	240 km		
Detection range for a fighter	200 km (6 RPM)	<50 m	120 m
Azimuth	360°	<0,20°	<3°
Height	30 000 m	<600 m	
Elevation	up to 30°		

Functional data	
Operation frequency	S band (NATO F)
Antenna rotation rate	6/12 RPM
Antenna transmit pattern	cos ²
Antenna receive pattern	stacked in elevation 7 beams
Beamwidth	1.8° AZ
Maximum traces tracked	255
IFF	MARK XA, ready to use MARK XIIA and mode S
Output data format	3D, IFF, auxiliary data in ASTERIX and/or national format
BITE	Available

TRS-15C sea surveillance version

