



ARGOS 73 S-BAND, 2D SOLID STATE LOW ALTITUDE SURVEILLANCE RADAR

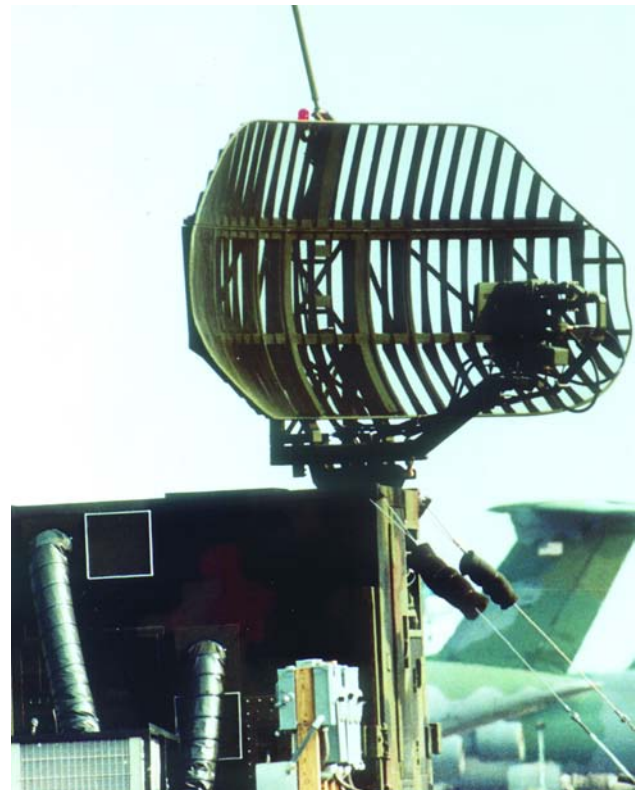
ARGOS-73 detects tracks and identifies targets operating over a wide speed range (from hovering helicopters up to aircraft flying at over MACH 3) and featuring very small radar cross sections, in a clutter and jamming environment, in overfilling attacks with stand-off or smart type weapons.

When both low altitude surveillance and high mobility are required Argos-73 by SELEX Sistemi Integrati is the solution.

ARGOS-73 is available in a highly mobile version for low and very low altitude Air Defence as well as in a fixed configuration for coastal applications.

ARGOS-73 uses a fully solid state transmitter based on an array of amplifier modules, which provides advantages, such as:

- Modular transmitter design: low, medium and high power version are available;
- Very high MTBF and easy maintainability;
- Graceful degradation, since the radar still operates even in case of failure of the most part of amplifier modules;
- Low voltage power supply for safe operator handling





- Very high intrinsic stability for optimum performance in clutter environment
- Low Life Cycle Cost.

The system is equipped with a solid state primary antenna and monopulse secondary search antenna. It provides fighters detection, up to 120 Km in range and 10000 mt in height.

ARGOS-73 antenna features a cosecant squared illumination pattern, very low sidelobes and double polarization.

ARGOS-73 is an excellent gap filler, reporting to higher level Command and Control centres as well as being deployed and integrated within Air and Coastal Defence networks.

Target detectability is enhanced by continuously adapting the operational mode to the changing environment using MTD technique and mapping of the environment. Other features are: multiple transmission waveform (phase coded), double conversion receiver, various frequency agility modes, plot extraction processing and on-line BITE.

STATUS

ARGOS-73 systems have been supplied to Italian and other foreign customers.

TECHNICAL CHARACTERISTICS

Antenna

- Type: Reflector feed
- Polarization: Horizontal, Circular (L/R)
- Scan rate: 10/12/15 r.p.m.
- IFF Antenna: Integrated

Transmitter

- Type: Solid State
- Frequency: S-band
- Peak power: 10 KW
- PRF: Fixed or stagger
- Modes: Fixed frequency, pulse-to-pulse agility, burst-to-burst agility

Coverage

- Range: 0.5 to 60 nm

Secondary Surveillance Radar (IFF)

- Frequency: 1030 MHz transmit, 1090 MHz receive
- Range: 0.5 to 120 nm
- Availability: 0.999
- Reliability (MTBF): 5000 hours
- Maintainability (MTTR): 0.5 hour

- Fully integrated BIT/BITE
- Operational status monitoring of subassemblies
- On-line repair of fail-soft solid-state transmitter