- **Electronic Scanning**
- **Linear/Circular Polarization**
- **Meteo Channel**
- **Transportable Version**

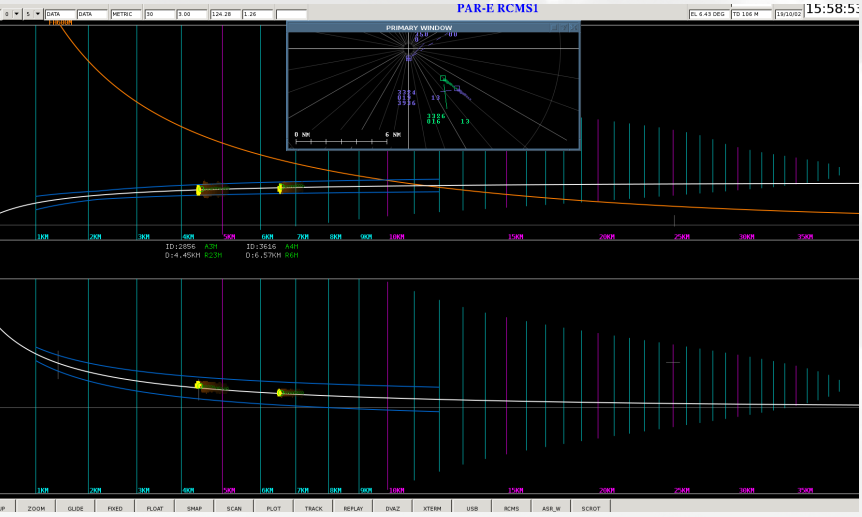
ELDIS
RADAR
SYSTEMS

PAR–NG

PRECISION APPROACH RADAR

The PAR-NG is new generation precision approach radar provides important support for the approach and landing control of various aircraft, including the emergency landing due to avionics failure. The radar utilizes an active electronic scanning antennas (AESA) both in the azimuth and the elevation which allows operation without mechanical movement of the antennas. Radar operate in linear or circular polarizarion mode. The radar meets relevant ICAO standards and follows the NATO Vision document, according to which the PAR technology will be used at least until 2040.

The PAR-NG Precision Approach Radar is designed for target detection such as aircrafts, ground objects and meteorological formations. The detected information is displayed on workplace screens and radar information is transferred to remote ATC workplaces. The radar is particularly important in situations when the pilot has limited sight (because of fog, rain, etc.) and in emergency landing due to avionics failure. In this situation, the radar has to provide the approach controller with maximum quality radar display complemented by computer evaluation of speed, deviations from glide path/course line, the distance from the previously approaching aircraft, etc.



CONFIGURATION

The PAR-NG Radar design is fully modular and fully duplicated radar solution, including the system of communication with a remote site. The radar construction is fully solid state, including the transmitting circuits. Both azimuth and elevation antennas involve digital TRM/RM modules ensuring their high reliability.

The PAR-NG Radar system involves the BITE diagnostics to enable fast and accurate identification of a faulty block of the radar system.

MOBILITY

The transportable version of PAR-NG can be transported by vehicles, trains, aircrafts with 1C ISO standard.

MAIN PARTS

- AESA antenna and radar head unit integrated in single shelter
- Maintanence and controler shelter (options)
- Data and CAM transmission link
- Power supply unit – Diesel generator, UPS unit
- Fire-fighting system
- Security electronic system

Runway Eye

- Camera surveillance of runway and earby area with alerts using AI
- IR vision
- Detail view of glidepath

PAR DISPLAY SYSTEM

- Non linear in range
- Best resolution in touchdown point
- Analog video - RAW (AD) and selective (MTD) video
- Digital data - PLOTS and TRACKS with LABELS
- Weather information
- Integrated QNH, visibility, weather condition display
- Local and remote control and monitoring system

BASIC PARAMETERS

- X-Band precision approach radar
- AESA Radar Technology
- Modular architecture
- Linear/Circular polarization
- 1 second update period
- Range up to 20 NM
- Azimuth coverage 30° (symetric or asymetric sector)
- Elevation coverage -1° to +14°
- Multiple runway directions support
- Changes between runway direction less than two minutes
- Highly effective central cooling system
- Camera vision system – Runway Eye
- Wind information
- The radar excels in low maintenance requirements
- Possibility of transport by container carrier

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