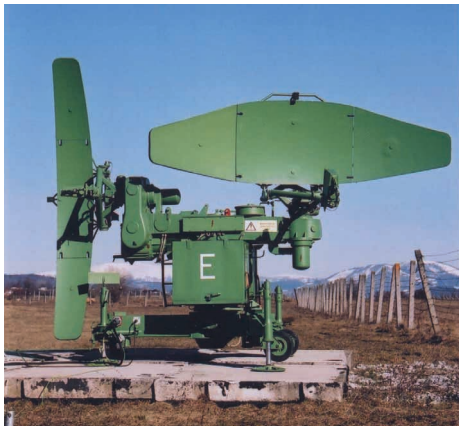
MORAD-P - PAR

MORAD-P is transportable precision approach radar representing the upgraded version of RP4/RP5 radar systems according to ICAO requirements. It is intended for efficient approach control of aircraft at civil/military airports even within adverse weather conditions. The upgrade consists in radar overhaul including out-of-date components replacement for advanced ones. Antenna system and transmitter unit are excluded from refurbishment. Supplier guarantees the below specifications and MORAD-P service life for at least 10 years.



Upgrade purpose:

- ❑ Improvement of radar parameters
- ❑ Increase of system stability
- ❑ Fully digital radar signal processing
- ❑ Digital output of radar data
- ❑ Service life extension for more than 10 years

Designed for:

- ❑ Military / civilian airports

System features:

- Isothermal container incl. air conditioning based on environment-friendly filling agent
- Computer aided diagnostics and maintenance system provided by central processing unit
- Receivers with low-noise amplifiers
- AMTI signal processing
- Angle information circuits with electronic alignment of antenna
- Supervisor display of PAR data, SP/EXT control and diagnostics
- Digital output of radar data
- Remote control

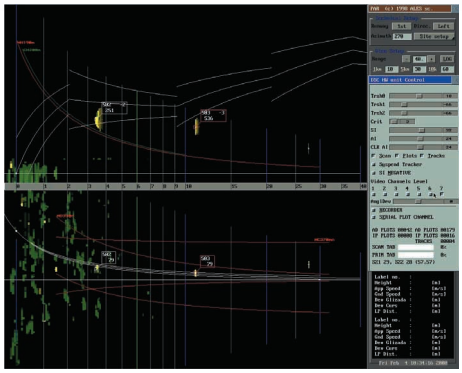
Basic characteristics

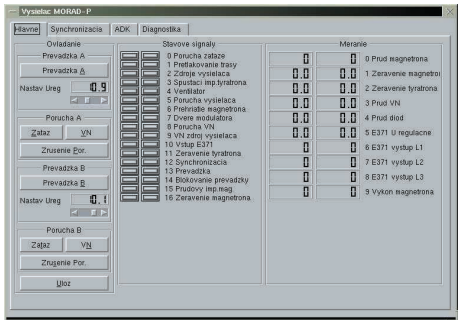
Band	X
Transmitter	2x150kW pulse peak power, magnetron type
PRF	2000Hz (stagger 9:10:11)
Pulse Width	0,5 µs
Range	50 km
Antenna coverage	
- azimuth	
- vertical plane	-3° to + 15°
- horizontal plane	± 15°
- elevation	
- vertical plane	-1° to + 14°
- horizontal plane	-9° to + 9°
Range accuracy	20 m
Range resolution	80 m
Azimuth accuracy	0,03°
AMTI ground clutter suppression	>32dB
Primary data output	digital (synthetic raw video compression format)
Data plot/track output	digital (ASTERIX format)
Local tracker capacity	128 tracks
Data interface	LAN and link modem (optionally wireless comm.)
Voice communication	telephone AUT, intercom
Power supply	3x230/400V/50Hz max input power 10kW
UPS	10 min / standby mode without RF emission
Environmental conditions	-35°C to 50°C

ALES a.s., Slovak Republic: Soblahovská 2050, 911 01 Trenčín, Tel./Fax: (+421-32) 6582 580, 6521 941, E-mail: ales@ales.sk
ALES s.r.o., Czech Republic: Velké náměstí 4, 386 01 Strakonice, Tel./Fax: (+420-383) 321 105, 327 768, E-mail: headoff@ales.cz

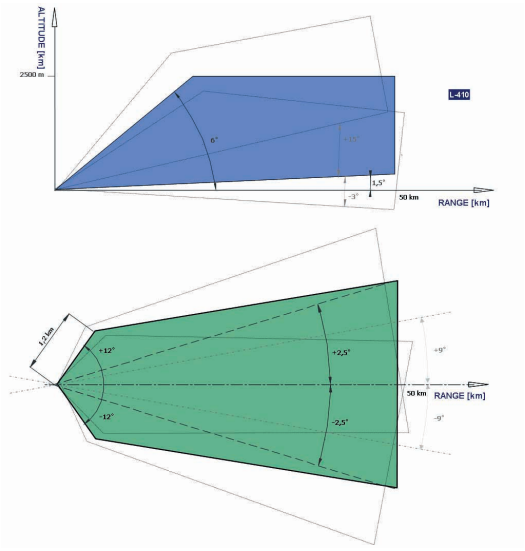
Basic features of RDD/PAR display:

- Synthetic raw video display
- Status, diagnostic a control data display
- Plot-to-track processing
- Track correlation
- Track conflict alert capability

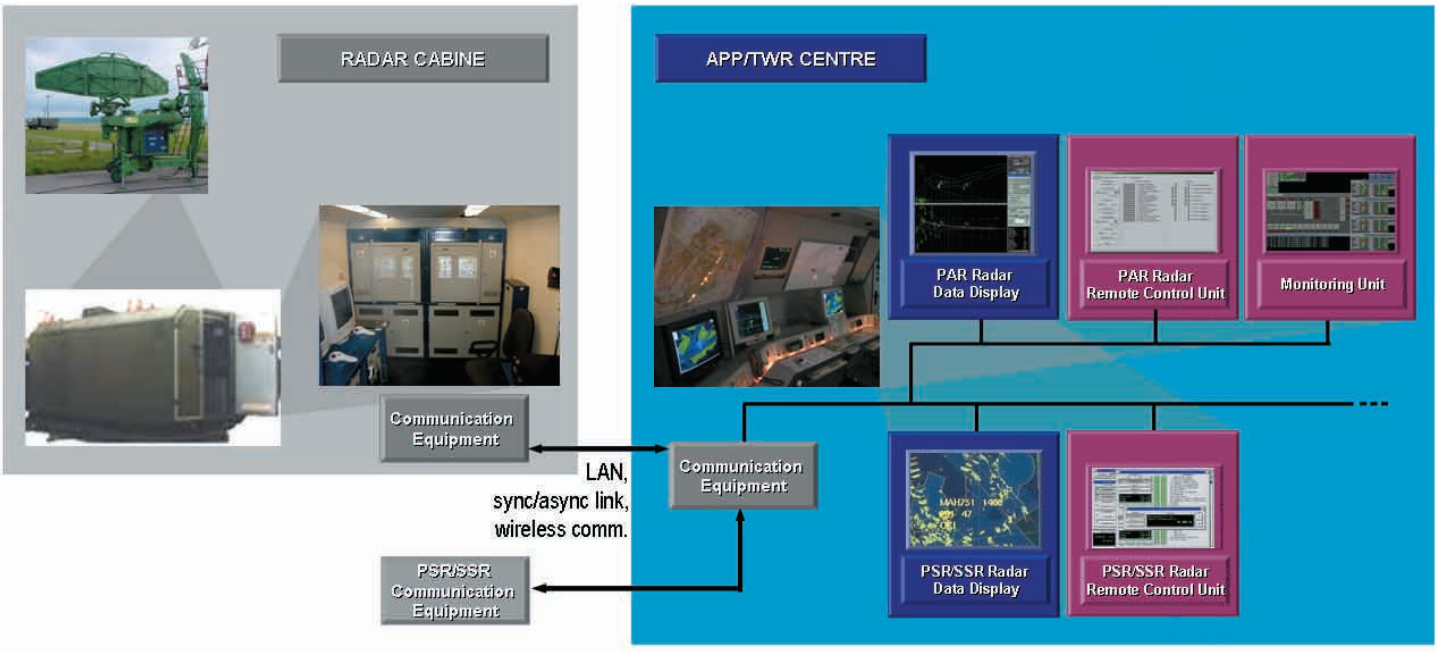




Coverage diagram



Typical configuration



References

Development of MORAD-P was completed in 2001.

ALES a.s., Slovak Republic: Soblahovská 2050, 911 01 Trenčín, Tel./Fax: (+421-32) 6582 580, 6521 941, E-mail: ales@ales.sk
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