The AD-RNAV comes with a self-contained equipment case containing the required hardware. It can be operated by laptop. It is fully capable of inspecting RNAV/RNP procedures, SBAS (LPV) approaches and radars. This solution with minor aircraft modification converts nearly each aircraft into a procedure flight inspection aircraft for any kind of GNSS based procedures and radar.

The minimum number of interfaces and compact design enables the AD-RNAV to be used as an add-on to an existing flight inspection system or as a stand-alone solution as loose equipment in a multi-role fixed-wing aircraft or helicopter.

Key Features:

- Small and lightweight
- Minor A/C modification required
- Integrated multi GNSS receiver with 120 channels
- RNAV, PBN, radar, SBAS
- Same powerful AD-AFIS software as in the fully-featured AD-AFIS consoles
- Portable Cockpit Information Display (PCID) available
- Standalone operation or add-on to any FIS
Components

Equipment Case
The equipment case is a small, ruggedized portable housing containing the data acquisition-, real-time- and positioning module. It provides a power interface and all data interfaces to the aircraft navigation sensors (e.g. GPS/FMS). Optionally, internal batteries can provide up to 4h independent operation.

Positioning Module
The equipment case integrates a multi GNSS receiver with 120 channels.

The receiver is capable of receiving and processing the following signals:
- GPS (L1,L2C,L5)
- GLONASS (L1,L2)
- Beidou/Compass (B1,B2)
- Galileo (E1,E5a,E5b)
- SBAS (EGNOS/WAAS/GAGAN/SDCM)
- Wide Area Differential GPS
- Phase Differential GPS (optional)

Real-Time Module
The real-time module controls the data acquisition module and the positioning module. It provides precisely time-stamped reference position and sensor data with 10Hz to the display computer where the data is analyzed by the AD-RNAV Flight Inspection Software.

Display Computer
A ruggedized laptop with SSD storage and Windows 10 can be used as display computer.

Pilot Guidance
Pilot RNAV guidance can be provided by an additional display (PCID) or optional data feed to the autopilot.
AD-RNAV Flight Inspection Software

- Easy-to-learn user interface known from AD-AFIS
- Built-in training mode
- 10Hz data recording in office-compatible data format
- Interface to standard office software packages
- ARINC 424 database import
- Full replay and reprocessing functionality
- Menu, keyboard and dedicated function key operation
- Automatic report generation
- Electronic Flight Instrument System (EFIS)
- Fully compatible to AD-AFIS series
- Windows® 10 compatible
Inspection Capabilities

- Waypoint accuracy
- Bearing accuracy
- Distance accuracy
- FAS data block
- Navigation sensor error (NSE)
- V-NAV performance
- SBAS integrity, coverage, and interference
- For the primary and secondary SBAS satellite(s):
  - SBAS PRN being tracked
  - Signal-to-noise ratio (C/N0)
  - Elevation
  - Azimuth
- GNSS integrity
  - DOP, HPL, VPL, HIL, HPL, …
  - Signal-to-Noise Ratio (C/N0)
  - Elevation
  - Azimuth
- GNSS interference
- Flyability
- Radar coverage and accuracy checks
- Receiver Autonomous Integrity Monitoring (RAIM)
- Approach lighting systems

RNav: Result Page

<table>
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<tr>
<th>Flightplan</th>
<th>RNP</th>
<th>VNAV</th>
<th>HAL</th>
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Waypoint list

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We keep you on the best path!