

# Flight Inspection System of the radio navigation aids



## Computer - based Automation Systems



## OBJECTIVES:

CFIS-1 is used for the airborne evaluation of accuracy and performance of ground navigation facilities. The system provides the capability to inspect the following aids:

**ILS** (instrument landing system),  
**MKR** (ILS associated approach markers),  
**VOR** (VHF omnidirectional range),  
**DME** (distance measuring equipment),  
**NDB** (non-directional beacon system),  
**VHF** (communication) and **radar** systems.

It is a modern, computerized system designed for the acquisition, recording, processing, analysis, display, and reporting of flight inspection data. It acquires various conditional signals from the avionics.

## FEATURES:

- Facilities database
- System Parameters database
- Automatic calibration
- Mission database
- Mission replay capacity
- Run time analysis

## FUNCTIONS:

- Data acquisition 5 samples/second
- Data filtering
- Data recording
- Trajectory follow navigation
- Flight data management
- Checklist
- Real-time data display
- Real-time analysis
- Hardcopy report
- Post run data replay
- Flying map

## REFERENCES:

### ANGLE

Digital Radio Theodolite  
GPS  
DGPS (option)

### DISTANCE

GPS  
Selected DME receiver  
Speed and time



**CFIS 1**

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# NAVAID SIMULATOR

## FEATURES:

- works in real time
- 12 bits resolution for analog signals
- signals shape design possibility
- real-time on screen monitoring
- many references
- digital and analog communications
- embedded facilities database
- remotely controlled by laptop
- portable
- menu and active screen



## PROCEDURES

ANNEX 10 TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION  
MANUAL ON TESTING OF RADIO NAVIGATION AIDS Document 8071 ICAO  
FLIGHT INSPECTION MANUAL FAA



## SUPPORTS

NAV receivers  
DME transponder  
ADF receiver  
VHF receiver

## REFERENCES

Digital Theodolite  
GPS



## INTERFACE

8 x RS 232  
4 x ARINC 429  
IEEE 488  
8 x 12 bits D/A converters  
4 x composite generators