

# *Helicopter Air Data System*



- *Full three-axis air data*
- *Enhanced weapon delivery accuracy*
- *Easy retrofit to existing airframes*
- *High accuracy air data down to the hover*
- *Measurement of downwash velocity*

**GEC-Marconi**

## Helicopter Air Data System

The GEC-Marconi Avionics Helicopter Air Data System (HADS), comprising the omni-directional Airspeed and Direction Sensor (AADS) and High Integration Air Data Computer (HIADC), outputs accurate air data over the entire flight envelope to a variety of avionics systems.

Originally integrated into the Cobra AH-1S helicopter to enhance weapon delivery, over 1,400 HADS are in service on a wide range of platforms for both operational and research purposes.

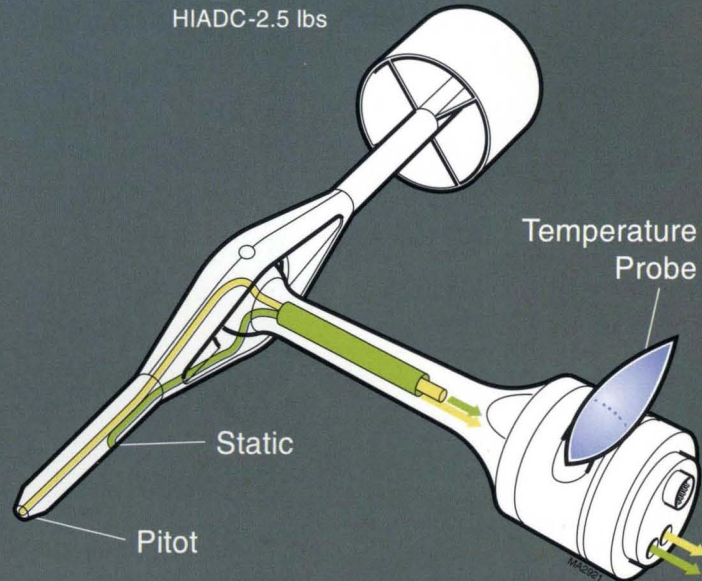
### System Description

A swivelling probe with pitot and static ports and an integrated air temperature sensor, provides accurate measurement of the air data in three axes.

HIADC receives pneumatic and air temperature inputs from the AADS; corrects for systematic errors and computes a full range of accurate air data parameters for output on a serial bus.

### HADS Characteristics

- Power 28V DC at 4.0W
- Reliability 20,000 hours MTBF (MIL-STD-217 ARW)
- Size AADS -Swivelling Probe 12.5"  
-Body assembly 10.0"  
HIADC 5.5 x 4.0 x 3.25"
- Weight AADS -2.5 lbs  
HIADC-2.5 lbs



### HADS has been installed on:

- McDonnell Douglas AH-64D
- Bell AH-1S Cobra
- Bell AH-1W Cobra
- Bell UH-1D/H Huey
- Agusta A-129 Mongoose
- Aerospaiale AS330 Puma
- Sikorsky H-60
- Sikorsky MH-60G
- Eurocopter BO-105
- Westland Mk-7 Lynx
- Westland EH101
- Boeing CH-47 Chinook

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