

Aircraft Environment Surveillance System (AESS)



**Integrated A380 avionics
increase cockpit efficiency**

Honeywell

Aircraft Environment Surveillance System (AESS)

Space and weight savings of 50%

Improved situation and traffic environment awareness for greater flight safety



Honeywell has successfully integrated some of the most widely-used and proven avionics equipment into the Aircraft Environment Surveillance System (AESS) to provide improved reliability and reduced costs for A380 operators:

- Enhanced Ground Proximity Warning System (EGPWS)
- TCAS & ATC/Mode S transponder with ADS-B
- IntuVue weather radar system

The AESS is the first truly integrated avionics surveillance system, available to the air transport industry, which optimizes performance by integrating weather, traffic and terrain awareness using Honeywell's proven safety and information products. Information is exchanged between the EGPWS, CAS 100 with Mode S/ADS-B transponders, and IntuVue™ 3-D volumetric weather radar to provide pilots with up-to-date flight safety information. Both weather and terrain information are displayed on a vertical situational display simultaneously to increase situational awareness. Integration also increases aircraft performance while reducing weight and volume by 50% to further reduce operating costs.

Enhanced Ground Proximity Warning Systems (EGPWS)

The industry's premier flight safety system includes a proven Terrain Awareness Warning System (TAWS) which uses aircraft inputs along with internal databases to predict potential conflicts between the aircraft's flight path and terrain or obstacles. EGPWS includes basic features such as peaks modes and obstacle detection and alerting. Software upgrades are offered for reactive windshear and the Runway Awareness and Advisory System (RAAS). EGPWS automatically adapts to phase of flight, aircraft dynamics and performance and is compatible with existing instrument procedures and Required Navigation Performance (RNP) approaches to increase cockpit efficiency and reduce operational costs.

Traffic Alert and Collision Avoidance System (TCAS/ACAS)

As the pioneer in TCAS technology, Honeywell has over 40 years of TCAS expertise. The CAS 100 system provides advanced collision avoidance protection and airspace situational awareness using the latest in processing technology and ADS-B functionality for increased aircraft surveillance, improved flight safety, and reduced operating costs. The processor is built to accommodate future upgrades for emerging user requirements and new technologies that will further enhance aircraft performance and maximize airline efficiency.

IntuVue 3-D Weather Hazard Detection and Avoidance System

IntuVue is the only advanced weather hazard system that creates a three-dimensional image of storm cells and displays weather out to 320 nm, and turbulence to 40 nm, in both plan and vertical views weather is then able to be dissected and analyzed by altitude and vertical heading. This improves the pilots ability to reroute their flight path sooner and chose the most efficient route to maximize passenger comfort and safety and to minimize fuel consumption. IntuVue's advanced features have demonstrated a 26% improvement in weather avoidance decision making and more than a 45% reduction in turbulence related incidents.

Find out more

For more information on the AESS system and Honeywell's advanced avionics offering, visit www.honeywell.com/ISS.

Honeywell Aerospace

1944 E. Sky Harbor Circle
Phoenix, AZ 85034
Toll Free: 1.800.601.3099
International: 1.602.365.3099
Fax: 1.602.365.2832
www.honeywell.com

Honeywell