

Bringing GPS inside a 7200m2 MRO Hangar

The Problem

Avionics are vital for the safe operation of modern aircraft and include navigation systems which utilise GPS and other satellite signals whenever in use. However, GPS signals are inherently low strength (-130 dBm) and are unlikely to be received inside buildings. This was increasing the costs of a major commercial Maintenance, Repair & Operations (MRO) facility in the UK in terms of manpower, fuel, utilities and time in order to get a plane outside the hangar just to get a GPS fix to test the aircraft's navigation system.

If an aircraft could remain inside the hangar for routine maintenance, personnel would not be required to move the aircraft in and out, thereby avoiding the need for a tow truck, a tow supervisor, brake person, wing walkers or a tail walker. Additionally, the hangar doors could remain closed achieving savings on heating or air conditioning and work could be scheduled far more effectively thereby reducing Aircraft on Ground (AOG) situations.

The Solution

A Chronos engineer carried out a detailed site survey which provided a thorough investigation of the area to receive GPS, the dimensions, access points, obstructions and detail mains power requirements. It also provided an installation method statement and risk assessment analysis to illustrate to the client what equipment would be used and where it would be installed. Following



our consultation the customer asked Chronos to supply and install a GPS L1 system that would give them in-hangar coverage for all aircraft around the clock.

"Chronos' professional approach sold their complete service to me. Their team of engineers operated to the highest standards and also ensured that the installation fully complied with OFCOM standards." He added "I'm extremely pleased with the system which is helping us to significantly lower overhead."

Hangar Crew Chief

CASE STUDY

Testing GPS inside a Hangar



Services

Chronos Technology provide a full range of accessories for distributing GPS signals including complete repeater kits, antennas, amplifiers, splitters, attenuators, filters and cables.

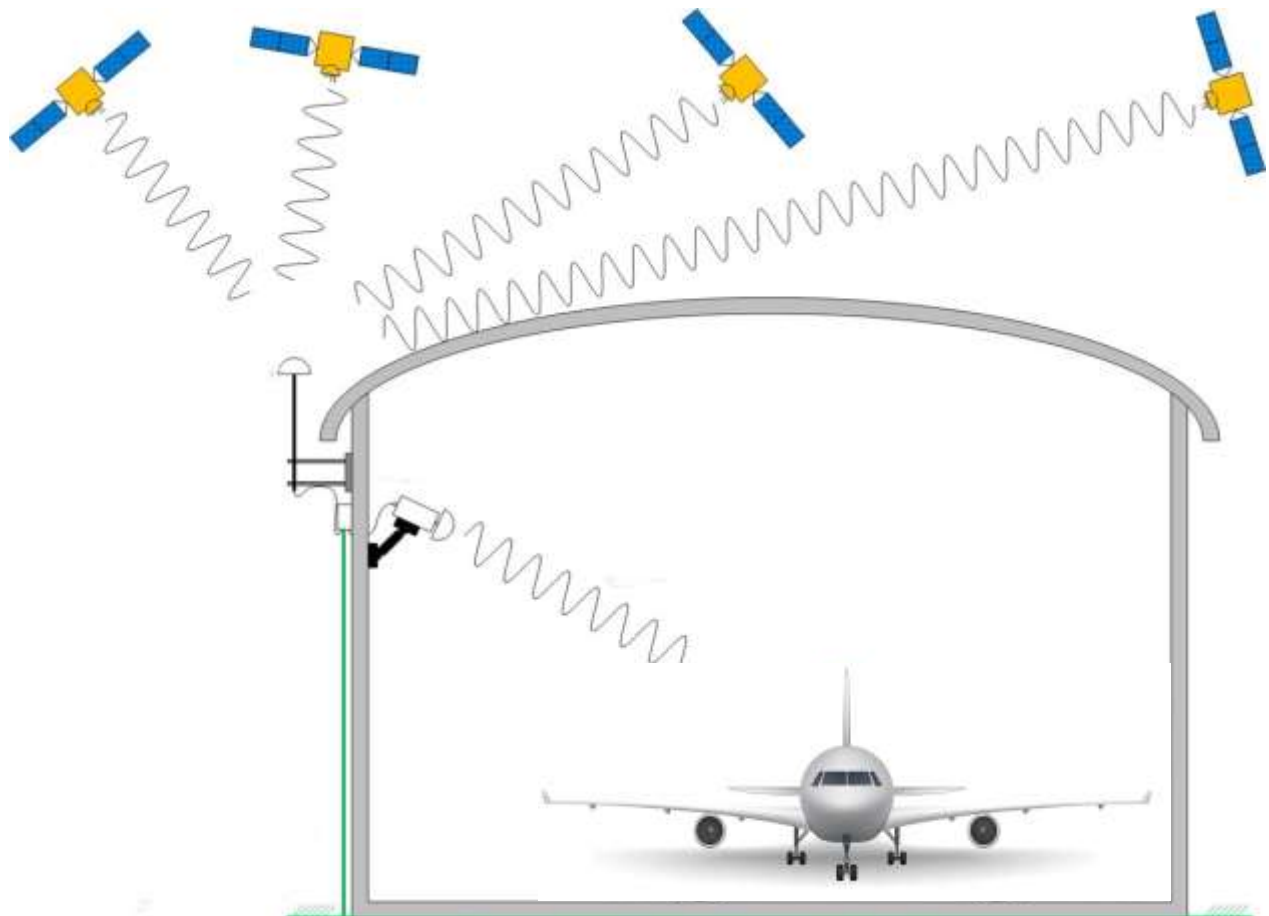
In all cases Chronos can also provide a full installation service from designing the layout and distribution of the solution through to comprehensive after sales support using the Chronos "Spares Support Plan". This starts with a site survey which ensures that even before commencing an installation the antenna, cable run and repeaters will all be placed at optimum points.

For further information please call Chronos Technology on the contact points below or visit www.gps-world.biz for more technical data and a quotation.

Benefits of GPS Repeaters in Hangars

- Cost Savings - Labour
- Cost Savings - Time
- Cost Savings - Heating/Air Conditioning
- Improved work environment
- ADS-B ready
- Constant GPS signal

CASE STUDY



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