

Affinity Microwave Link



Newcastle International Airport

Case Study

Affinity Licenced 1.4GHz Microwave System helps Newcastle Airport deploy new wide area Multi Lateration System.

Newcastle Airport are one of the first airports in the country to deploy a wide area Multi Lateration System. The system listens to information transmitted by air craft to compute their exact positions in 3 dimensions. This data is then transmitted to screens to be viewed by air traffic controllers for separation of aircraft.

As the system uses a series of ground stations they must be physically connected back to the central tower in Newcastle. The airport design team had to work out the best possible locations for the ground receiving equipment. A local Police mast was shortlisted as a potential site but little if any connectivity was possible using traditional wired infrastructure.

Affinity was approached to recommend a suitable microwave solution. The Airport mast is out of range of most unlicenced microwave equipment.

For the best possible interference immunity a 1.4GHz licenced microwave system was suggested. Normally used in the utility, oil and gas fields, it was ideal presenting effective connectivity with excellent propagation characteristics and low licence cots.

A full radio test was undertaken using a dedicated team. The tests were very positive and the Airport decided to go ahead with the installation.

As part of our installation a special fabricated bracket was needed for the Control Tower to ensure solidity and clearance from other antenna. Affinity worked alongside Airport designers to ensure everything was approved by the Civil Aviation Authority.

Affinity are contracted to provide spares coverage for the next 3 years. The link has been operational now for over 18 months with no reported outage.



- **In depth site survey & radio test prior to order**
- **Long range Ethernet 1.4GHz System**
- **Licenced System offers interference immunity**
- **Mounted directly to Control Tower**
- **3 Year virtual spares contract for on site engineering support**
- **Post installation Engineering Training**

"Affinity's approach, delivery and training were fantastic - a first class service"

Can we help you?

Discuss your Microwave Link requirement with us 0800 8402033

Please contact us sales@affinity-comms.co.uk