

## **Low Power ADS-B Transceiver**

Since early 2012, NATS has been working on a project that could introduce a light weight, low cost ADS-B transceiver to market.

Infringements into controlled airspace are a concern for everyone – they're a safety issue and can cause NATS operational delays. The issue is further magnified by the fact that infringing aircraft often aren't fitting with transponders and on some occasions cannot be detected by primary radar.

Previous attempts to persuade General Aviation pilots into fitting transponders have met with some limited success – the cost is often too great and the benefits to the GA pilot not easy to quantify.

Therefore, NATS is assessing the feasibility of introducing a relatively inexpensive ADS-B transceiver - a 'safety beacon for the skies' - for the GA market. The technology is fully interoperable with the existing ATC surveillance system and it would be reasonably straightforward for NATS to use ADS-B signals to augment its radar data.

The benefit to pilots would be a device that both broadcasts your position whilst also indicating to you other "ADS-B OUT" enabled aircraft in the vicinity.

The safety benefits to everyone involved are obvious.

NATS is now looking to procure a prototype device for testing over this coming summer. There is a lot of work to do to understand the optimum specifications for power output and range requirements and the quality of the GPS derived position.

In addition, there are questions over the need for signal certification that would need to be resolved before any product was brought to market. NATS is working with Helios to address some of these performance requirements

Yet despite these challenges, NATS is confident that an ADS-B enabled transceiver would be welcomed by the GA community and we would welcome your feedback on the proposal.