

Over the winter of 2016-17 PilotAware joined with the OGN to enhance the OGN Network so that aircraft equipped with PilotAware units can see gliders equipped with FLARM or OGN trackers. This has been done to increase safety between powered aircraft and gliders. By the end of April 2017 4 existing OGN, receive only sites, had been upgraded to OGN-PilotAware receive and transmit sites. These are at Bidford upon Avon, Shennington, Husbands Bosworth and Corby (Stoke). In addition, a new site was introduced at Wellesbourne Airfield.

The trial has been very successful and now PilotAware equipped aircraft flying to the South and East of Birmingham are able to be alerted of gliders in their area. The following heat map (bottom left) shows the extent of where transmissions have been achieved over the last 3 months. (Four experimental sites have also been installed at Popham, Thame, Guildford and Balerno in recent weeks but these are not yet at optimum performance).



The trial has met all expectations and has received much critical acclaim from users who are able to see when they are under the influence of the OGN uplink. The image above right is a screen shot from the PilotAware RADAR available from the users iPad. This was taken over the trial area (Actually the village of Ettington) and shows the active stations of Bidford, Shennington and Wellesbourne. The banner at the top left hand corner shows that the OGN uplink is available and how many stations are in range. Obviously the more the better.

The plan is now to roll out the enhancement of other existing OGN sites and also to use the Powered Flying community to fill in the gaps. With a useful 30Km range each station will provide overlap and redundancy. Whilst the map shows the extent of aircraft detected and serviced from just 5 stations in the Midlands, Thame and Popham this is not enough for everyday use and more stations will need to be bought on line.

Consequently, we are now seeking help from all areas to increase the reach. A new cell is about to be opened in Yorkshire thanks to the Military seeing the advantage of the uplink to let PilotAware users know about their Tucano and Tutor aircraft which are to be fitted with FLARM at Linton on Ouse and Topcliffe. In a short period of time 42 other sites have been identified and we will be rolling out these as soon as practicable.

The project is now looking for Money, Champions and Sites. **Money**, we hope that clubs, individuals and organisations will muster their resources and fund individual sites. Installation of a brand-new site should be less than £250 per site using commercially available antennas. An upgrade will be less than half of this. PilotAware will be providing the 869.5MHz Radio Bridge and Antenna at cost. A site will need power, the internet (it doesn't have to be fast) and somewhere to mount the antennas. **Champions**, we will be looking for Champions to co-ordinate the installation of ground stations on geographical areas. The software has been produced to make individual site configuration easy. **Sites**, as well as the existing OGN sites, we are exhorting powered flying clubs, individual users and organisations to fill in the gaps.

We are soliciting support from national bodies to assist in this amazing safety initiative. It can be either financial, technical or moral as well as the provision of champions and sites. Finally, we have we have just agreed the first sites covering parts of Poland and Germany. To help <mailto:ogn@pilotaware.com>