## TRIG ADS-B BE IN THE KNOW



Across the pond, the majority of American GA pilots are already flying with ADS-B technology improving their safety and visibility. So, what is ADS-B, what are the benefits of this technology and how do you install this in your aircraft?

### WHAT IS ADS-B OUT?

ADS-B (Automatic Dependent Surveillance - Broadcast) uses a transponder, typically combined with a GPS, to transmit highly accurate positional information to ground stations and directly to other aircraft. Aircraft with ADS-B Out provides air traffic controllers with 'pinpoint' positional and flight information data.

Aircraft, with a traffic receiver connected to a display (ADS-B In) can see other aircraft with ADS-B Out installed. This enhances aircraft visibility and importantly reduces the risk of air to air collision.

ADS-B uses satellite and transponder technology to provide the following potential benefits in an ADS-B environment:

- More aircraft can operate safely in the same airspace, so congestion is reduced.
- With appropriate equipment it's possible to have a live 'traffic picture' in the cockpit.
- ADS-B enhances flight safety and collision avoidance.

#### ADS-B BE SAFE FOR YOU AND OTHERS

In a busy flying club or flying school ADS-B can be of particular benefit. It improves situational awareness in the circuit, aircraft can be tracked, and conflictions avoided.

Russell Whyham of Air Navigation and Trading, Blackpool has installed a TN72 and said, "I can (now) see where my students are when flying solo so am very pleased with that."

By deploying ADS-B technology we can work together to make flying safer for everyone.

Retaining a good visual look out is vital but flying with ADS-B can enhance passenger and pilot safety. Why not do your part and help make the skies a safer place for everyone by getting equipped.

#### ADS-B BE SEEN WITH THE FINEST

You need three items for ADS-B Out – a Mode-S Transponder, a suitable GPS Position Source and GPS Antenna.



**Transponder** - Trig has a history of creating future proof avionics that are built to meet ICAO international standards. Our TT31, TT21 and TT22 Mode S transponders have always been ADS-B Out capable. If you are flying with a Trig transponder you are already halfway to being ADS-B Out equipped.

**GPS** – Trig's TN72 GPS Position Source is fully certified to TSO-C199. It is a highly affordable aid to pilots looking for certified ADS-B Out equipage, as it is a SIL 1 and SDA 1 device.

SIL 1 (Source Integrity Level of 1) and SDA 1 (System Design Assurance of 1) provides greater confidence that your GPS has been tested and proven as accurate and dependable.

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Critically, some ADS-B In Traffic Receiver products will <u>not</u> display aircraft information that is derived from devices which use lower quality SIL 0 and SDA 0 outputs. This data may be ignored and not shown on a traffic display, potentially rendering your aircraft invisible to others!

You don't have to compromise your electronic visibility when you fly with Trig. A TN72 will be visible across all types of ADS-B In equipment.

**GPS Antenna** – At Trig, we offer two antenna types. Our TA70 fully certified antenna can be installed on the outside of the aircraft and has a weatherproof gasket seal. Alternatively, the TA50 is a small, compact and affordable puck antenna. This can be installed anywhere in the aircraft as long as there is a clear sight of the horizon, within the cockpit is ideal. The TA50 is available in 1m and 3m lengths.



**HOW DO I INSTALL THE TN72?** 

This is a perfect winter project while your aircraft is in the hangar. A Trig ADS-B installation is extremely simple.

Firstly, you will need a Trig transponder. If you already have one installed, please make sure your software is up to date. You can ask you dealer or send it back to one of Trig's service centers for a free software upgrade.

Secondly, install a TN72 GPS Position Source. Being small and lightweight the TN72 can be installed away from the panel, allowing discrete installation and unlike bulky portable devices will not compromise your lookout. Installing a TN72 is a two-wire connection to the transponder remote backbox unit. It couldn't be simpler.

Thirdly, you will need to install your Trig GPS antenna. Our TN72 comes with a QMA connector so this is an easy and simple installation.

Once the TN72 is installed and configured with the transponder there is no further set up required. This allows all syndicate pilots, flight school pilots and private pilots to fly with no additional set up hassle.

Many pilots and flying schools have already installed the TN72 successfully.

Kate Reid of LAC Flying School, Barton said, "The installation was all that was required to set up and configure the equipment, it was essentially plug and play from our point of view. Having a TN72 fitted has proved to be very reliable and it 'comes on' without any problems when the transponder is switched on."

#### **HOW CAN I PURCHASE TRIG?**

Contact your Approved Trig Dealer today for the best price available. The TN72 GPS is an affordable solution at (verollinen hinta 430€, ei antennia)

Make a difference to safety in the skies and keep you and your passengers safe. Do your part, join other pilots now and become ADS-B Out equipped.





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