

TB20-G500 Avionics retrofit



STC DAHER-SOCATA
Installation of a PFD/MFD Garmin G500 on TB20 GT
With GPS/NAV/COM GNS530W/430W
and GAD43 Adapter unit for autopilot

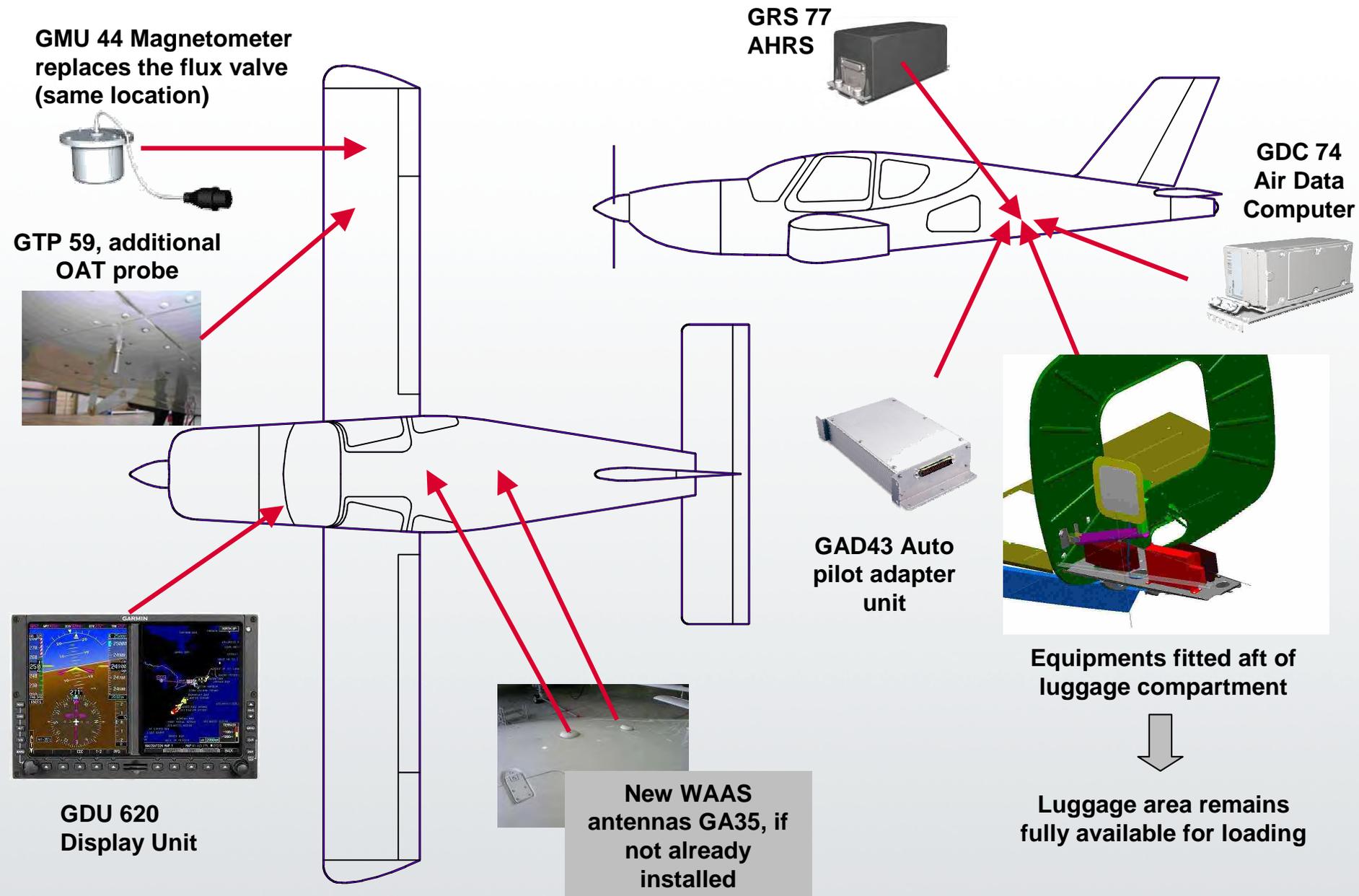
Garmin G500 retrofit is now available

Proposed By Daher-Socata the TB20 Manufacturer



- There is now a way to get a « glass cockpit » feel, but with all of the capabilities you wish to have with the G500 retrofit.
- Your old six-pack instrument layout will turn into a state-of-the-art digital command center with AHRS attitude/heading reference and dual 6.5 inch LCD displays.

Details of the modifications



How to proceed with your installation ?

DAHER-SOCATA offers two options.

1) **STC KIT**

You buy to Daher-Socata the STC kit which includes:

- Technical Instruction and blue prints for installation.
- Primary parts and accessories.
- Letter of Approval.
- P.O.H. supplement.

> Not included:

- *Garmin equipments, G 500 and GNS 430W/530W (if not already installed).*
- *Sigmatek stand-by gyro horizon.*

The installation is performed by a facility of your choice.

2) **Complete STC installation by DAHER-SOCATA**

Works performed by Daher-Socata in its factory Part145 repair station in Tarbes.

(including steps in option1)

Garmin G500 retrofit scenario

First step: Daher-Socata has developed the STC for TB20 GT.

Second step: Daher-Socata will extend the validity of the present STC for the GT models to all TB20 models.

Minor modifications will be needed to adapt the STC on your TB20 (depending on aircraft autopilot and Advisory Panel configurations).

Quotation provided on request.

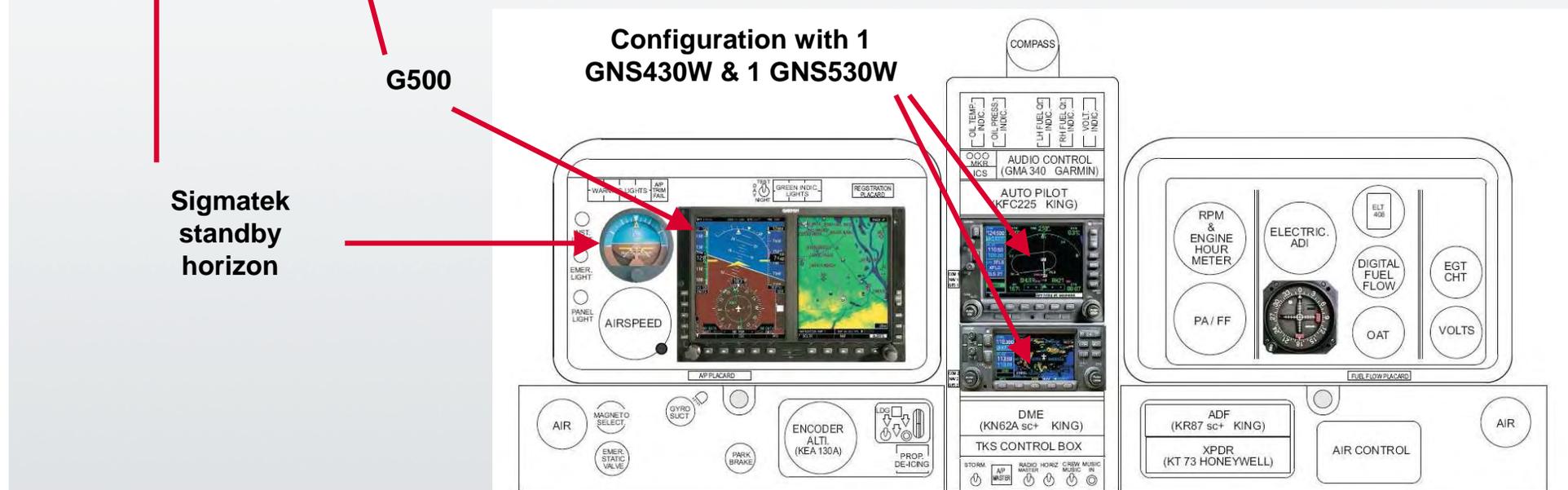
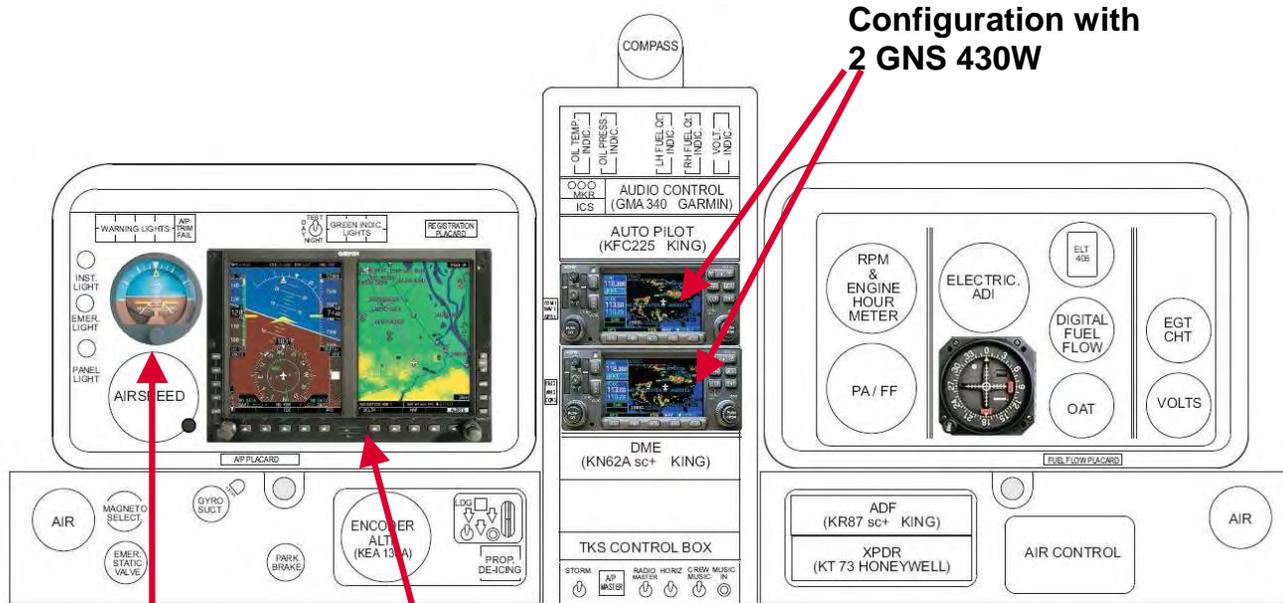
Before GT version



GT version



Exemples of avionics configuration



**Sigmathek
standby
horizon**

G500

- Result is a modern flight technology « glass cockpit » with two 6.5 inches diagonal flat panel LCDs positioned (GDU620) side by side, located in a 10 inch wide structure.
- The sensitive gyro mechanics replaced by a solid state Attitude Reference System (GRS77).
- GNS430W/530W is a WAAS/GPS unit with **PR-Nav** capability for IFR procedures. It provides VOR, localizer, glideslope information and includes VHF.
- G500 provides course deviation, vertical deviation, heading bug, course pointer and roll steering information to the autopilot.
- GAD43 is the adapter for G500 that provides analog attitude signal for use with autopilot systems. It interfaces with GRS77 for attitude and heading input signal.
- Completely new left instruments panel is a lightweight aluminium CAD-CAM piece, designed to position the GDU 620 and the 3 standby indicators in the primary field of view.
- The original alarm panel is kept and integrated in the new panel.

Comprehensive guide of the G500 retrofit

TBM850
by DAHER-SOCATA

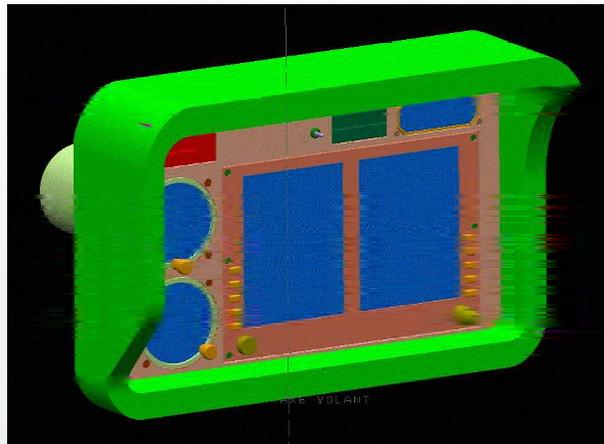
STC Daher-Socata provides your TB with an ergonomics design, as fitted on a brand new aircraft.

> A new standby pneumatic horizon is installed.

> The STC uses the existing standby anemometer and altimeter.



- Modification is designed, certified and manufactured by the aircraft Manufacturer.
- Thanks to a unique design, the Garmin display units are contained in a **flush mount design**.



- Structural stress analysis of the instruments panel was conducted to avoid any ageing problem of the supporting structure.
- Luggage compartment space remains the same.
- STC is compatible with a full de-iced aircraft.
- Alternate solution: Purchase the STC kit only, limited to mechanical parts.

For any request, please contact :

François Blumé, f.blume@socata.daher.com

Office phone: +33(0)5 62 41 76 75

Mobile: +33(0)6 87 80 24 36

