

## **CS-STAN**

### **Does CS-STAN allow the installation of Garmin GNS devices?**

#### **Answer**

The main functionality of these devices is COM/NAV/GPS. CS-SC052b (GNSS equipment) allows the combination with CS-SC001 (COM) and CS-SC056 (NAV). Thus its installation can be considered eligible for CS-STAN. However, the limitations of CS-SC052b have to be respected. In particular, any connection with an autopilot is not permitted, since such use would go beyond the limitation to situational awareness only.

#### **Last updated:**

25/05/2018

#### **Link:**

<https://www.easa.europa.eu/en/faq/46836>

### **Does CS-STAN allow the installation of Garmin GTN devices?**

#### **Answer**

The functionality of the Garmin GTN series exceeds the one covered by CS-SC052b and thus its installation is not eligible for CS-STAN.

Garmin is holding an STC with a comprehensive AML for the installation of the GTN series. In cases where a European type is not listed on that AML, due to the absence of a FAA TC, the process of a minor modification or Form 134 could be used to extend the applicability of the STC, if agreed by EASA.

#### **Last updated:**

25/05/2018

#### **Link:**

<https://www.easa.europa.eu/en/node/46837>

### **Does CS-STAN allow the installation of digital multifunction engine monitoring devices (e.g. EDM 900)?**

**Answer**

CS-SC201a explicitly excludes the installation of digital multifunction devices.

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25/05/2018

**Link:**

<https://www.easa.europa.eu/en/node/46838>

**Is there any AMC/GM related to CS-STAN?****Answer**

AMC to M.A.801: [Easy Access Rules for Continuing Airworthiness](#)

AMC to 145.A.50 referring to M.A.801

GM to 21.A.90B and 431B referring to M.A.801

**Last updated:**

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**Link:**

<https://www.easa.europa.eu/en/node/46839>

**Clarifications on installation of an ADS-OUT system combined with a transponder system (CS-SC005a) - Configuration 3****Answer**

This SC is for the installation of an ADS-B OUT system that is combined with a transponder in a single unit. The Configuration 3 describes the particular case of installation of a transponder that contains an ADS-B OUT system and a GNSS position source that is not approved.

Therefore, the conditions for configuration 3 shall read as:

- The ADS-B transmit unit forms part of the Mode S transponder equipment. The transponder equipment and its installation are compliant with CS-SC002c or later amendments, or are otherwise approved.
- The GNSS receiver is not approved or its installation is not certified. However, the compatibility of the combination of the transponder and the GNSS receiver is explicitly stated by the manufacturer of the transponder.

- The quality indicators are configured according to the manufacturer instructions to report the lowest quality (e.g. SIL = 0 and SDA = 0, NACp = 0). — The installation instructions from the equipment manufacturer have to be followed. EASA will implement this correction in a revision of CS-STAN issue 3 in the upcoming months, together with other corrections as necessary.

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18/07/2019

**Link:**

<https://www.easa.europa.eu/en/node/100695>

**Clarifications on installation of an ADS-OUT system combined with a transponder system (CS-SC005a) - Portable units****Answer**

The use of ADS-B portable units is not covered by CS-STAN.

Additionally, the usage of ADS-B portable units must be authorised by the National Aviation Authorities and by the Air Navigation Service Providers. Simultaneous ADS-B OUT transmissions from the same aircraft (e.g. installed + portable ADS-B OUT) has a negative impact on Air Traffic Services because it creates interference. Pilots and aircraft owners should make sure that an installed Mode S transponder does not broadcast ADS-B OUT parameters simultaneously with an allowed portable ADS-B OUT unit (e.g. as part of ADS-B trials organised by Air Navigation Service Providers). However, there is no restriction on the usage of an ADS-B IN only portable unit (reception of ADS-B transmissions).

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<https://www.easa.europa.eu/en/node/100696>