

FAA STC ST01841CH | EASA STC 01660

Installation of GPS Antenna Provisions on Boeing 747 Series Aircraft

OVERVIEW

- » FAA STC ST01841CH
- » European Aviation Safety Agency (EASA) STC 01660

Govern the installation of GPS antenna provisions in accordance with Electronic Cable Specialists (ECS) Master Data List ECS-201551.

YOUR NEEDS

Provides GPS antenna mounting provisions for Boeing 747 series aircraft.

YOUR BENEFITS

The complete system installation, which requires both the antenna provisions and activation packages, will provide precise GPS signals to any Flight Management System.

STC AIRCRAFT EFFECTIVITY

- » Boeing 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft.

STC LIMITATIONS

- » None

STC CONFIGURATIONS & LIMITATIONS

- » **Configuration 1:** 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft. Left side GPS antenna structural provisions.
- » **Configuration 2:** 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft. Right side GPS antenna structural provisions.
- » **Configuration 3:** 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft. Left side GPS antenna coax cable routing (antenna side coax cable with right angle TNC connector; LRU side coax cable with 180 degree BMA plug; total coax cable system loss of approximately 6 dB).

- » **Configuration 4:** 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft. Right side GPS antenna coax cable routing (antenna side coax cable with right angle TNC connector; LRU side coax cable with 180 degree BMA plug; total coax cable system loss of approximately 6 dB).
- » **Configuration 5:** 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft. Left side GPS antenna coax cable routing (antenna side coax cable with right angle TNC connector; LRU side coax cable with ARINC 600 Size 5 socket; total coax cable system loss of approximately 11.2 dB).
- » **Configuration 6:** 747-100/-100B/-200B/-200C/-200F/-300/-SR/-SP series aircraft. Right side GPS antenna coax cable routing (antenna side coax cable with right angle TNC connector; LRU side coax cable with ARINC 600 Size 5 socket; total coax cable system loss of approximately 11.2 dB).
- » **Configuration 7:** 747-200B/-200C/-200F/-300 series aircraft. GPS antenna structural provisions installation at frame station 1383.
- » **Configuration 8:** 747-200B/-200C/-200F/-300 series aircraft. GPS antenna structural provisions Installation at frame station 1405.

PRODUCT DESCRIPTION

- » Depending upon the configuration, this modification consists of structural provisions, either single or dual, installed on the upper fuselage for mounting a GPS antenna. Coax cables are installed and routed from the upper fuselage the electronics bay. The possible Configurations for this modification are listed in the STC Configuration Section.

ELECTRICAL CHANGES

- » **Configurations 3 – 6:** Antenna coaxial cables are run from the GPS antennas to the E&E compartment.

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MECHANICAL CHANGES

- » Configuration 1:
Install left GPS antenna structural provisions

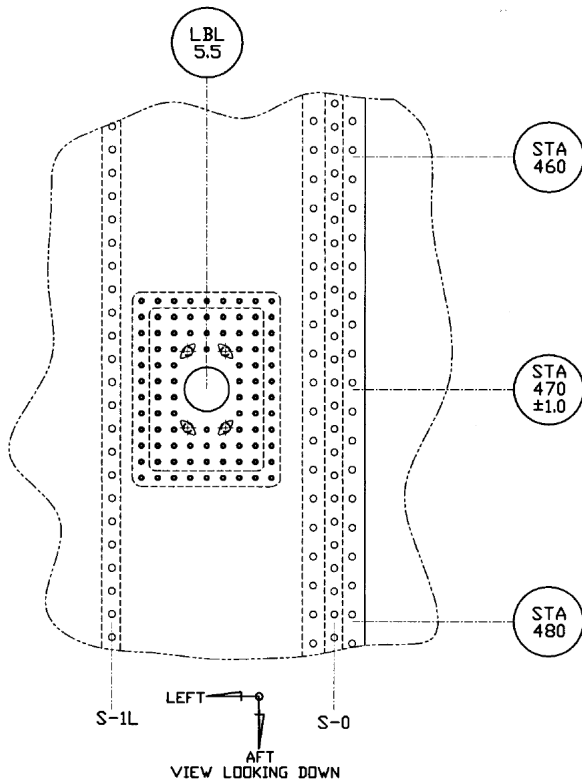


FIGURE 1:
Left GPS Antenna Structural Provisions

MECHANICAL CHANGES CONT'D.

- » Configuration 2:
Install right GPS antenna structural provisions

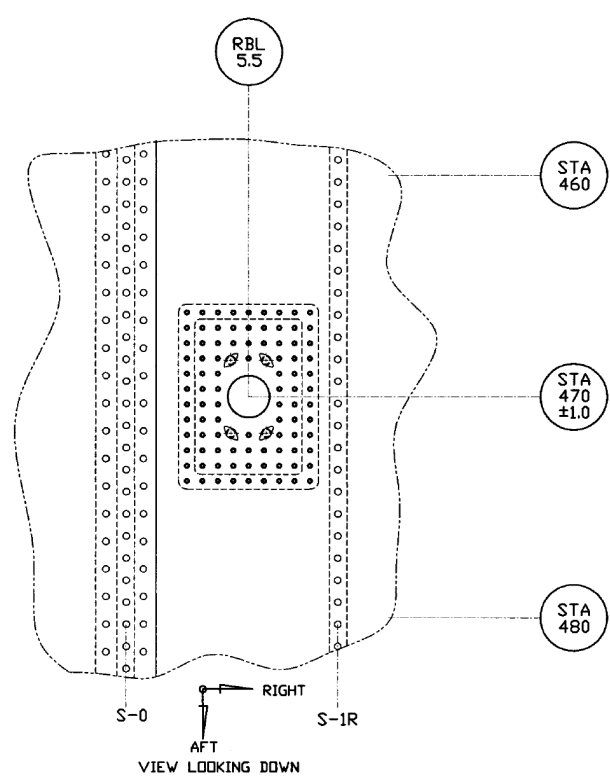


FIGURE 2:
Right GPS Antenna Structural Provisions

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» Configuration 7: GPS antenna structural provisions installation at frame station 1383

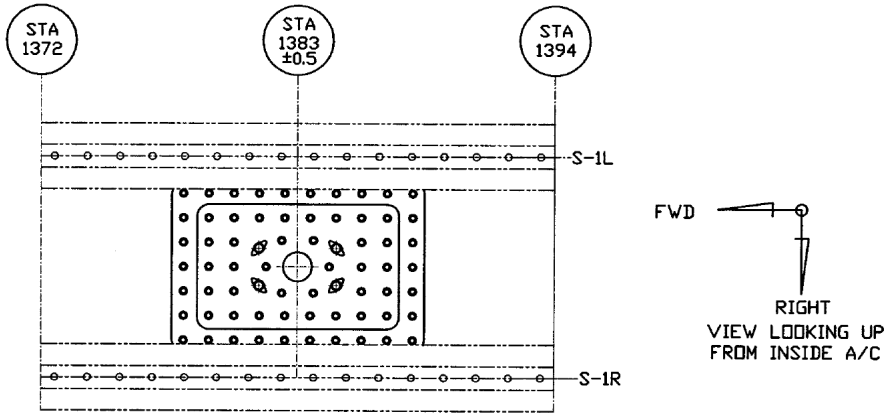


FIGURE 3:
GPS Antenna Structural
Provisions - STA 1383

» Configuration 8: GPS antenna structural provisions installation at frame station 1405

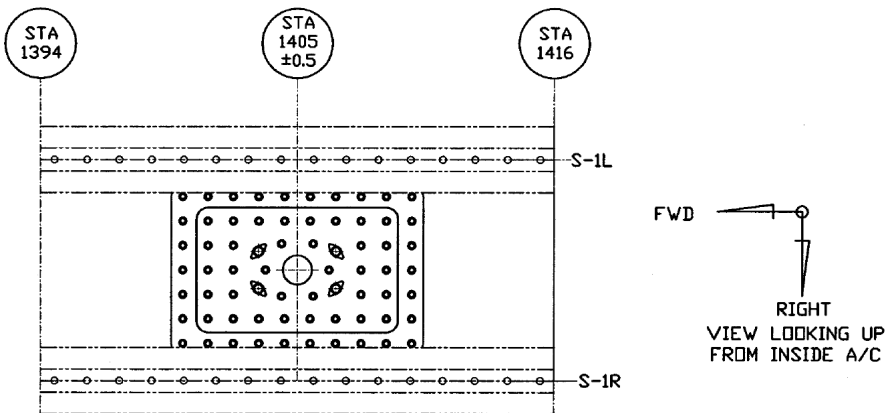


FIGURE 4:
GPS Antenna Structural
Provisions - STA 1405