

COMMENT RESPONSE DOCUMENT

EASA PAD No. 20-183

[Published on 20 November 2020 and officially closed for comments on 18 December 2020]

Commenter 1: Air New Zealand – Peter Taylor – 23/11/2020

Comment # 1

1. The PAD does not consider aircraft with IRS installed. We would appreciate it if the AD can include a further effectivity group for aircraft with the effective P/N GPS receivers and IRS installed. This group would reflect the configuration of the AirNZ fleet and would not require GPS receiver modification iaw compliance paragraph (1).
2. The compliance SB's ATR72-34-1164 and ATR72-34-1165, include NAS config s/w modification to reactivate GPS receiver SBAS function. For operators such as Air New Zealand, in non SBAS areas but within the shadow of other regions SBAS coverage, we would like the option to retain our current NAS config and keep SBAS function not activated. (i.e. no requirement for NAS s/w update). Therefore, we request a revision of SB ATR72-34-1164 and ATR72-34-1165 to retain the current NAS config (for operators in non SBAS areas).
3. Modification of the GPS receivers has previously been offered as an on-wing service completed by representatives of the OEM, Thales. Due to COVID restrictions, we do not believe this is practical. Therefore, modification of GPS receivers can only be completed by component modification in Thales repair centres. Thales are unable to support our current repair requirements (shop turn time). Therefore, the compliance time is insufficient for the world fleet to comply. We suggest increased compliance time is required and/or additional exchange units are provisioned by Thales.

EASA response:

Ad1.EASA disagrees. In coordination with ATR, following response is offered:

IRS is not considered as a mitigation mean, it is only a detection mean. Indeed, IRS allows detecting an erroneous GPS data and this would result in IRS coasting mode, which could have an operational impact on the remainder of the flight. Therefore A/C equipped with IRS cannot be excluded from EASA AD applicability.

Moreover, the intent of this new AD is to eradicate affected version of GPS receiver on RNP AR and LPV fleet, whatever the other elements of aircraft configuration.

Ad2.EASA disagrees. In coordination with ATR, following response is offered:



It has been evidenced that SBAS signals could be received by GPS operated outside SBAS areas, this is why all SBAS GPS are included in the applicability of EASA AD. In addition, new GPS RA01 eliminates SBAS issues and recovering GPS SBAS mode allows a better position integrity in the cases where SBAS augmentation position becomes better than non-augmented GPS position.

Ad3.EASA disagrees.

In the current pandemic, predictions regarding logistic arrangements are highly unreliable. Nevertheless EASA considers this unsafe condition as well-known through the previous AD 2019-0004. It is further considered in the interest of aviation safety to eliminate risks rather than mitigating them.

EASA issued the ETSO authorisation for the updated GPS receiver in October 2019. ATR issued the corresponding Service Bulletins in December 2019. The PAD comment period will end 18.December 2020. In light of these dates, the foreseen compliance time of 24 months after the effective date of the expected AD appears reasonable in the interest of safety.

No changes have been made to the Final AD in response to this comment.

Commenter 2: Iran Air – Hamid Soleimani – 13/12/2020

Comment # 2

Regarding PAD 20-183, as operators are totally aware if their regional flight spaces are not SBAS required areas, below suggestion is respectfully recommended to be considered as another means of compliance:

As it is illustrated in PAD Group 1 “aeroplanes are those that have an affected part installed and on which ATR modification (mod) 7180 or mod 7182 has been embodied in production, or on which SB ATR42-34-0194 or SB ATR42-34-0196 or SB ATR72-34-1143 or SB ATR72-34-1145 or SB ATR72-34-1154 has been embodied in service” are subjected to GPS Receiver replacement.

Following the mentioned mods and SBs stating “NAVIGATION - ACTIVATE RNP AR 0.3/1 NM FUNCTION”, SBs can be issued as “NAVIGATION - DEACTIVATE RNP AR 0.3/1 NM FUNCTION” as well. As a result, there would exist this possibility to choose either GPS receiver upgrade or aircraft alternation from group 1 to group 3 by reversion of mod 7180 or mod 7182.

EASA response:

EASA disagrees. Refer to comment #1 Ad.2 regarding reception of SBAS signals and potential for improved position integrity. For the same reason EASA would not promote reversion of mod 7180 or mod 7182 as being in contradiction with the safety initiative for PBN implementation.

No changes have been made to the Final AD in response to this comment.

