

Non-Compliance of ALLTEK / AMEC AIS Class B to Required IEC Standards*

Friday, 17th November 2017

This document has been prepared and issued by SRT Marine Systems to provide factual clarification following the recent public issue of an independent test report confirming non-compliance of ALLTEK / AMEC AIS Class B devices.

- SRT's sole objective is to ensure the integrity of AIS, and therefore its core operational performance and in turn the safety and security of all users.
- The overlaying functionality, form factors and quality of products differs between manufacturers - although also linked to the technical operation of the product - is not relevant to this particular notification of non-compliance with the IEC & ITU defined AIS Class B transceiver standard. SRT's statement is purely in relation to the specific performance requirements stated by the international AIS Class B standards.
- It is important to differentiate between testing and compliance with a specific international technical standard (such as AIS Class B) and product functionality and product quality; although all are ultimately interlinked. Quality manufacturers such as SRT will also submit their products to extensive additional testing based upon years of accumulated experience.
- The AIS technical protocol standards are defined by specific ITU and IEC standards, in the case of AIS Class B these are primarily defined by documents IEC62287 and ITU-M.R1371. These documents provide absolute clarity on the prescribed test methods and criteria which must be followed by manufacturers and test houses.
- Compliance with the technical standards exactly as specified is critical to the core performance of a product – this is particularly the case for radio communication products to ensure robust consistent performance and interoperability between products from different manufacturers. Independent testing is required for certification to ensure compliance and

therefore the underlying core performance and capabilities of the product. This in turn supports and enables product functionality.

- Issues arising from non-compliance with a technical standard, may not be immediately obvious to end users. But they may in fact be causing them to miss vital communications and performance functionality. In this specific case, the result will be missed transmissions and thus potential serious safety issues.
- TUV is the world's leading and largest government accredited test organisation, with decades of experience of testing radio communication products ranging from AIS to mobile phones. In SRT's 25 years of radio communication technology, product development and certification, they have always been the most challenging and are considered to be the gold standard. Independent testing by such organisations is used by responsible quality product manufacturers to aggressively challenge and validate the performance and functionality statements they make about their own products. TUV is accredited by USA and European governments and authorities. <https://www.tuv-sud.co.uk>
- For the avoidance of doubt SRT manufactured and supplied the NAIS400 and not the NAIS500. Any product based on SRT technology and or manufactured by SRT is either clearly marked or upon inspection the SRT logo and name can be seen on the electronics inside.
- The issue that caused the end users to return NAIS500 units was diagnosed as a poor connection between the internal GNSS antenna connector and the internal PCB. In SRT's opinion this arose from a combination of poor design and manufacturing. Although not manufactured by SRT, we repaired the units and returned to the users. This issue was in addition to the core performance non-compliance discovered during pre-dispatch product quality performance testing by our Customer Support Team. NAVICO was immediately notified.
- We note that AMEC does not deny and or refute that their AIS Class B is non-compliant to the requirements of the AIS Class B standard as defined in IEC62287.
- We note that AMEC seeks to mitigate the material issue of non-compliance with the IEC AIS Class B standard by suggesting that because AIS Class B's have two receivers they will cope with the issues that arise due to the material out of specification operation of the Alltek receivers. In SRT's opinion this does not make it acceptable for the

product to be non-compliant to the standard, nor does it in fact mitigate the user risks of not successfully receiving or transmitting.

- We note that AMEC's illustrated test set-up is incorrect and not compliant with the prescribed set up and methods defined in IEC62287-1 Ed3.0.
- In AMEC's report, they refer to 'another SRT AIS device' whose spurious response is different to the standards. This is misleading and factually incorrect since the test report they identify is for a different and unrelated product.
- All SRT products are designed, engineered and manufactured in Europe to the highest international standards. Only high quality materials and components are used. All products undergo extensive internal and external independent technical testing by fully accredited test houses, such as BSH and TUV. In addition every product undergoes extensive and prolonged functionality and reliability testing with professional mariners and coast guards. This extensive and robust testing ensures the highest possible quality and performance. All statements made by SRT about our products are fully supported by independent parties.