



Technical Circular

No.: 008/2023

Date: 15th May 2023

Subject: LRIT Transmission Failure due to GPS Rollover.

1. Non transmission of position by some Long-Range Identification and Tracking (LRIT) units have been reported due to GPS rollover which took place on 25 March 2023. This may have an impact on the Ship Security Alert System (SSAS) as well, if linked to the same terminal.
2. The reason for this malfunction is that the LRIT equipment has not been upgraded. Specifically, the LRIT model TT-3026X, which utilizes a GPS module from the manufacturer Garmin, has proven unable to manage the GPS rollover, causing glitches in the date/time stamp. The product has been declared end of service and there are no longer any software updates available. The only way to resolve the issue is to replace the terminal.
3. In view of above, Danish Maritime Authority (DMA) has advised ship Owners/managers to check the LRIT unit fitted onboard their ships. In case of malfunction, Recognized Organization is to be contacted along with proposal for replacement of faulty unit.
4. In case of unforeseen extraordinary circumstances, preventing the exchange of equipment, the Administration is to be notified and presented with an action plan for rectification of the LRIT unit.
5. Owners/operators and masters are advised to be guided by above and ensure compliance.

Enclosure:

1. Statement from Danish Maritime Authority regarding LRIT transmission failure, dated 13 April 2023.

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Information to Recognized Organizations and Danish shipping companies

13-04-2023

Our reference:

Case 2023118633

Office

/Niels Skriver Nielsen

Chief Ship Surveyor

Statement from DMA regarding LRIT transmission failure

The Danish Maritime Authority has been informed that due to a GPS rollover on 25 March 2023, some Long Range Identification and Tracking (LRIT) units may not be transmitting their positions. This may have an impact on the Ship Security Alert System (SSAS) as well if linked to the same terminal.

DANISH MARITIME AUTHORITY

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Denmark

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The Danish Maritime Authority acknowledges that delivery time of new equipment may be an issue and therefore accepts that ROs impose a statutory deficiency regarding this issue with a deadline for rectification until **1 July 2023**.

MINISTRY OF INDUSTRY,
BUSINESS AND FINANCIAL
AFFAIRS

In case of unforeseen extraordinary circumstances, preventing the exchange of equipment, the DMA must be notified and presented with an action plan for rectification.

In the meantime, the vessel may continue to operate.

Kindly also refer to the appendix from the manufacturer.

For further information or questions, please contact ro@dma.dk.

Appendix: Letter from Cobham Satcom (*on behalf of Thrane & Thrane A/S*), March 29 – 2023

Kgs. Lyngby, March 29 - 2023

To whom it may concern,

Regarding GPS rollover on Mini-C (TT-3026X)

Due to GPS Rollover some units of the Mini-C (TT-3026) are from March 25th – 2023 having errors in the Date/Time stamp.

The errors have been identified as caused by the GPS module (Garmin) used in some of the units being unable to handle the recent GPS rollover.

The error does not occur on all TT-3026X. Some TT-3026Xs are build using a GPS module from U-Blox. These are still OK.

The TT-3026X in the field are +13 years old.

The product has been declared End of Service for some time and can no longer be updated to new GPS settings.

Signed for and on behalf of Thrane & Thrane A/S



Niels Peter Agdal

Cobham SATCOM