

Technical Notice

TD 9778/2019

Dated: 01.03.2019

SUBJECT:

Global Positioning System (GPS) Week Rollover Event

On **6 April 2019**, how Global Positioning System (GPS) devices display time may be affected by a change in the GPS navigation message signals.

The way GPS broadcasts time and date information involves a 10-bit week number (0-1,023), which resets or "rolls over" every 1,024 weeks or approximately 19.6 years. The next week number rollover will occur on 6 April 2019.

The 2019 GPS Week Number Rollover could have a potential effect upon GPS receivers (including GPS sensors and GPS receivers embedded within multifunction displays, chart-plotting products, AIS receivers and VHF radios) and any of their features dependent on date/time information.

Owners of ships fitted with equipment reliant on GPS signals, should:

- Ensure the equipment's firmware is up to date
- Contact the manufacturer to ensure the equipment will not be adversely affected by this event.

For further information see Department of Homeland Security release of the memorandum titled [U.S. Owners and Operators Using GPS to Obtain Time](#)