

Cobham SATCOM Global Technical Service dept.

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TT-3020C & TT-3022D GPS/Wrong time issue.

Subject:

There is a software issue in the Garmin GPS module, and is why the UTC time is wrong. The problem is the year format, which is why you are getting 65516:65508:65517 as UTC time. When the time in the 3020C transceiver is wrong, the 3606E Message Terminal will make a watchdog reset and it will reboot again and again.

Priority:

• **MEDIUM:** It is recommended to apply this change on all non-working units.

Solution:

- You can upgrade the Garmin module with new configuration and software. With software version 2.50 and new configuration the Garmin module working fine again. Please see below for more info.
- 2. You can also send the GPS module back to your local RWS, or the transceiver unit, and they will be able to help you.
- 3. You can switch off for the internal GPS with the command se -z BGPS=OFF please see below. Please remember switch off and on for the 3020C before you will see the GPS is off. When the internal GPS is disabled, you can connect an external GPS to the connector X4 pin 12 and 13. Pin 12 = RX in, Pin 13 = Signal GND.

- 4. If you have an external GPS connected to the transceiver NMEA input, please be sure the GPS fulfill the European Wheelmark IEC61162-1 standard. If not the transceiver can't update the position from the external GPS.
- 5. You can also replace the Garmin GPS module, with a working module. We have sold the Ublox GPS module for the last 4 years, and the Ublox module has no issue and working fine.

GPS status with wrong UTC time.

```
x
GPS Status last updated at 01-12-2014 11:00:00
                      11 visible satellites
 Test Summary: OK
                                                 SW Version 25.2.50
   Navigation Mode: 1 FOM: 1 UTC: 1
   Accept Altitude: 0 Hold: 0 VPerr: 13 m
PDOP: 02 HDOP: 01 HPerr: 7 m
Elevation mask: 00 HVerr: 0 cm
                                     VPerr: 13 m
                                     HVerr: 0 cm/s
 Satellite Tracking Status
   Satellites: 01* 04* 11* 14* 18*
   Signal Level: 50 50 51 50 46
   Elevation: 30 63 50 27 19
                269 262 273 114 055
   Azimuth:
 V. Speed :
                0 ft/m Altitude:
                                       65516:65508:65517 UTC
 Position : 57 00 23 N 009 55 89 E at
 Course : 000 deg/true north
 Speed : 000 knots : 0000 kmph : 0000 mph
```

Switch the GPS module off in transceiver unit:

: se -z

- 1: PRINTER=YES
- 2: PPAGING=NO
- 3: PLINES=53
- 4: FFEED=NO
- 5: TZ=MET0:0

:

:

```
: se -z BGPS=OFF

:

: se -z

1: PRINTER=YES

2: PPAGING=NO

3: PLINES=53

4: FFEED=NO

5: TZ=MET0:0

6: BGPS=OFF
```

Update configuration in Garmin module:

You should connect your computer via a standard RS-232 interface to the GPS module.

You can download software version 2.50 and SNSRCFG_320 tool via the link below.

http://www8.garmin.com/support/collection.jsp?product=010-00124-00





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