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SAILOR VSAT **SW ver. 1.57 Build 021**

Subject:

Please be informed that new software, version 1.57 build 021 for SAILOR 60 GX – SAILOR 100 GX, has been released.

Priority:

- **HIGH:** It is highly recommended to apply this change / initiative to all systems.

Changes from SW ver. 1.54 Build 012 to SW ver. 1.57 Build 021

- **New features and improvements:**
 - Furuno updates
Terminal ID, acuvendor, SAILOR 60 GX, SAILOR 100 GX
 - rftype 1011 for FV-100GX.
 - rftype 1012 for FV-60GX.
 - Self-refreshing Dashboard.
 - Added options for extra modem and BUC diagnostics. Appendix II.
 - Enabled in the help desk, shown in diagnostic report
 - Line-up available
 - Added Cross-Elevation Bearing performance optimization. Appendix I.
 - Minimize friction by improving distribution of grease in bearing.
 - Added support for X7 Modem on GX systems
 - Now possible to switch between Ka and GX by changing modem profile.
 - Improved tracking algorithm for SAILOR 60 GX
- **User related bug fixes:**
 - Auto recovery after antenna shutdown corrected
 - Possibility for spurious FDM shutdown corrected on SAILOR 60 GX
 - RF performance improvements after auto-recovery
 - GNSS Position on Dashboard showing position with an offset to the D° M". Appendix III.
 - Bug Fixed. GNSS Position now shown in degrees and decimal degrees
- **Known problems:**
 - None

Release history

Changes from SW ver. 1.50 Build 036 to SW ver. 1.54 Build 012

- **New features and improvements:**
 - New WEB MMI layout. (see appendix)
 - New Navigation menu.
 - Heading: External, Fixed, None
 - GPS: Possible to manually input GPS position. (see appendix)
 - Support for new GNNS module.
 - GPS, Glonass, BeiDu is supported with the new Hw installed. (see appendix)
 - SNMP Trap support (see appendix)
 - For info. See the MIB file.
 - Remote syslog (see appendix)
 - Improved heading handling (GPS compass)
 - SAILOR 60 GX support
- **User related bug fixes:**
 - EVENT LIST: UTC shows local time
- **Known problems:**
 - None

Changes from SW ver. 1.50 Build 016 to SW ver. 1.50 Build 036

- **New features and improvements:**
- **User related bug fixes:**
 - Antenna does not respond to a 'jog command' Fixed
- **Known problems:**
 - None

Changes from SW ver. 1.48 Build 129 to SW ver. 1.50 Build 016

- **New features and improvements:**
 - Complete support for SAILOR 100 GX and GX upgrade kit.
 - Azimuth calibration using active satellite profile.
 - "Just click and calibrate"
 - Stores previous sw ver. for easy roll back.
 - "Just click and roll back previous sw ver."
 - Extra options on Generic modem setup (RSSI / Rx-LOCK)
 - Reacquisition based on RX-lock status (high / low - threshold)
 - Additional RX Locked status on the Dash Board – VSAT Modem.

- **User related bug fixes:**
 - Reacquisition in 'Generic Modem mode' based on RX-lock status.
 - Recalibration of ZRM/encoders before acquisition to minimize influence of radar interference in the encoders.
 - *The fix will make the ADU more robust, but not fix the entire interference issue when the ADU is installed within the +-15 deg radar beam.*
 - Occasional PMM POST failure after reboot.
 - Changing admin password using POST.
- **Known problems:**
 - Issues with iDirect Serial modem sw version 15.0.0.X.
 The SAILOR VSAT does not get the Tx frequency parameter from the modem. This will result in a warning on the SAILOR VSAT.
 The Tx frequency used for the cable calibration will then be set to 1.225Ghz for best possible performance.
 Note: With sw. ver. 1.48 build 114 and lower, the SAILOR VSAT will raise a permanent alarm, and will not be operative.

Software upload procedure.

1. Extract the "SAILOR VSAT - GX Software 1.57B021.zip" file
2. Open an Internet browser on the PC and enter the web address to the SAILOR VSAT/GX at <http://192.168.0.1>.
3. Select **ADMINISTRATION**.
 Enter **ADMINISTRATOR LOGIN**:
User name: (default = admin (case sensitive))
Password: (default = 1234)
4. Locate UPLOAD SOFTWARE TO TERMINAL , Browse, and select the new software file tt7xxx_1.57-21-acu.tiif
5. The SAILOR VSAT/GX system will reboot,
6. Verify that the page shows the new software version numbers currently loaded in the ACU.

This concludes the SW upload procedure.

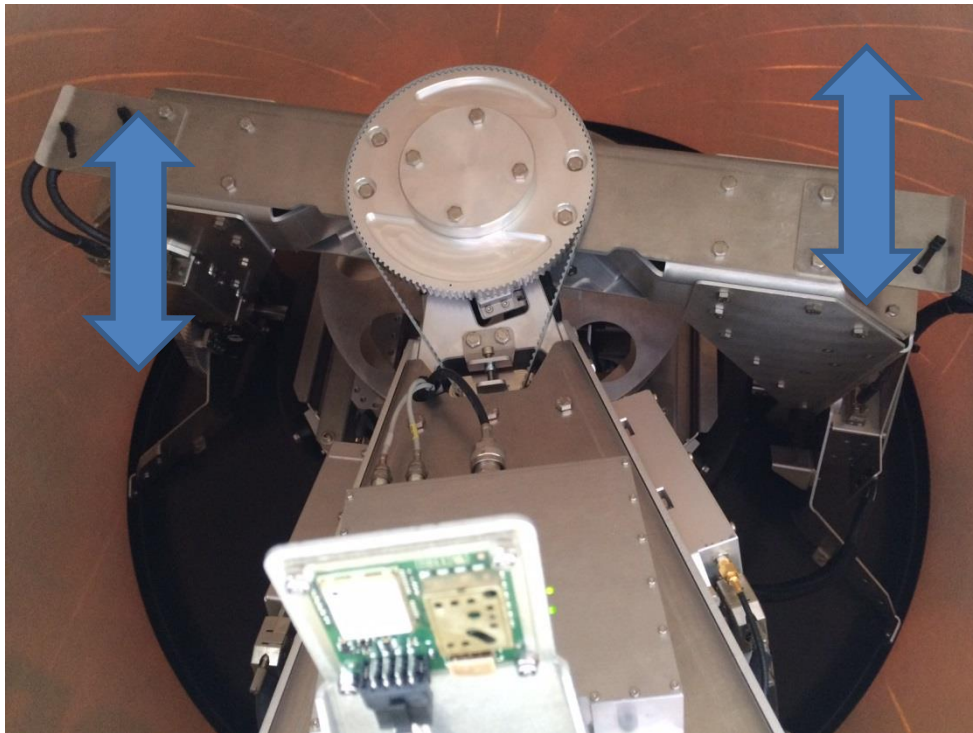
Appendix I.

Cross-Elevation Bearing performance optimization.

To achieve a good grease distribution in the X-elevation bearing, on vessels with a minimum of motions, the X-elevation bar is now moved $\pm 20^\circ$ within a period of 8 hours. (0 \rightarrow $+20^\circ$ \rightarrow 0 \rightarrow -20° \rightarrow 0, in a linear pattern)

That will help minimizing the friction in the bearing.

If the vessel motions increases (**roll** $> 10^\circ$) this function is stopped and the X-elevation bar is moved back to horizontal.




Appendix II.

Extra modem and BUC diagnostics

COBHAM

RX : ■■■■■□
Tracking
adu-acu34 - SAILOR 100 GX

<p>DASHBOARD</p> <hr/> <p>SETTINGS</p> <hr/> <p>SERVICE</p> <hr/> <p>ADMINISTRATION</p> <hr/> <p>HELPDESK</p> <ul style="list-style-type: none"> • Support <hr/> <p>Event list</p> <hr/> <p>Self test</p> <hr/> <p>SITE MAP</p> <hr/>	<p>SUPPORT</p> <p>Contact</p> <p>For help, please contact Please enter support information here</p> <p>Mib file</p> <p>Download MIB file</p> <p>Legal information</p> <p>Legal notices</p> <p>Download reports</p> <p>Diagnostics report Download</p> <p>Statistics report day ▾ Download</p> <p>Extra diagnostic log</p> <p>Modem <input type="checkbox"/></p> <p>BUC <input type="checkbox"/></p> <p>Apply settings Apply</p>
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From Diagnostic report:


2016-11-23T10:26:41.047327+00:00	adu-acu34:	ADU_IF_XST: 2 st=Norm;Acq[90]Dep: zc= nav=AIPt/AIPtCDPX TxA=EY=N 49.6 dm bhdg=0 az/el=179.6/35.1 ss=1-10 chyz=0.00/0.00/0.00
2016-11-23T10:26:41.049986+00:00	adu-acu34:	ADU_IF_XST: 2 st=Norm;Acq[90]Dep: zc= nav=AIPt/AIPtCDPX TxA=EY=N 50.6 dm bhdg=0 az/el=124.7/12.7 ss=15.20 chyz=0.00/0.00/0.00
2016-11-23T10:26:54.695070+00:00	adu-acu34:	DEMOD: WxLxLo: 1TxOn=1BucOn=0
2016-11-23T10:26:54.695070+00:00	adu-acu34:	ADU_IF_XST: 2 st=Norm;Acq[90]Dep: zc= nav=AIPt/AIPtCDPX TxA=EY=Y 50.03 dm bhdg=0 az/el=124.6/12.7 ss=14.90 chyz=0.00/0.00/0.00
2016-11-23T10:27:04.2508675+00:00	adu-acu34:	ADU_IF_XST: 2 st=Norm;Acq[90]Dep: zc= nav=AIPt/AIPtCDPX TxA=EY=Y 50.06 dm bhdg=0 az/el=124.6/12.8 ss=14.70 chyz=0.00/0.00/0.00
2016-11-23T10:42:42.685414+00:00	adu-acu34_vmu:	MVU-ACU_L1: 1
2016-11-23T10:42:43.103999+00:00	adu-acu34:	GX_IF: BU-C-BUC-VMU: c0 13 00 00 c0 02 00 05 f5 c0
2016-11-23T10:42:43.171774+00:00	adu-acu34:	GX_IF: BU-C-BUC-VMU: c0 08 00 c0 02 00 16 f6 c5 62 65 64 2c 67 70 69 f6 f5 30 2c 42 44 49 50 f5 30 00 f6 c6
2016-11-23T10:42:45.296905+00:00	adu-acu34_vmu:	ACU-VMU: v = 55.79346 12.52298 1169339295 87.211
2016-11-23T10:42:46.704489+00:00	adu-acu34:	ADU-ACU_K: K 9.0 0.0
2016-11-23T10:42:48.123996+00:00	adu-acu34:	GX_IF: VMU-BUC: c0 04 00 c0 03 00 01 e5 c0
2016-11-23T10:42:48.179554+00:00	adu-acu34:	GX_IF: BU-C-BUC-VMU: c0 08 00 c0 03 00 04 42 53 34 41 30 30 31 37 68 41 33 35 52 54 45 44 50 3d 2b 32 37 29 36
2016-11-23T10:42:48.187431+00:00	adu-acu34:	GX_IF: VMU-BUC: 46 53 04 41 54 55 53 34 c6 f6 c6 f6 61 62 c6 f6 72 d6 61 62 c6 f6 75 74 70 75 6e 72
2016-11-23T10:42:48.193927+00:00	adu-acu34:	GX_IF: BU-C-BUC-VMU: f6 72 d6 61 62 c6 f6 72 d6 61 62 c6 f6 75 65 6d 70 c0 51 66 c0
2016-11-23T10:42:50.296906+00:00	adu-acu34_vmu:	ACU-VMU: v = 55.79346 12.52298 1169339295 87.349
2016-11-23T10:42:52.707555+00:00	adu-acu34_vmu:	MVU-ACU_L1: 1
2016-11-23T10:42:53.133995+00:00	adu-acu34:	GX_IF: VMU-BUC: c0 01 00 00 c0 00 99 64 c0
2016-11-23T10:42:53.1771771+00:00	adu-acu34:	GX_IF: BU-C-BUC-VMU: 81 08 00 c0 29 c6 f6 c6 f6 63 c6 66 61 66 6e 72 6d 61 62 c6 f6 75 74 70 75 6e 72
2016-11-23T10:42:53.181334+00:00	adu-acu34:	GX_IF: BU-C-BUC-VMU: 6d 61 c6 f6 72 6d 61 62 c6 f6 75 65 6d 70 c0 63 c6
2016-11-23T10:42:54.579047+00:00	adu-acu34_vmu:	ACU-VMU: v = 1.0
2016-11-23T10:42:55.297307+00:00	adu-acu34_vmu:	ACU-VMU: v = 55.79346 12.52298 1169339295 87.233

NOTE: Be aware that ACU-modem communication will fill up the log very quickly as status commands are sent very often.

Appendix III.

GNSS Position now shown in degrees and decimal degrees

COBHAM

RX :  Tracking adu-acu32 - SAILOR 100 GX

- DASHBOARD
- SETTINGS
- SERVICE
- ADMINISTRATION
- HELPDESK
- SITE MAP

DASHBOARD

GNSS position	55.79° N, 12.52° E	ACU part name	TT-7016B
Vessel heading	4.8°	Antenna part name	TT-7009C
Satellite profile	GX profile	ACU serial number	70160007
Satellite position	62.6°E	Antenna serial number	70090002
RX polarisation	Left hand circular	Software version	1.57 build 21
TX polarisation	X-pol	POINTING	
RX RF frequency	20.177760 GHz	Azimuth, elevation geo	124.7° 12.8°
LNB LO frequency	18.250000 GHz	Azimuth, elevation rel	118.7° 12.2°
BUC LO frequency	28.050000 GHz	TX	
Tracking RF frequency	20.177760 GHz	BUC TX	On
MODEM			
Model	Inmarsat GX modem		
RX locked status	Locked		
RX IF frequency	1927.760000 MHz		
TX allowed	Yes		

Previous shown in degrees - Minutes (D° M") with the 'Decimal degrees to Minute conversion' not always done correctly

DASHBOARD	
GNSS position	55°47' N, 12°31' E