Sportsman Service Bulletin 66

<u>Subject</u> :	VHF COM Interference Check with Garmin 430W / 530W series GPS / COM units
Applicability:	IFR equipped Sportsman with Garmin 430W or 530W series GPS /Com installations
<u>Issue</u> :	VHF interference with the GPS signal on Garmin 430W and 530W equipment
<u>Compliance Time</u> :	A VHF COM interference check must be accomplished prior to IFR flight with these installations.

Discussion and Background Information:

It has come to our attention that when transmitting on their COM radio, some customers are experiencing VHF interference with the GPS signal to their Garmin 430W and 530W equipment resulting in a partial or complete loss of the GPS signal.

The loss of GPS signal when transmitting may affect your autopilot if it is in GPS tracking mode. If you lose the GPS signal, the autopilot will shift from GPS tracking to NAV tracking.

We are working on a solution to the problem and will issue a follow-up service bulletin with our findings.

Do not attempt flight into IFR conditions if your installation fails the following tests.

<u>Required Action</u>:

- 1. All other avionics should be turned off at the start of this test. Turn on the GNS 430W or GNS 530W series unit.
- 2. Upon acknowledgment of the Instrument Panel Self-Test Page, the Satellite Status Page is displayed. If the unit is unable to acquire satellites, move the aircraft away from obstructions, which might be shading the GPS reception. If the situation does not improve, check the GPS antenna installation.

Once GPS position information is available, perform the following steps:

1. On the Satellite Status Page, verify that the lat/long agree with a known reference position.

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COM Units				

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- 2. While monitoring the Satellite Status Page, turn on other avionics one at a time and check the GPS signal reception to make sure it is not affected (no significant signal degradation).
- 3. Before proceeding with the VHF COM interference check, ensure that any connected equipment is transmitting and / or receiving data from the GNS 430W or GNS 530W series unit and is functioning properly.

VHF COM Interference Check (Note: The interference check must be completed on all IFR installations).

Once the Signal Acquisition Test has been completed successfully, perform the following steps:

- 1. View the Satellite Status Page and verify that al least 7 satellites have been acquired on the GNS 430W or GNS 530W Series unit.
- 2. Verify that the GPS "NAV" flag is out of view.
- 3. Select 121.150 MHz on the COM transceiver to be tested.
- 4. Transmit for a period of 35 seconds.
- 5. Verify that the GPS "NAV" flag does not come into view.
- 6. Repeat steps 4 and 5 for the following frequencies:
- 25 kHz COM Channel Spacing

131.225 MHz
131.250 MHz
131.275 MHz
131.300 MHz
131.325 MHz
131.350 MHz

7. Repeat steps 3 through 6 for all remaining COM transceivers installed in the aircraft.

Do not attempt flight into IFR conditions if your installation fails the tests.

If the GPS NAV Flag comes into view while performing the test, contact the Glasair Aviation Technical Support Department at <u>technicalsupport@glasairaviation.com</u> or call the Technical Support line directly at 360-435-8536 and report your findings.

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