

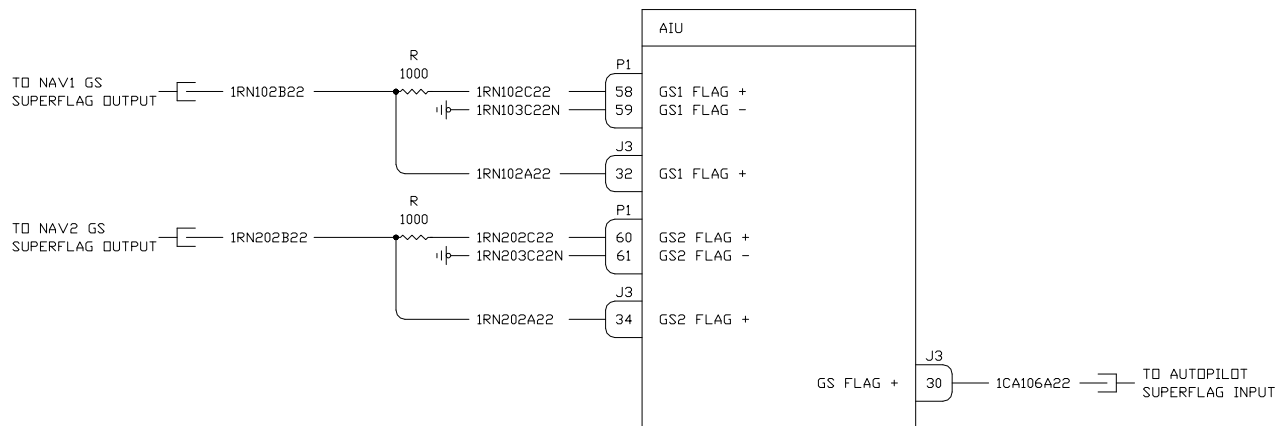
SERVICE INFORMATION LETTER 014

February 7, 2005

Subject: Using Glideslope Superflag with the AIU

This Service Information Letter is to inform installers on the proper wiring required to interface the Chelton Analog Interface Unit to a Nav receiver using the Glideslope Superflag signal.

A +24VDC Glideslope Superflag signal can potentially cause the Glideslope flag detectors that are fed from the P1 – Pins 58/59 (Glideslope1 Flag) and P1 – Pins 60/61 (Glideslope2 Flag) to fail resulting in the loss of Glideslope presentation on the EFIS displays. If the interface between an existing Nav receiver and the Chelton AIU are to use the Glideslope Superflag signal for a valid signal and to drive the aircraft’s autopilot, the following modification must be used.



- A 1000 Ohm, ½ Watt resistor must be installed in series with the P1 – Pin 58 (for Glideslope1) and P1 – Pin 60 (for Glideslope2) to protect the input of the AIU flag detect circuitry.
- AIU P1 – Pin 59 and P1 – Pin 61 must be wired to signal ground.
- Glideslope Superflag input can be fed directly into J3 – Pin 32 and J3 – Pin 34 for autopilot control.
- Switched Glideslope Superflag output will be sent to the autopilot on J3 – Pin 30.

The installer will obtain a 1000 Ohm, ½ Watt, axial lead resistor locally and install in the wire bundle as close to the P1 connector backshell as possible without placing excessive strain on the resistor,

leads, or solder joint (2 inches minimum). The installer will protect the resistor(s), leads and solder joints with heat-shrink tubing or similar material rated for aircraft use. The resistor assembly will be restrained in the wire bundle with an appropriate method as shown in AC 43.13-1B, Chapter 11, Sections 12, 13, and 16 as required.



Robert DuRall
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