


REV	A	APPLICATION			REVISIONS		
		PRODUCT LINE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
SH	1	IDU-III	A	Initial Release per DCN W3906	08/30/04	V. Wallace	
DWG. NO.	150-045019						

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<p>APPROVALS</p>		<p>DATE</p>	 <p>Wulfsberg Electronics <i>A Chelton Group Company</i></p>			
DRAWN	L. Evans	08/30/04	<p>TITLE:</p> <p>SERVICE BULLETIN WSB IDU-III-12 (KN-53 GLIDESLOPE INTEGRATION)</p>			
CHECKED	D. Boston	08/30/04				
PRODUCT MANAGER	D. Boston	08/30/04				
ENGINEER			SIZE	CAGE CODE	DWG NO.	REV
ISSUED	V. Wallace	08/30/04	A	1B7G3	150-045019	A
<p>Typed signatures indicate approval. Handwritten signature approval of this document is on file at Wulfsberg Electronics, Prescott, Arizona.</p>			SCALE: NONE		DO NOT SCALE DRAWING	



Wulfsberg Electronics
A Chelton Group Company

SERVICE BULLETIN

EQUIPMENT: IDU-III

DATE: August 30, 2004

BULLETIN NUMBER: WSB IDU-III-11 Revision A

EFFECTIVITY

This service bulletin applies to the following:

LRU P/N	HDWR Mod	SWID
401-045500-[]	0101	5.0A or later

REASON

Problem Resolutions:

1. Interfacing the Bendix/King KN-53 Nav radio to the Chelton Analog Interface Unit (AIU-1) in accordance with STC SA02203AK may result in the removal of Glideslope flag and deviation information due to an alternate ground path inside of the AIU. This service bulletin will describe the wiring modification between the KN-53 and the AIU to eliminate this ground path.

DESCRIPTION

This document allows the addition of an external resistor to the Glideslope +Flag line into the AIU to eliminate an alternate ground path.

COMPLIANCE

Required for those installations that interface the Bendix/King KN-53 Navigation radio to the Chelton AIU.

WARRANTY INFORMATION

Units still in the warranty period may request this modification under the terms of the warranty agreement. Inquiries should be directed to "Customer Support" at the address listed below:

Chelton Flight Systems
1109 Main Street
Suite 560

Boise, Idaho 83702
Phone (208) 389-9959
Fax (208)389-9961

APPROVAL

This modification does not affect the original approval.

MANPOWER

1.0 Man-hours per aircraft.

REFERENCES

System Installation Instructions, 150-045264, and Analog Interface Unit Installation Manual, 570-7000.

MATERIAL INFORMATION

The parts required to modify an IDU-III installation in accordance with this Service Bulletin may be obtained as follows.

Item 1 may be purchased from any electronics source that carries the component specified.

PARTS REQUIRED

<u>ITEM</u>	<u>QTY</u>	<u>U/M</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	1	ea	RN60C2702F	Resistor, 27.0K-ohm, 300V, 1%, 1/4W, Metal film, axial lead

TEST EQUIPMENT REQUIRED

IFR Nav-401 Flight Line Tester or equivalent

NOTE: The following modification procedures describe the modification of the wiring diagrams where the KN-53 is connected to the Nav1 input of the AIU. The KN-53 can be installed in the Nav1, Nav2, or both positions. For installations where the KN-53 is installed in the Nav2 position, perform the same modification but use AIU Pins 60 (G/S +Flag) and 61 (G/S –Flag).

MODIFICATION PROCEDURE

1. Remove all necessary access panels to gain access to the AIU.
2. Cut the Glideslope +Flag and Glideslope –Flag wires approximately 6 inches from the AIU J1 connector (See Figure 1).

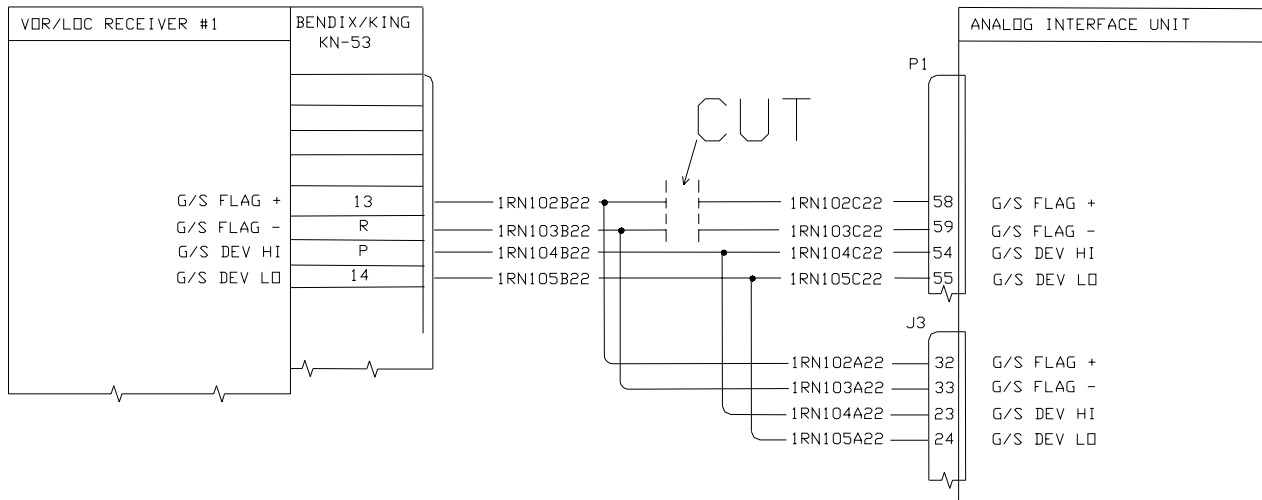


Figure 1

3. Add a 27.0K-ohm resistor (Item 1) to the Glideslope +Flag wire from the KN-53 and to the AIU Glideslope +Flag wire cut in step 1 (See Figure 2).
4. Cap and stow the Glideslope –Flag wire from the KN-53 cut in step 1 (See Figure 2).
5. Connect the Glideslope –Flag wire from the AIU cut in step 1 to a local airframe ground (See Figure 2).

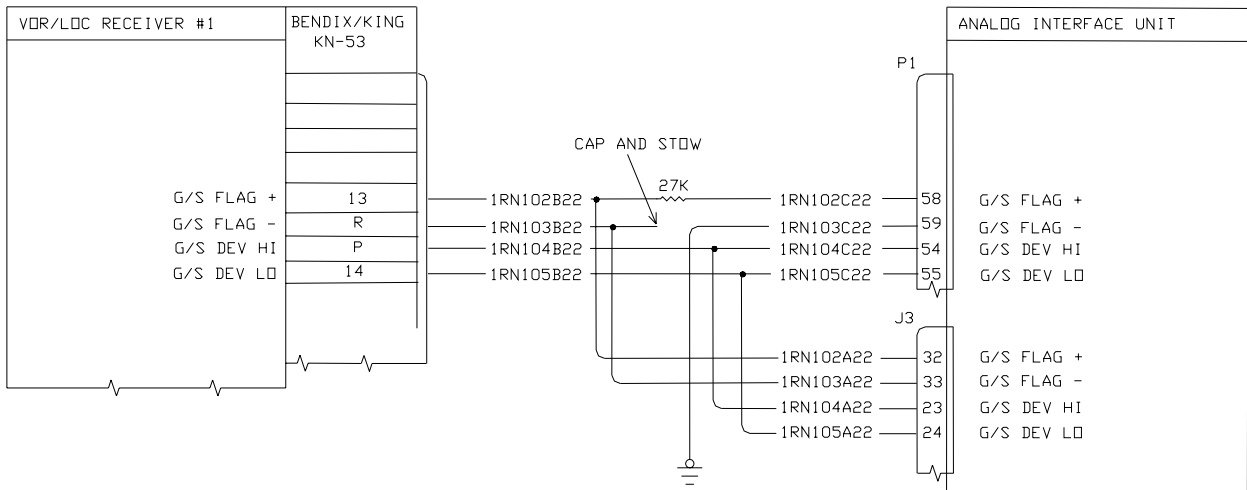


Figure 2

6. Secure wire bundle and install any connectors removed for the modification procedures.
7. Install all access panels removed to perform the modification procedures.

TESTING PROCEDURE

1. Apply external power to the aircraft.
2. Apply power to the EFIS and Navigation radios.
3. Tune the KN-53 Nav radio to the ILS frequency of the Flight Line Nav Tester.
4. Set the Flight Line tester for a valid Glideslope signal with 0 deviation.
5. Select the HSI source to the KN-53 Nav radio.
6. Select the HSI display on the PFD (See figure 3) and MFD(s).

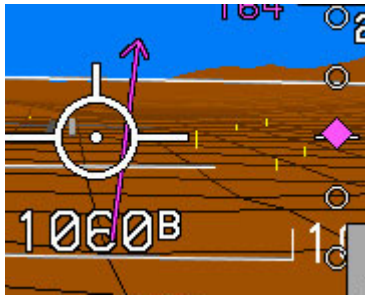


Figure 3

7. Verify that the Glideslope deviation is visible and centered on the PFD and MFD(s).
8. Set the Flight Line tester to a full-scale deflection UP (0.175 DDM).
9. Verify that the Glideslope deviation is at full-scale deflection on the PFD and MFD(s).
10. Remove power from the EFIS and Navigation radios.
11. Secure external power to the aircraft.