


REV <b>A</b>	<b>APPLICATION</b>			<b>REVISIONS</b>		
	PRODUCT LINE	REV	DESCRIPTION	DATE	APPROVED	APPROVED
SH <b>1</b>	IDU-III	A	Initial Release per DCN W3813	7/16/04	R. Talken	DAC
DWG. NO. <b>150-045015</b>						

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<b>APPROVALS</b>		<b>DATE</b>		<b>TITLE:</b> <b>SERVICE INSTRUCTION, WSI IDU-III-11</b> <b>(TERRAIN DATABASE UPDATE)</b>	
DRAWN Robert DuRall		7/16/04			
CHECKED Dale Cureton		7/16/04			
PRODUCT MANAGER					
ENGINEER Robert DuRall		7/16/04		SIZE <b>A</b>	CAGE CODE <b>1B7G3</b>
ISSUED R. Talken		7/16/04		DWG NO. <b>150-045015</b>	
<b>Typed signatures indicate approval. Handwritten signature approval of this document is on file at Wulfsberg Electronics, Prescott, Arizona.</b>		SCALE: NONE		DO NOT SCALE DRAWING	
				REV <b>A</b>	



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## SERVICE INSTRUCTION

**EQUIPMENT:** IDU-III

**DATE:**

**BULLETIN NUMBER:** WSB IDU-III-11 Revision A

### **EFFECTIVITY**

This service instruction applies to the following:

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

### **REASON**

1. Adds inland waterways.
2. Enhance terrain features throughout the world

### **DESCRIPTION**

This modification updates the Terrain Database.

### **COMPLIANCE**

Recommended.

### **APPROVAL**

This modification does not affect the original approval.

### **MANPOWER**

1.0 Man-hours per aircraft.

### **REFERENCES**

System Installation Instructions, 150-045264.

### **MATERIAL INFORMATION**

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

Item 1 may be ordered from Chelton Flight Systems at (208) 389-9959.

Item 2 may be purchased from any hardware store.

Item 3 may be purchased from any office supply or other store selling computer and digital camera accessories.

### **PARTS REQUIRED**

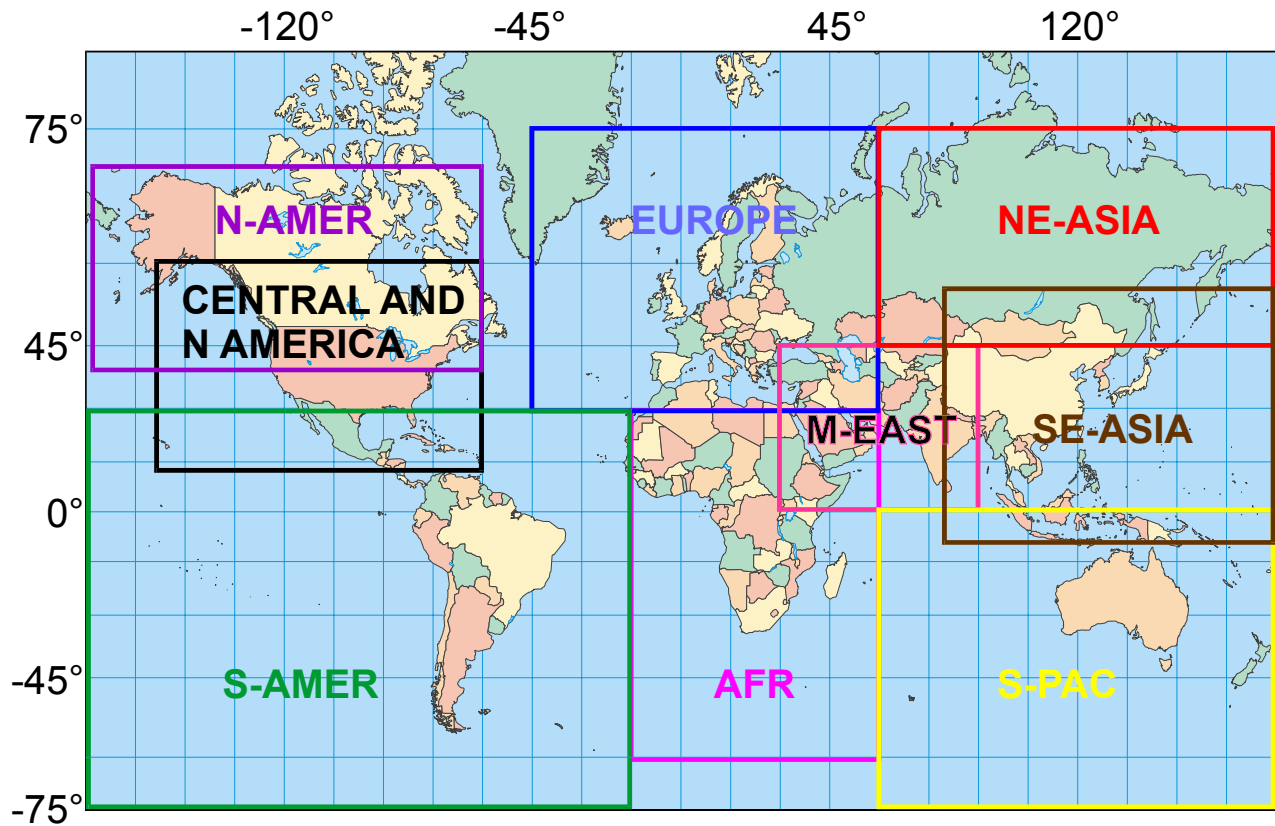
<b><u>ITEM</u></b>	<b><u>QTY</u></b>	<b><u>U/M</u></b>	<b><u>PART NUMBER</u></b>	<b><u>DESCRIPTION</u></b>
1	1	ea	404-045713-[-]-0401	Ground Drive
2	1	ea	N/A	3/32" Hex-Head driver
3	1	ea	N/A	SmartMedia Card, 8MB – 64MB

The Ground Drive can be one of nine different terrain databases depending on terrain coverage.

### **Part Number**

### **Terrain Coverage**

404-045713-1-0401	Africa terrain (S60W030 to N30E060)
404-045713-2-0401	Europe terrain (N30W045 to N75E060)
404-045713-3-0401	Middle East terrain (N00E030 to N45E090)
404-045713-4-0401	Northeast Asia terrain (N45E060 to N75E179)
404-045713-5-0401	South America terrain (S75W179 to N30W030)
404-045713-6-0401	South Pacific terrain (S75E060 to N00E179)
404-045713-7-0401	Southeast Asia terrain (S10E080 to N55E179)
404-045713-10-0401	North America terrain w/ Inland Water (N40W179 to N69W51)
404-045713-11-0401	Central and North America terrain w/ Inland Water (N10W161 to N63W51)



**Figure 1. Terrain Coverage Map 0401**

**MODIFICATION PROCEDURE**

**CAUTION**

ANY DISASSEMBLY/ASSEMBLY OF THIS UNIT MUST BE DONE AT A STATIC SAFE WORKSTATION. REMOVED MODULES SHOULD BE PLACED IN ANTISTATIC BAGS WHEN NOT INSTALLED IN THE UNIT.

**IDU MODIFICATION**

1. Ensure power is removed from the EFIS system.
2. Extract the IDU from the tray using a 3/32" hex-head driver (Item 2).
3. Remove the IDU from the tray.
4. Place the IDU on a static safe workstation.
5. Extract the Ground Drive from the IDU by pushing on the extraction button on the top of the IDU.
6. Remove the drive from the IDU.
7. Insert the new Ground Drive (Item 1) into the slot of the IDU with label facing forward.

8. Slowly, press down on the Ground Drive (Item 1) until the drive seats fully in the IDU.
9. Access the aircraft and place the IDU into the tray.
10. Secure the IDU in the tray using a 3/32" hex-head driver (Item 2).

### **TERRAIN DATABASE VERIFICATION**

1. Ensure external power is available for the aircraft as the verification process can take up to 30 minutes per unit.
2. Insert a SmartMedia card (Item 3) in the front slot of the IDU.
3. Apply power to the IDU and verify the Ground Maintenance menu is displayed.
4. Rotate the right-hand encoder until the "Terrain Data Verification" option is highlighted then press in the encoder.

### **CAUTION**

*TERRAIN VERIFICATION CAN TAKE UP TO 30 MINUTES TO PERFORM. DO NOT REMOVE POWER FROM THE IDU DURING TERRAIN VERIFICATION AS THE DATA MAY BECOME CORRUPTED. IF THIS OCCURS, THE TERRAIN VERIFICATION SHOULD BE RE-RUN TO CONFIRM THERE HAS BEEN NO CORRUPTION.*

5. Upon completion, verify the IDU displays "BIT check finished – All terrain files OK!".
6. Press any button or the right-hand encoder on the IDU to return to the Ground Maintenance menu.
7. Remove power from the IDU
8. Extract the SmartMedia card (Item 3) from the IDU.

### **TESTING PROCEDURE**

1. Apply power to the EFIS system and verify each IDU completes initialization and testing.
2. Verify the modified IDU displays:

FLIGHTLOGIC \* REV 5.0A-10  
SOFTWARE OK

on the status page.

*NOTE: \* will be either "PFD" or "MFD" depending on the IDU location in the EFIS system.*

3. Press a key and verify IDU begins EFIS operation.
4. Return all used database cards to Chelton Flight Systems for disposition.

**IDENTIFICATION PROCEDURE:** None.