MANUFACTURER	MODEL	GLOBAL TYPE DESIGNATOR
DASSAULT (cont)	MYSTERE FALCON 900 B	DA90B
	MYSTERE FALCON 900 HEAVY	DA90H
	MYSTERE FALCON 900B HEAVY	DA90BH
	MYSTERE FALCON 900 EX	DA90EX
BEECHCRAFT	KING AIR E90	BE90
	KING AIR 200	BE20H
	KING AIR 300	BE30
	KING AIR 350	BE35
	KING AIR 400	BE40
	KING AIR 400A	BE400A
	KING AIR 400A (Increased landing WT.)	BE400H
BOEING	727-100 (JT8D-7 ENGINES)	B727D7
BRITISH AEROSPACE	BAE 146-100	BA461
	BAE 146-200	BA46
	BAE 146-300	BA463
	BAE HS126-600A	HS600A
	BAE HS126-700A	HS700A
	BAE HS126-700B	HS700B
	BAE HS126-800A	HS800A
	BAE HS126-800B	HS800B
	BAE1000	BA1000
	JETSTREAM 3100	BA31
	JETSTREAM 3200	BA32
CANADAIR	CHALLENGER 600	CL600
	CHALLENGER 600W (WINGLETS)	CL600W
	CHALLENGER 601	CL601
	CHALLENGER 601-3A	CL61
	CHALLENGER 601-3A (45,250 RAMP WT.)	CL61H
CESSNA	CITATION I 500	CE500
	CITATION I 501	CE501
	CITATION II 550	CE550
	CITATION II 550 (New Cruise mode)	CE550A
	CITATION II 550 (Increased Max WT)	CE550H
	CITATION II 550 (New Cruise mode Increased Max WT)	CE550I
	CITATION II S550	S550
	CITATION II S550H	S550H

TABLE 4-1 (Sheet 2 of 3)

MANUFACTURER	MODEL	GLOBAL TYPE DESIGNATOR
CESSNA (cont)	CITATION III 650	CE650
	CITATION III 650A (SB 13 & 14)	CE650A
	CITATION III 650 HEAVY	CE650H
	CITATION III 650 HEAVY (Increased ZFW)	CE650Z
	CITATION V 560	CE560
	CITATION VII 650	CE657
	CITATION XL	CE560X
	CITATION X	CE 750
DORNIER	228-201	D2281
	228-202	D2282
EMBRAER	120 PW118	E120
	120A PW118A	E120A
	120A PW118A	EMB120
GULFSTREAM	GULFSTREAM 1	G1
	GULFSTREAM II WITH HUSH KIT	GUII
	GULFSTREAM II WITH TIP TANKS	G2TT
	GULFSTREAM III	GUIII
	GIII ASC70	GIII70
	GULFSTREAM IV	G4
	GULFSTREAM IV W/MACH.85 &.86	G4A
ISRAEL AIRCRAFT	WESTWIND 1124	W1124
INDUSTRIES	WESTWIND 1124A	W1124A
	WESTWIND 1124 W/AFC 1076	W1124I
	WESTWIND 1124 ASTRA	W1125
	ASTRA JET	AJ25
	ASTRA JET (INCREASED MAX WT)	AJ25H
LEAR	LEARJET 31	LE31
	LEARJET 31A	LE31A
	LEARJET 31A INCREASED ZFW-13,000	LE31AZ
	LEARJET 35A	LE35
	LEARJET 36A	LE36
	LEARJET 55 ECR 2431	LE55
	LEARJET 55 ECR 2554	LE55A
LEAR (cont)	LEARJET 55C	LE55C
LOCKHEED JETSTAR	GARRET 731	JET731
MITSUBISHI	MU300 DIAMOND 1	DIAM1
SABRELINER	SABRELINER 60	SABR60
	SABRELINER 65	SABR65
	SABRELINER 80	SABR80

TABLE 4-1 (Sheet 3 of 3)

4.1 CONFIGURATION MODULE PROGRAMMING FOR GNS-500A SERIES 4/5 WITH DMU P/N 42000-XX-XX

1. Install test connector P/N 12870-1 to the front of the DMU on J102.

2. Turn system on. Press the ENTER Key to accept DATE, GMT, and Position.

3. Press the DATA Key to display the AFIS MENU Page. See Figure 4-1.

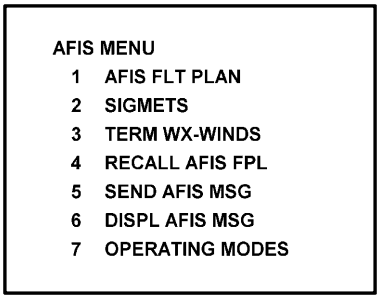


Figure 4-1

4. Use the UP or DOWN Arrow Key to position the cursor over Option 4, RECALL AFIS FPL and press the ENTER Key. The RECALL AFIS FPL Page appears. Use the UP or DOWN Arrow Key to position the cursor over the DATE field and enter 357777. Press the ENTER Key. See Figure 4-2.

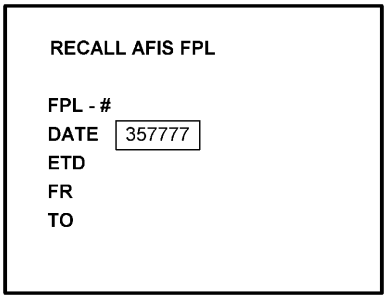


Figure 4-2

5. Select the AFIS configuration to be read or modified from the AFIS Configuration Menu Page (Figure 4-3) and press the ENTER Key.

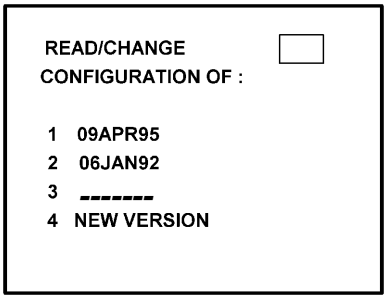


Figure 4-3

The dates of previously entered configurations are shown in Options 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Options 1 to 4 as desired and Figure 4-4 will be displayed.

6. Insert the basic operating weight and press ENTER. See Figure 4-4.

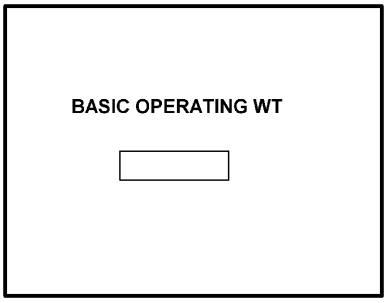


Figure 4-4

7. Insert the default for Auto Report and press ENTER. See Figure 4-5.

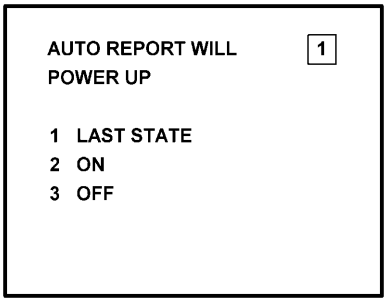


Figure 4-5

8. Insert 15 as the Auto Reporting time interval unless advised differently by the pilot/operator and press ENTER. See Figure 4-6.

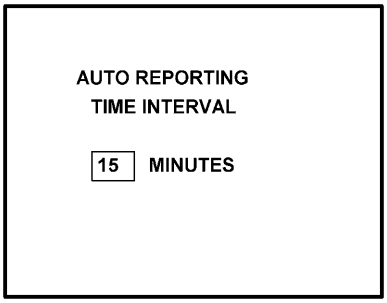


Figure 4-6

9. This step is applicable only to DMU P/N 42000-03-03 and 42000-04-03. Select Option 1 if reports are not wanted on the ground. Select Option 2 if reports on the ground are required. See Figure 4-7.

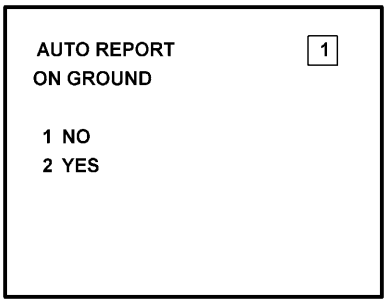


Figure 4-7

10. Insert complete aircraft registration number (tail number) in the cursor field and press ENTER. See Figure 4-8.

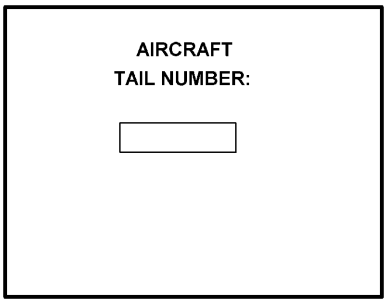


Figure 4-8

11. Insert GS as the Airline ID number and press ENTER. See Figure 4-9.

NOTE:

Currently, **GS** is the only valid entry and may change at a future time.

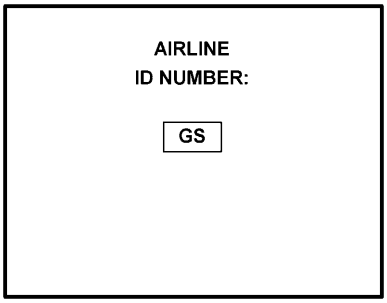


Figure 4-9

12. In the Flight Number cursor field, insert the number 0001 as shown in Figure 4-10. Press ENTER.

NOTE:

Currently, **0001** is the only valid entry and may change at a future time.

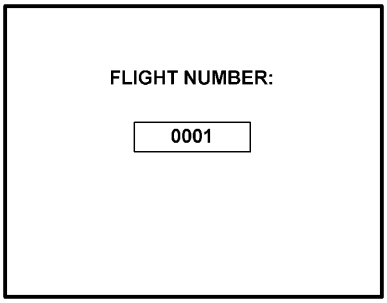


Figure 4-10

13. This step is only applicable to DMU P/N 42000-01-01 and 42000-02-02. Determine the number of NMUs connected to the DMU (there are a maximum of 3), insert the number in the cursor field, and press ENTER. See Figure 4-11.

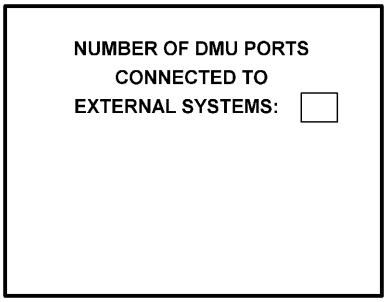


Figure 4-11

14. Complete this step for all other versions. Insert 2 as shown in Figure 4-12 to indicate that Port 1 is connected to the GNS-500A system and press ENTER.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

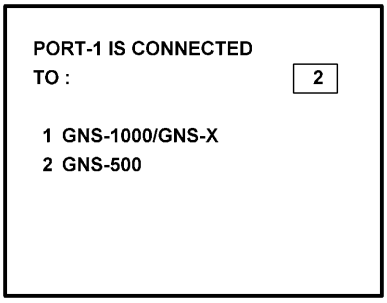


Figure 4-12

15. If applicable, insert 2 to designate that Port 2 is connected to the GNS-500A system. Press ENTER. See Figure 4-13a for DMU P/N 42000-01-01 and 42000-02-02. See Figure 4-13b for DMU P/N 42000-03-03 and 42000-04-03.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

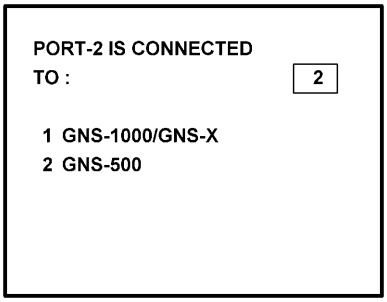


Figure 4-13A

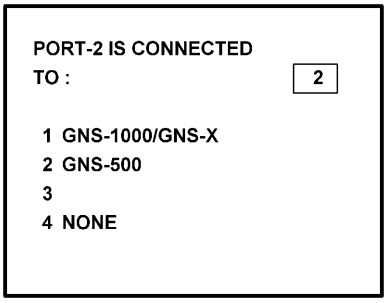


Figure 4-13B

NOTE:

Program for Port 3 as necessary. Press ENTER to continue.

16. To designate Port 1 as the Master 422 Port, insert 1 and press ENTER. See Figure 4-14.

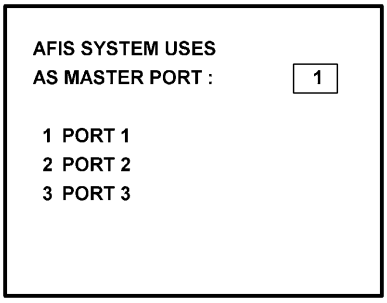


Figure 4-14

NOTE

The master port refers to the use of one port by the software to have priority over the data from other ports (i.e. CDU2). Global recommends use of Port 1.

17. The 429 port option is not applicable to DMU P/N 42000-XX-XX. This page will only appear if DMU P/N 42000-03-03 or 42000-04-03 is installed. If applicable, insert 3 and press ENTER. See Figure 4-15.

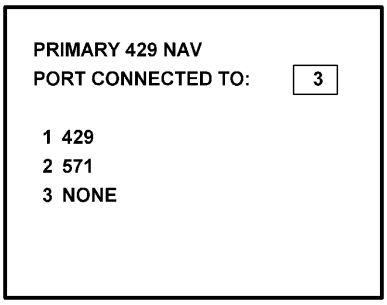


Figure 4-15

18. The 429 port option is not applicable to DMU P/N 42000-XX-XX. This page will only appear if DMU P/N 42000-03-03 or 42000-04-03 is installed. If applicable, insert 3 and press ENTER. See Figure 4-16.

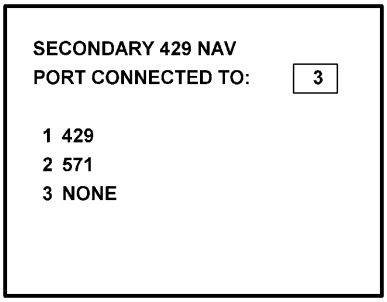


Figure 4-16

19. The 429 port option is not applicable to DMU P/N 42000-XX-XX. This page will only appear if DMU P/N 42000-03-03 or 42000-04-03 is installed. If applicable, insert 3 and press ENTER. See Figure 4-17.

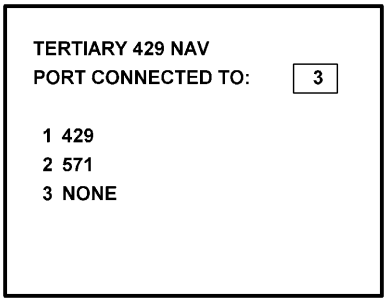


Figure 4-17

20. Select whether the AFIS system is using a separate antenna and press ENTER. See Figure 4-18.

NOTE:

The Antenna Switching Unit (ASU) allows the AFIS system to share an antenna with the VHF Com or use its own antenna.

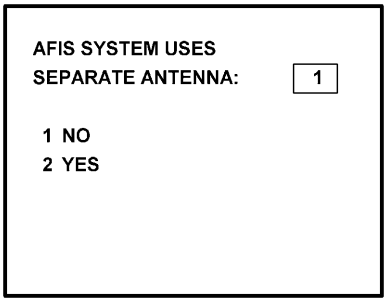


Figure 4-18

21. Insert type designator as listed in Table 4-1 and press ENTER. See Figure 4-19.

NOTE:

If the aircraft type is not listed in Table 4-1, contact Global Data Center to obtain type designator.

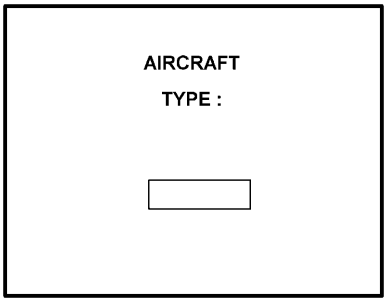


Figure 4-19

22. Select Option 1 for ARINC network, Option 2 for SITA or AVICOM network. Press ENTER to continue. See Figure 4-20.

NOTE:

Air Canada network is no longer active.

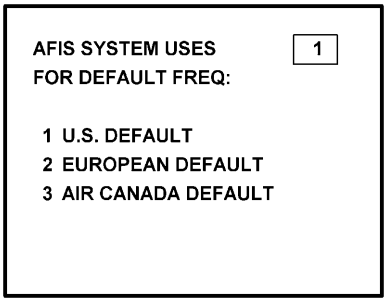


Figure 4-20

23. Steps 23 and 24 are only applicable to Series 4/5 users with Fuel Flow option DMU P/N 42000-02-02 or 42000-04-03. If other versions of the DMU are used, proceed to Step 25. If applicable, select the number that corresponds to the number of engines on the aircraft and press the ENTER Key. See Figure 4-21.

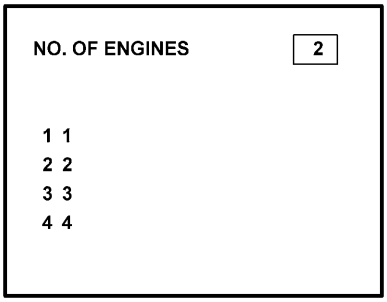


Figure 4-21

24. Fuel Flow Interface - Enter one of seven options. See Figure 4-22.

    Using the Up and Down arrow keys, move the fuel flow sensor options into the stationary cursor field. Scroll through and press the ENTER Key to select the desired option.

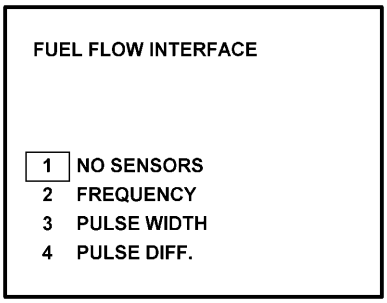


Figure 4-22 (page 1)

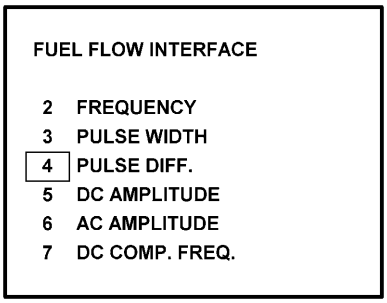


Figure 4-22 (PAGE 2)

(a) If Option 1 (NO SENSORS) is selected, the system will go to Step 25.

(b) If Option 2 (FREQUENCY) is selected, Figure 4-23 appears. Select the appropriate manufacturer and scaling by using the Up and Down arrow keys to place the desired option in the cursor field. Press ENTER.

NOTE:

See Section 1 to cross-reference the manufacturer part number to the fuel flow type and frequency scaling. LEAR stands for J.E.T. fuel flow manufacturer and AERO is AERO Systems.

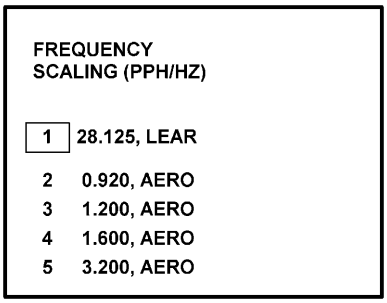


Figure 4-23 (PAGE 1)

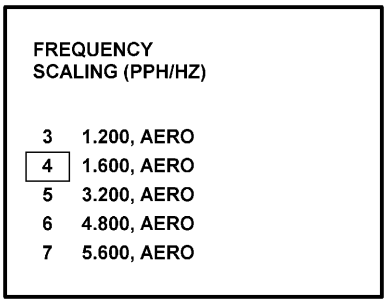


Figure 4-23 (PAGE 2)

(c) If Option 3 (PULSE WIDTH) is selected, Figure 4-24 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values. ELD stands for ELDEC. See Figure 4-24.

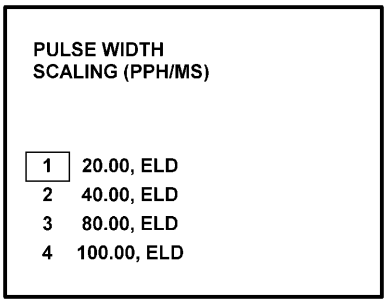


Figure 4-24 (PAGE 1)

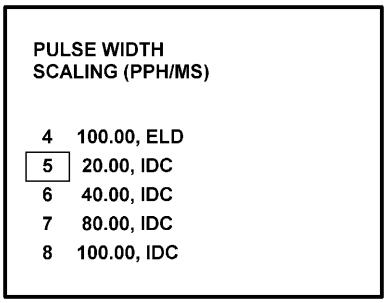


Figure 4-24 (PAGE 2)

(d) If Option 4 (PULSE DIFF) is selected, Figure 4-25 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values.

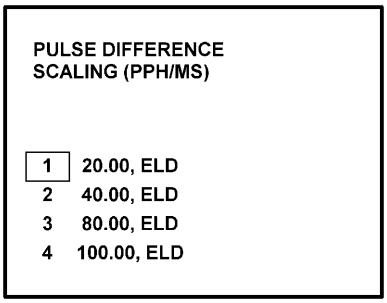


Figure 4-25

(e) If Option 5 (DC AMPLITUDE) is selected, Figure 4-26 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values. AMTK stands for AMETEK. CAN is Canadian Marconi, CON is Consolidated Airborne and RAG is Ragen Data System

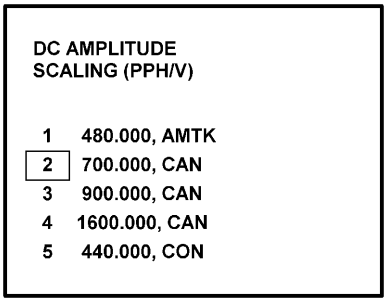


Figure 4-26 (PAGE 1)

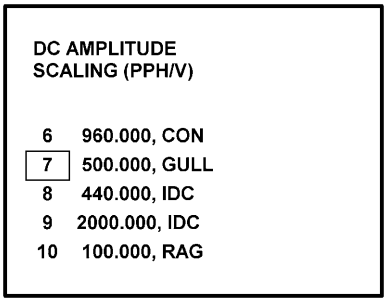


Figure 4-26 (PAGE 2)

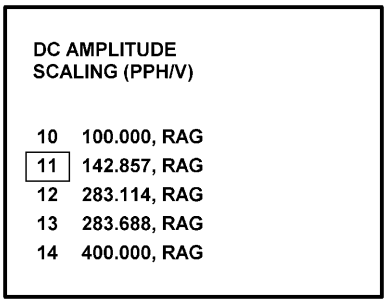


Figure 4-26 (PAGE 3)

(f) If Option 6 (AC AMPLITUDE) is selected, Figure 4-27 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values. GE stands for General Electric.

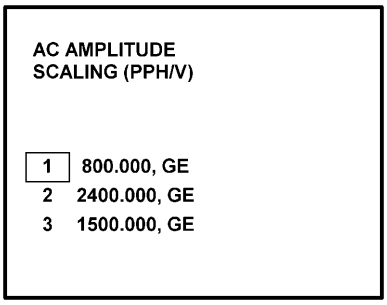


Figure 4-27

(g) If Option 7 (DC COMP. FREQ.) is selected, Figure 4-28 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values.

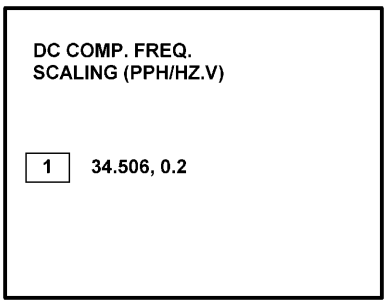


Figure 4-28

25. This step is only applicable to DMU P/N 42000-03-03 and 42000-04-03. If other versions of DMU are used, proceed to Step 26.

    Select the applicable special feature option and press the ENTER Key to continue. See Figure 4-29.

    NOTE:

    OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times.

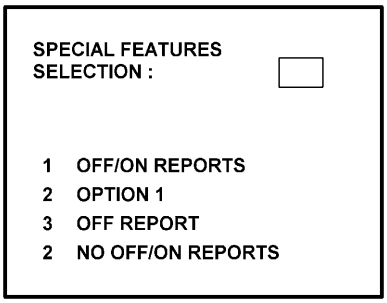


Figure 4-29

26. Select whether stored weather will be retained in memory when power is interrupted. Press the ENTER Key to continue. See Figure 4-30.

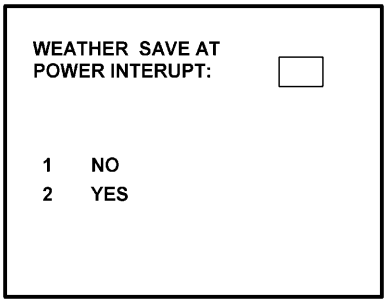


Figure 4-30

27. This step is only applicable to DMU P/N 42000-03-03 and 42000-04-03. If other versions of the DMU are used, proceed to Step 30.

    Select the desired option for Auto Weather update status at power up and press the ENTER Key. See Figure 4-31.

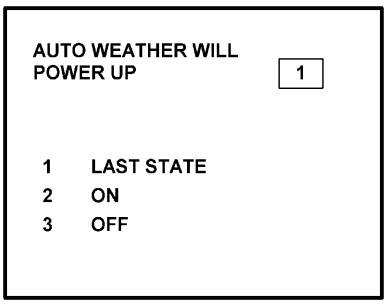


Figure 4-31

28. This step is only applicable to Series 4/5 users with Satellite Data Communication System option DMU P/N 42000-03-03 and 42000-04-03. If other versions of the DMU are used, proceed to Step 30.

    If applicable, select Satcom Option 2 and press the ENTER Key. See Figure 4-32.

    If Option 1 is selected, proceed to Step 30. Option 3 (ARINC 741) and Option 4 (SATFONE) are not available for DMU P/N 42000-03-03 and 42000-04-03. These options apply to other FMS/DMU configurations discussed elsewhere.

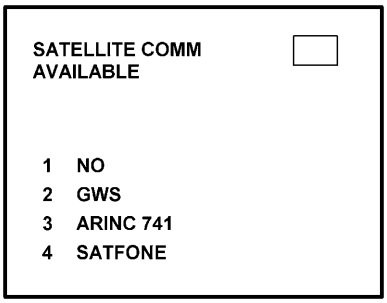


Figure 4-32

29. This step is only applicable to Series 4/5 users with Satellite Data Communication System option DMU P/N 42000-03-03 and 42000-04-03. Also, Option 2 must have been selected in Step 28. If other versions of the DMU are used or Option 1 was selected in the previous step, proceed to Step 30. Select the desired option and press the ENTER Key. See Figure 4-33.

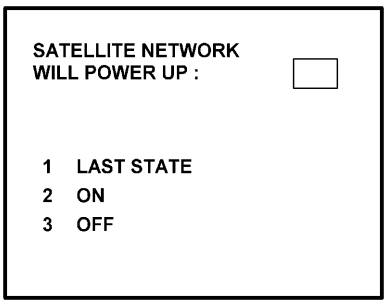


Figure 4-33

30. Write configuration data to the Configuration Module by selecting 2 and press the ENTER Key. See Figure 4-34.

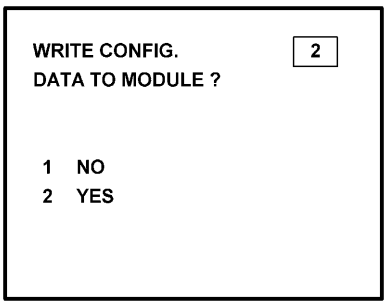


Figure 4-34

4.2 CONFIGURATION MODULE PROGRAMMING FOR GNS-500A SERIES 4/5 WITH DMU P/N 400-045500-XXXX.

NOTE:

The following configuration pages are not available for DMU P/N 400-045500-0210 or 400-045500-2010.

1. Install test connector P/N 12870-1 to the front of the DMU on J102.

2. Turn system on. Press the ENTER Key to accept DATE, GMT, and Position.

3. Press the DATA Key to display the AFIS MENU Page. See Figure 4-35.

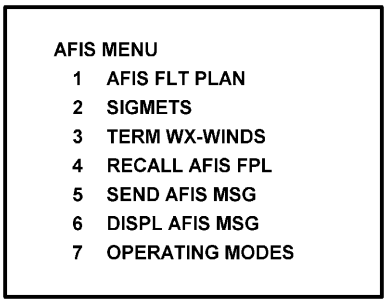


Figure 4-35

4. Use the UP or DOWN Arrow Key to position the cursor over Option 4, RECALL AFIS FPL and press the ENTER Key. The RECALL AFIS FPL Page appears. Use the UP or DOWN Arrow Key to position the cursor over the DATE field and enter 357777. Press the ENTER Key. See Figure 4-36.

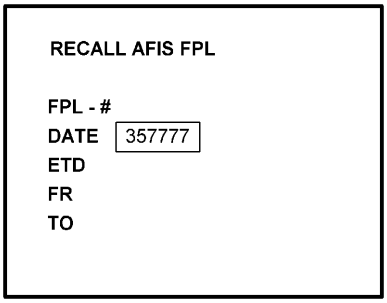


Figure 4-36

5. Select the AFIS configuration to be read or modified from the AFIS Configuration Menu Page (Figure 4-37) and press the ENTER Key.

   The dates of previously entered configurations are shown in Options 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Options 1 to 4 as desired and Figure 4-38 will be displayed.

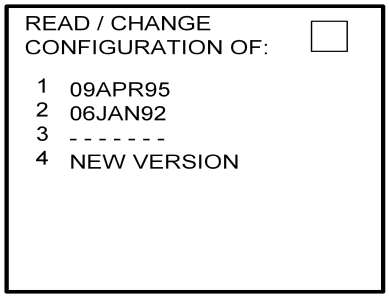


Figure 4-37

6. Insert the basic operating weight and press ENTER. See Figure 4-38.

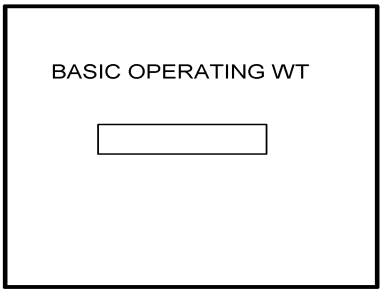


Figure 4-38

7. Insert the default for Auto Report and press ENTER. See Figure 4-39.

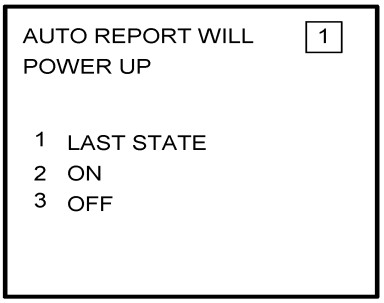


Figure 4-39

8. Insert 15 as the Auto Reporting time interval unless advised differently by the pilot/operator and press ENTER. See Figure 4-40.

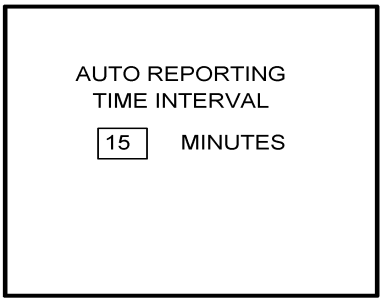


Figure 4-40

9. Select Option 1 if reports are not wanted on the ground. Select Option 2 if reports on the ground are required. See Figure 4-41.

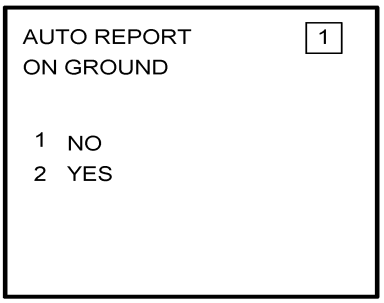


Figure 4-41

10. Insert complete aircraft registration number (tail number) in the cursor field and press ENTER. See Figure 4-42.

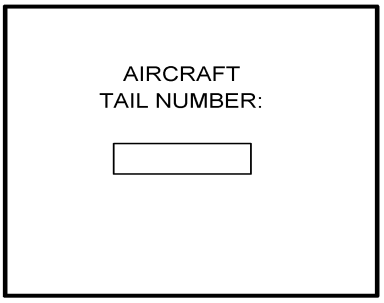


Figure 4-42

11. Insert GS as the Airline ID number and press ENTER. See Figure 4-43.

NOTE:

Currently, GS is the only valid entry and may change at a future time.

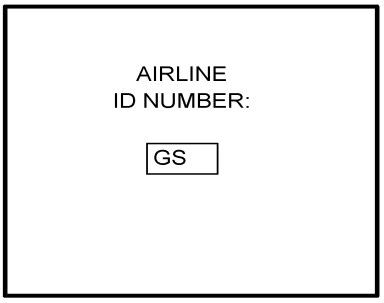


Figure 4-43

12. In the Flight Number cursor field, insert the number 0001 as shown in Figure 4-44. Press ENTER.

NOTE:

Currently, 0001 is the only valid entry and may change at a future time.

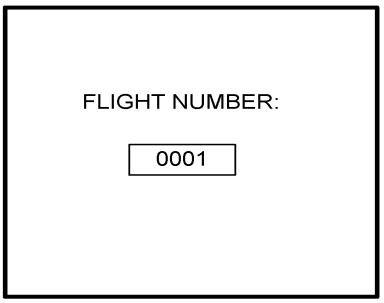


Figure 4-44

13. Insert 2 as shown in Figure 4-45 to indicate that Port 1 is connected to the GNS-500A system and press ENTER.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

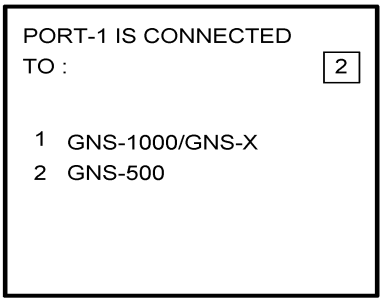


Figure 4-45

14. If applicable, insert 2 to designate that Port 2 is connected to the GNS-500A system. Press ENTER. See Figure 4-46.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

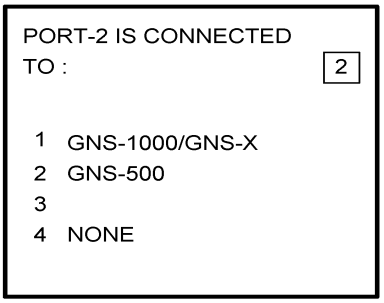


Figure 4-46

15. If applicable, insert 2 to designate that Port 3 of connected to the GNS-500A system and press ENTER. See Figure 4-47.

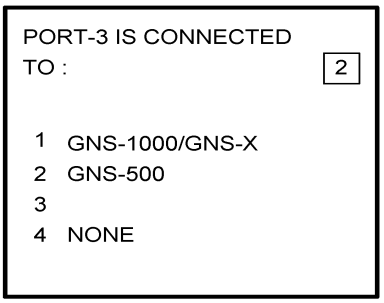


Figure 4-47

16. To designate Port 1 as the Master 422 Port, insert 1 and press ENTER. See Figure 4-48.

NOTE:

The master port refers to the use of one port by the software to have priority over the data from other ports (i.e. CDU2). Honeywell recommends use of Port 1.

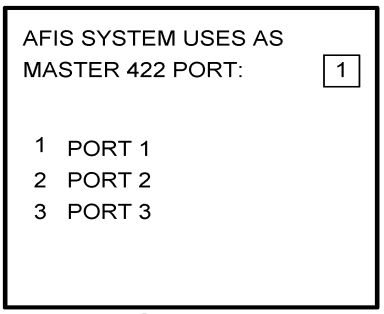


Figure 4-48

17. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only GWS systems are used, insert 3 and press ENTER. See Figure 4-49.

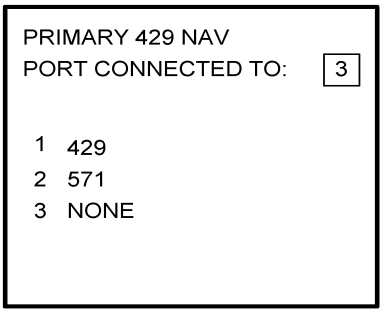


Figure 4-49

18. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-50.

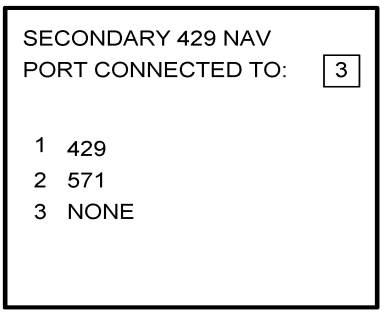


Figure 4-50

19. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only GWS systems are used, insert 3 and press ENTER. See Figure 4-51.

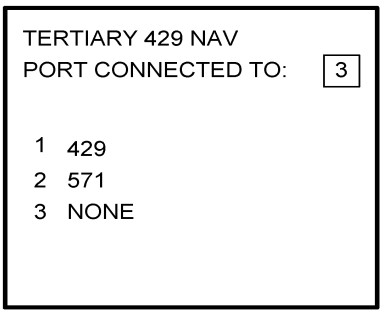


Figure 4-51

20. Select whether the AFIS system is using a separate antenna and press ENTER. See Figure 4-52.

NOTE:

The Antenna Switching Unit (ASU) allows the AFIS system to share an antenna with the VHF Comm or use its own antenna.

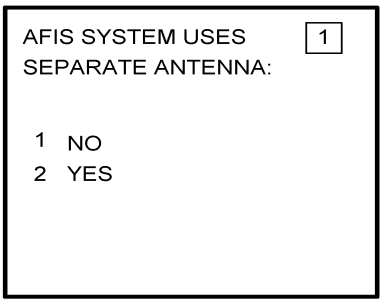


Figure 4-52

21. Insert type designator as listed in Table 4-1 and press ENTER. See Figure 4-53.

NOTE:

If the aircraft type is not listed in Table 4-1, contact Global Data Center to obtain type designator.

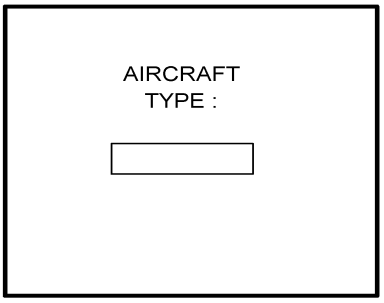


Figure 4-53

22. Select Option 1 for ARINC network, Option 2 for SITA or AVICOM network. Press ENTER to continue. See Figure 4-54.

NOTE:

Air Canada network is no longer active.

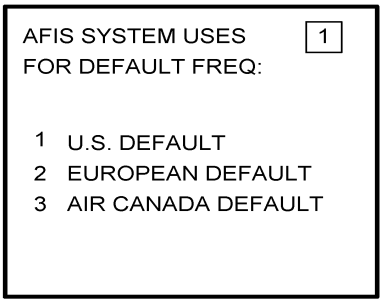


Figure 4-54

23. Steps 23 and 24 are only applicable to Series 4/5 users with Fuel Flow option DMU P/N 400-045500-0002, 400-045500-0004 or 400-045500-0006. If other versions of the DMU are used, proceed to Step 25. If applicable, select the number that corresponds to the number of engines on the aircraft and press the ENTER Key. See Figure 4-55.

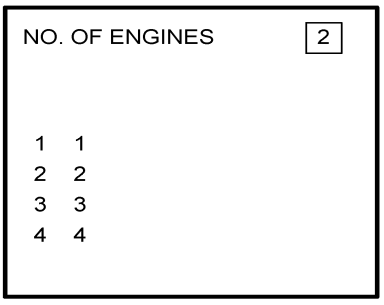


Figure 4-55

24. Fuel Flow Interface - Enter one of seven options. See Figure 4-56.

    Using the Up and Down arrow keys, move the fuel flow sensor options into the stationary cursor field. Scroll through and press the ENTER Key to select the desired option.

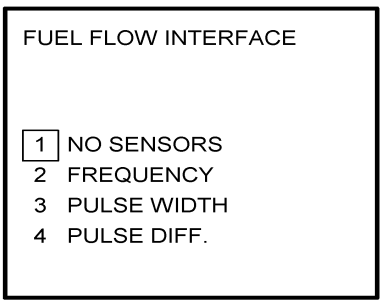


Figure 4-56 (PAGE 1)

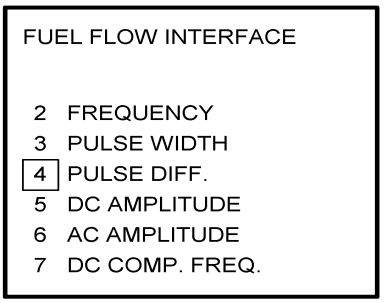


Figure 4-56 (PAGE 2)

(a) If Option 1 (NO SENSORS) is selected, the system will go to Step 25.

(b) If Option 2 (FREQUENCY) is selected, Figure 4-57 appears. Select the appropriate manufacturer and scaling by using the Up and Down arrow keys to place the desired option in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the manufacturer part number to the fuel flow type and frequency scaling. LEAR stands for J.E.T. fuel flow manufacturer and AERO is AERO Systems.

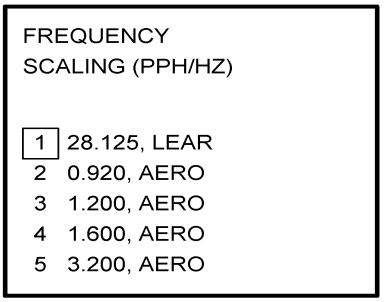


Figure 4-57 (PAGE 1)

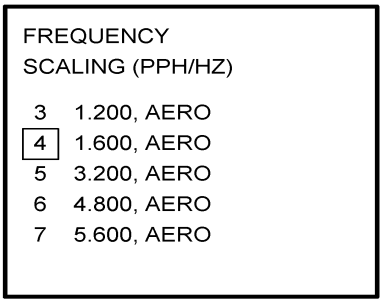


Figure 4-57 (PAGE 2)

(c) If Option 3 (PULSE WIDTH) is selected, Figure 4-58 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values. ELD stands for ELDEC. See Figure 4-58.

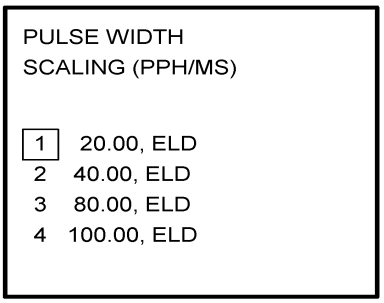


Figure 4-58 (PAGE 1)

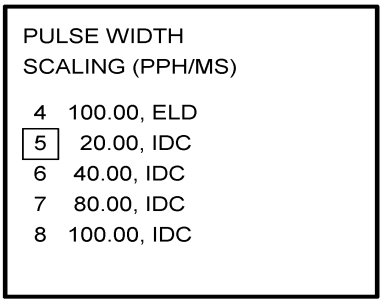


Figure 4-58 (PAGE 2)

(d) If Option 4 (PULSE DIFF) is selected, Figure 4-59 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values.

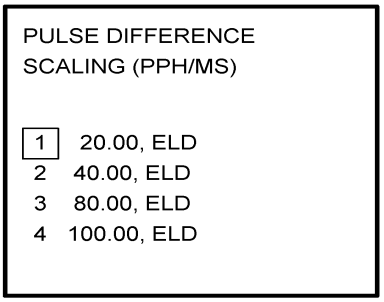


Figure 4-59

(e) If Option 5 (DC AMPLITUDE) is selected, Figure 4-60 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values. AMTK stands for AMETEK. CAN is Canadian Marconi, CON is Consolidated Airborne and RAG is Ragen Data System.

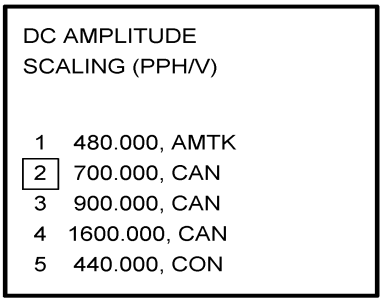


Figure 4-60 (PAGE 1)

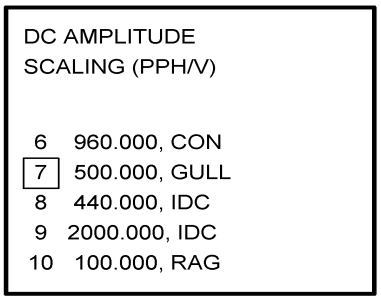


Figure 4-60 (PAGE 2)

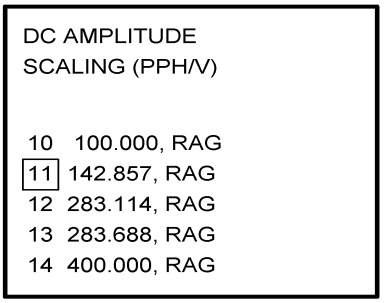


Figure 4-60 (PAGE 3)

(f) If Option 6 (AC AMPLITUDE) is selected, Figure 4-61 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values. GE stands for General Electric.

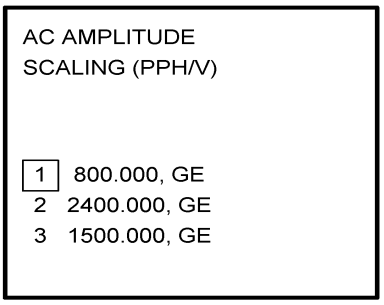


Figure 4-61

(g) If Option 7 (DC COMP. FREQ.) is selected, Figure 4-62 is displayed. Use the Up and Down arrow keys to place the appropriate manufacturer/scaling in the cursor field. Press ENTER.

NOTE:

See Section 1.3.2, SYSTEM SPECIFICATIONS, to cross-reference the fuel flow indicator/transmitter manufacturer's part number to the appropriate scaling values.

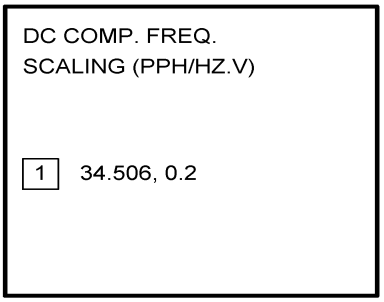


Figure 4-62

25. Select the applicable special feature option and press the ENTER Key to continue. See Figure 4-63.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times.

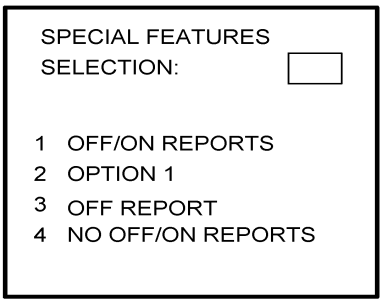


Figure 4-63

26. Select whether stored flight plans, messages and weather will be retained in memory when power is interrupted. Press the ENTER Key to continue. See Figure 4-64.

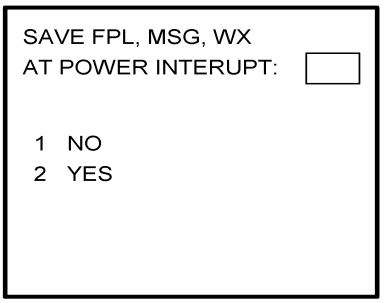


Figure 4-64

27. Select the desired option for Auto Weather update status at power up and press the ENTER Key. See Figure 4-65.

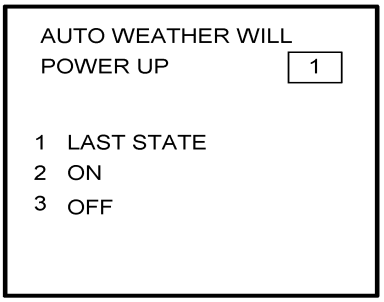


Figure 4-65

28. This step is only applicable to Series 4/5 users with Satellite Data Communication System option DMU P/N 400-045500-0003, 400-045500-0004, 400-045500-0005 or 400-045500-0006. If other versions of the DMU are used, proceed to Step 30.

    If applicable, select Satcom Option 2 and press the ENTER Key. See Figure 4-66.

    If Option 1 is selected, proceed to Step 30. Options 3 and 4 are only available with DMU P/N 400-045500-0005 or 400-045500-0006.

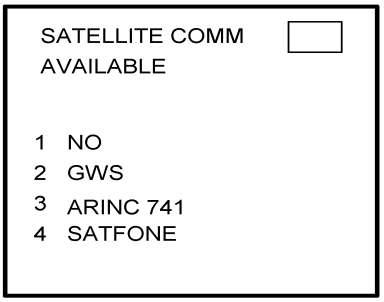


Figure 4-66

29. Select the desired option and press the ENTER Key. See Figure 4-67.

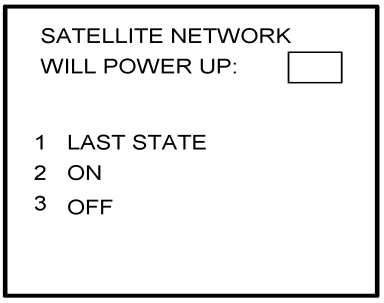


Figure 4-67

30. Write configuration data to the Configuration Module by selecting 2 and press the ENTER Key. See Figure 4-68.

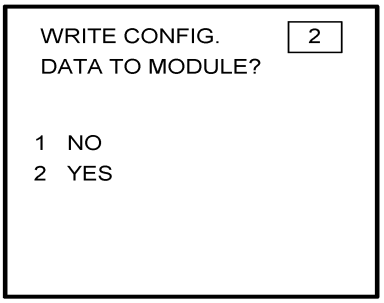


Figure 4-68

4.3 CONFIGURATION MODULE PROGRAMMING FOR GNS-1000, GNS-X, GNS-XES, GNS-XL OR GNS-XLS WITH DMU P/N 42000-01-01 OR 42000-03-03

1. Install test connector P/N 12870-1 to the front of the DMU on J102.

2. Turn system on. Press the ENTER Key to accept DATE, GMT, and Position.

3. Press the PLAN Key or AFIS Key to display the AFIS MENU Page. See Figure 4-69 or Figure 4-70.

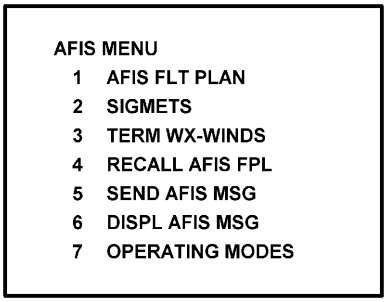


Figure 4-69

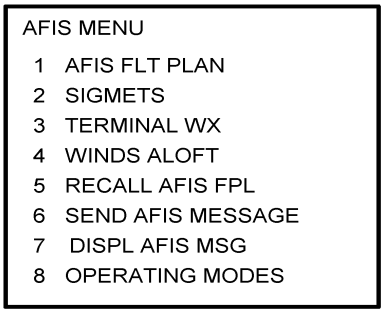


Figure 4-70

4. Use the UP or DOWN Arrow Key to position the cursor over the RECALL AFIS FPL option and press the ENTER Key. The RECALL AFIS FPL Page appears. Use the UP or DOWN Arrow Key to position the cursor over the DATE field and enter 357777. Press the ENTER Key. See Figure 4-71.

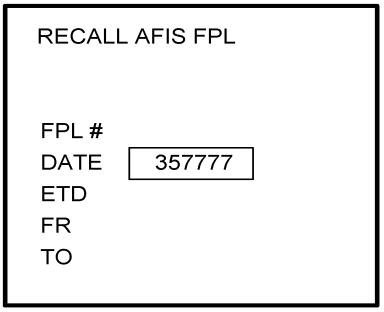


Figure 4-71

5. Select the AFIS configuration to be read or modified from the AFIS Configuration Menu Page (Figure 4-69) and press the ENTER Key.

   The dates of previously entered configurations are shown in Options 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Options 1 to 4 as desired and Figure 4-72 will be displayed.

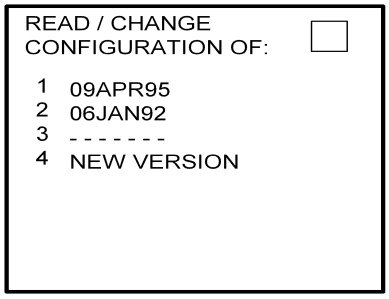


Figure 4-72

6. Insert the basic operating weight and press ENTER. See Figure 4-73.

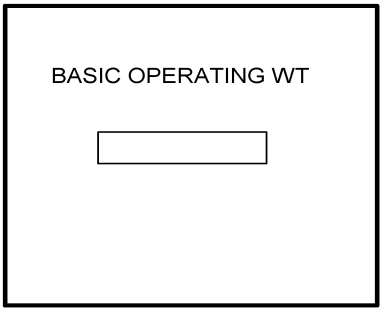


Figure 4-73

7. Insert the default for Auto Report and press ENTER. See Figure 4-74.

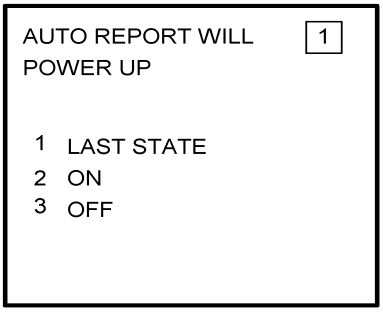


Figure 4-74

8. Insert 15 as the Auto Reporting time interval unless advised differently by the pilot/operator and press ENTER. See Figure 4-75.

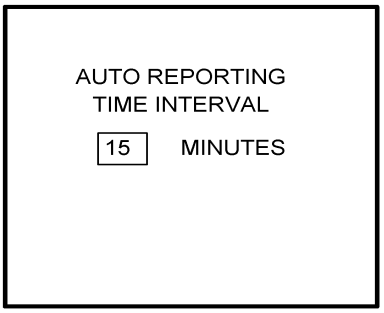


Figure 4-75

9. Select Option 1 if reports are not wanted on the ground. Select Option 2 if reports on the ground are required. See Figure 4-76.

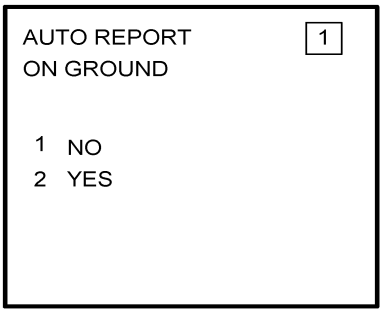


Figure 4-76

10. Insert complete aircraft registration number (tail number) in the cursor field and press ENTER. See Figure 4-77.

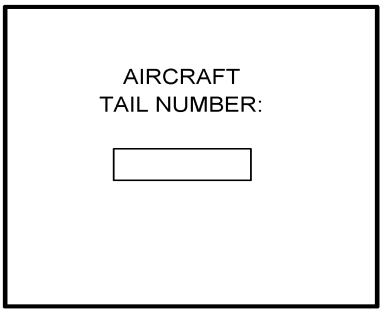


Figure 4-77

11. Insert GS as the Airline ID number and press ENTER. See Figure 4-78.

NOTE:

Currently, GS is the only valid entry and may change at a future time.

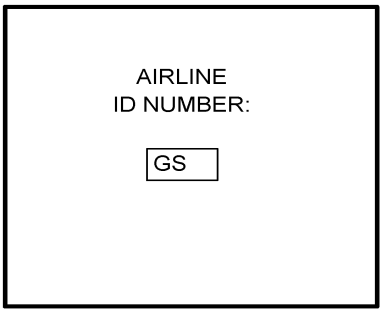


Figure 4-78

12. In the Flight Number cursor field, insert the number 0001 as shown in Figure 4-79. Press ENTER.

NOTE:

Currently, 0001 is the only valid entry and may change at a future time.

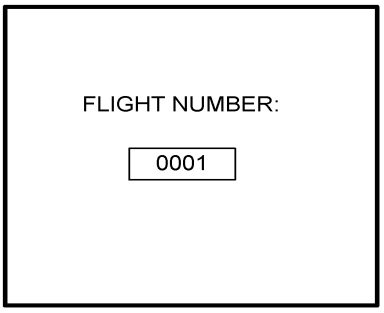


Figure 4-79

13. This step is only applicable to DMU P/N 42000-01-01. Determine the number of CDUs or NMUs connected to the DMU (there are a maximum of 3), insert the number in the cursor field, and press ENTER. See Figure 4-80.

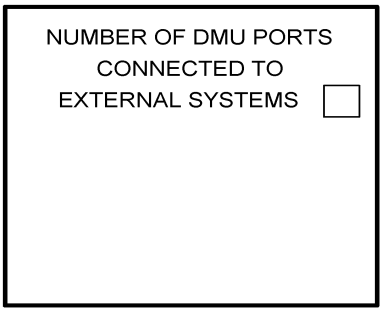


Figure 4-80

14. Insert 1 as shown in Figure 4-81 to indicate that Port 1 is connected to the GNS-1000 or GNS-X system and press ENTER.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

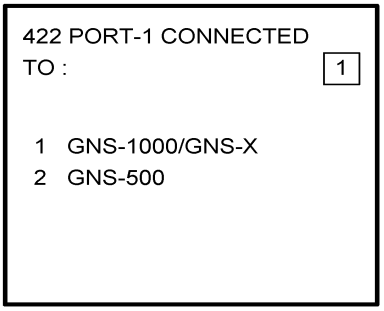


Figure 4-81

15. If applicable, insert 1 to designate that Port 2 is connected to the GNS-1000 or GNS-X system. Press ENTER. See Figure 4-82a for DMU P/N 42000-01-01. See Figure 4-82b for DMU P/N 42000-03-03.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

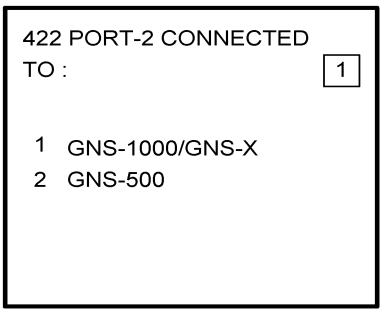


Figure 4-82A

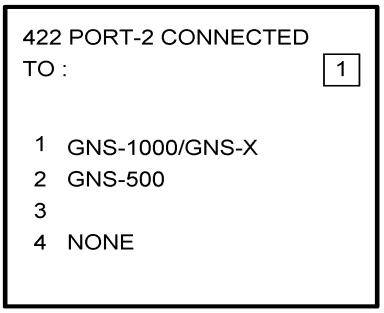


Figure 4-82B

16. If applicable, insert 1 to designate that Port 3 is connected to the GNS-1000 or GNS-X system. Press ENTER. See Figure 4-83a for DMU P/N 42000-01-01. See Figure 4-83b for DMU P/N 42000-03-03.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

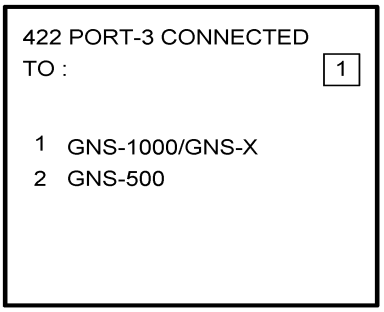


Figure 4-83A

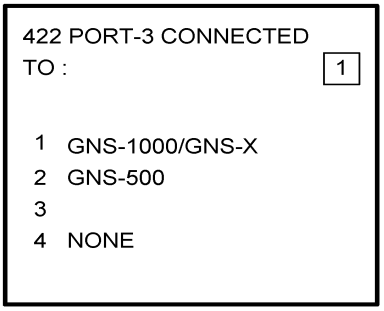


Figure 4-83B

17. To designate Port 1 as the Master 422 Port, insert 1 and press ENTER. See Figure 4-84.

NOTE:

The master port refers to the use of one port by the software to have priority over the data from other ports (ie CDU2). Global recommends use of Port 1.

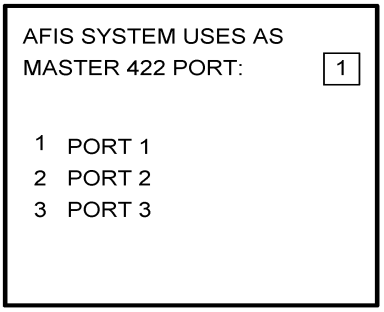


Figure 4-84

18. The 429 port option is not applicable to DMU P/N 42000-XX-XX. This page will only appear if DMU P/N 42000-03-03 is installed. If applicable, insert 3 and press ENTER. See Figure 4-85.

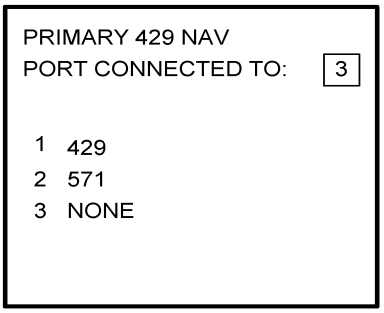


Figure 4-85

19. The 429 port option is not applicable to DMU P/N 42000-XX-XX. This page will only appear if DMU P/N 42000-03-03 is installed. If applicable, insert 3 and press ENTER. See Figure 4-86.

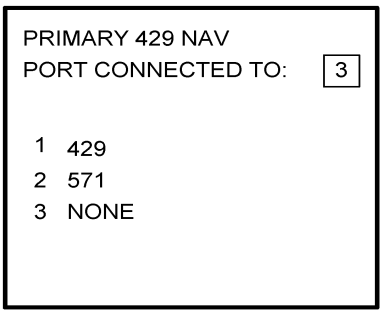


Figure 4-86

20. The 429 port option is not applicable to DMU P/N 42000-XX-XX. This page will only appear if DMU P/N 42000-03-03 is installed. If applicable, insert 3 and press ENTER. See Figure 4-87.

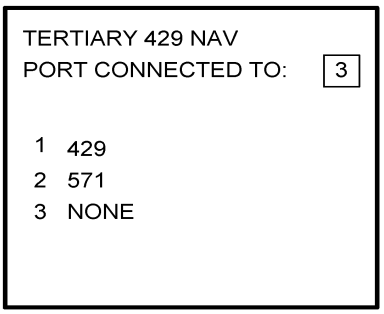


Figure 4-87

21. Select whether the AFIS system is using a separate antenna and press ENTER. See Figure 4-88.

NOTE:

The Antenna Switching Unit (ASU) allows the AFIS system to share an antenna with the VHF Comm or use its own antenna.

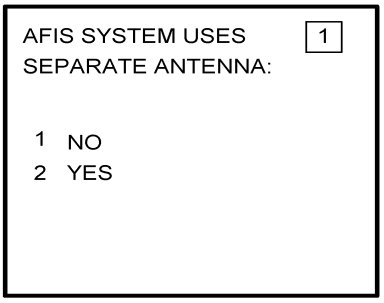


Figure 4-88

22. Insert type designator as listed in Table 4-1 and press ENTER. See Figure 4-89.

NOTE:

If the aircraft type is not listed in Table 4-1, contact Global Data Center to obtain type designator.

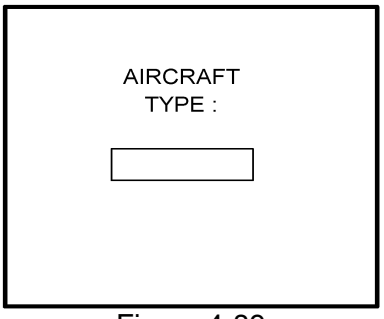


Figure 4-89

23. Select Option 1 for ARINC network, Option 2 for SITA or AVICOM network, or Option 3 for Air Canada network. Press ENTER to continue. See Figure 4-90.

NOTE:

Air Canada network is no longer active.

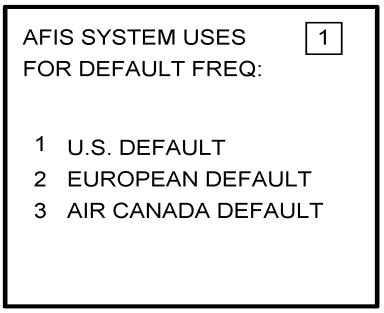


Figure 4-90

24. Fuel Flow option is not available for GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS. Insert 1 and press the ENTER Key. See Figure 4-91.

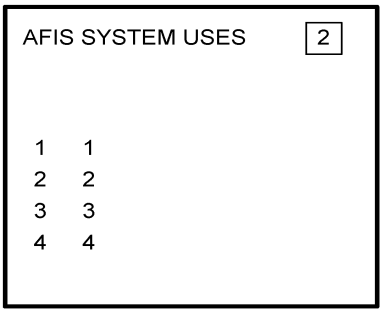


Figure 4-91

25. Fuel Flow option is not available for GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS. Select 1 and press the ENTER Key. See Figure 4-92.

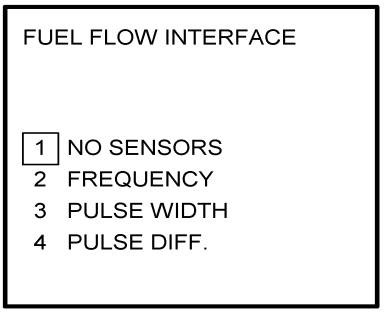


Figure 4-92

26. This step is only applicable to DMU P/N 42000-03-03. If other versions of DMU are used, proceed to Step 27. Select the applicable special feature option and press the ENTER Key to continue. See Figure 4-93.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times.

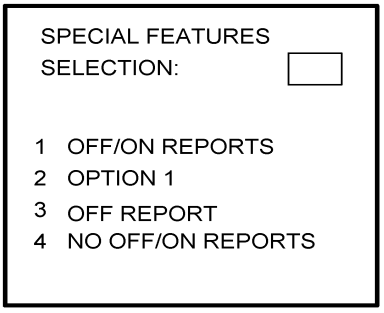


Figure 4-93

27. Select whether stored weather will be retained in memory when power is interrupted. Press the ENTER Key to continue. See Figure 4-94.

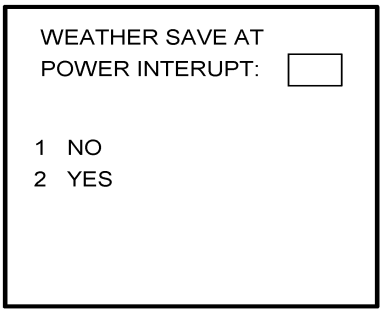


Figure 4-94

28. This step is only applicable to DMU P/N 42000-03-03. If other versions of the DMU are used, proceed to Step 30. Select the desired option for Auto Weather update status at power up and press the ENTER Key. See Figure 4-95.

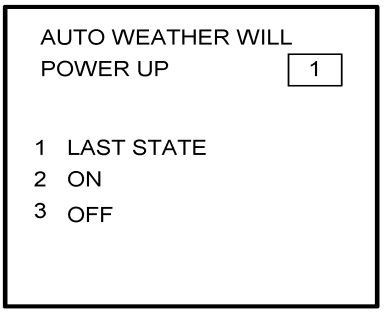


Figure 4-95

29. This step is only applicable to GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS with Satellite Data Communication System option DMU P/N 42000-03-03.

    If applicable, select Satcom Option 2 and press the ENTER Key. See Figure 4-96. If Option 1 is selected, proceed to Step 31. Option 3 (ARINC 741) and Option 4 (SATFONE) are not available for DMU P/N 42000-03-03. These options apply to other FMS/DMU configurations discussed elsewhere.

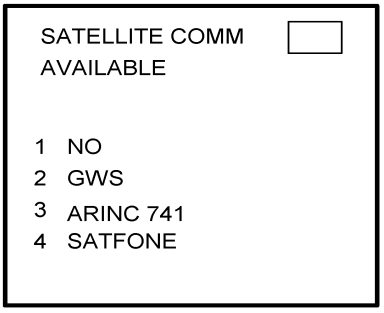


Figure 4-96

30. This step is only applicable to GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS with Satellite Data Communication System option DMU P/N 42000-03-03. If other versions of the DMU are used, proceed to Step 31.

    Select the desired option and press the ENTER Key. See Figure 4-97.

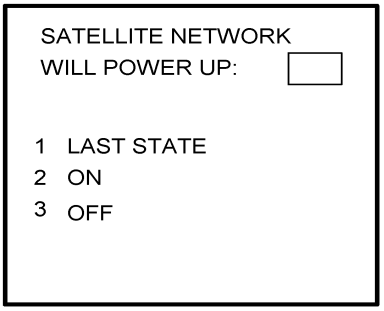


Figure 4-97

31. Write configuration data to the Configuration Module by selecting 2 and press the ENTER Key. See Figure 4-98.

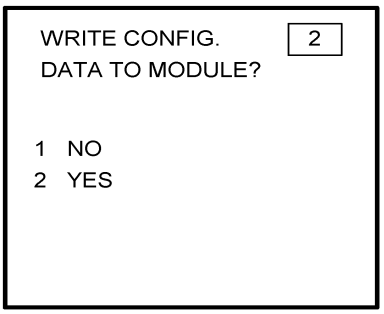


Figure 4-98

4.4 CONFIGURATION MODULE PROGRAMMING FOR GNS-1000, GNS-X, GNS-XES, GNS-XL OR GNS-XLS WITH DMU P/N 400-045500-0001, 400-045500-0003 OR 400-045500-0005 AND OTHER FMS MANUFACTURES USING DMU P/N 400-045500-0001, 0002, -0003, -0004, -0005, -0006 OR -0130

1. Install test connector P/N 12870-1 to the front of the DMU on J102.

2. Turn system on. Press the ENTER Key to accept DATE, GMT, and Position.

   (a) If DMU has been configured for ACARS proceed to step 4(a) otherwise step 3.

3. Press the PLAN Key or AFIS Key to display the AFIS MENU Page. See Figure 4-99 or Figure 4-100.

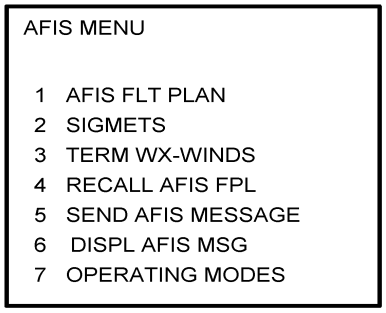


Figure 4-99

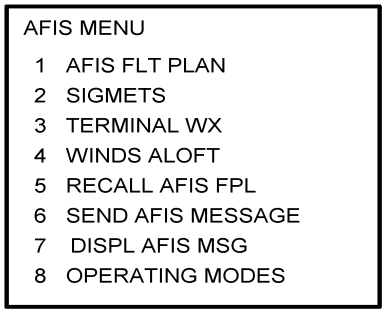


Figure 4-100

4. Use the UP or DOWN Arrow Key or Line >Select keys to position the cursor over the RECALL AFIS FPL option and press the ENTER Key. The RECALL AFIS FPL Page appears. Use the UP or DOWN Arrow Key or Line Select keys to position the cursor over the DATE field and enter 357777. Press the ENTER Key. See Figure 4-101.

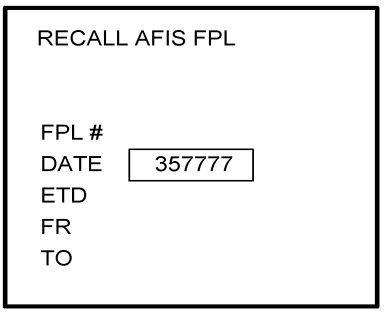


Figure 4-101

NOTE:

ITEMS 4(a) through 4(k) are only available for -0003 or -0130. For other part numbers skip to item 5.

(a) Press the PLAN key or AFIS key to display the ACARS page. See Figure 4-102 or 4-103.

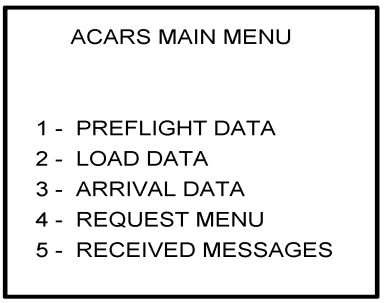


Figure 4-102

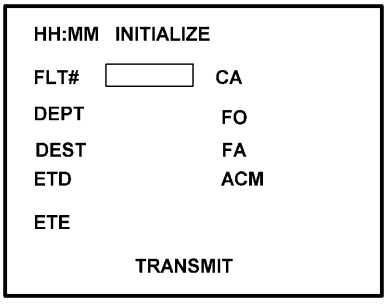


Figure 4-103

(b) If ACARS page shown in Figure 4-102 appears, press “1" key and the PREFLIGHT Data page, Figure 4-104 will appear. Otherwise proceed to step 4(h).

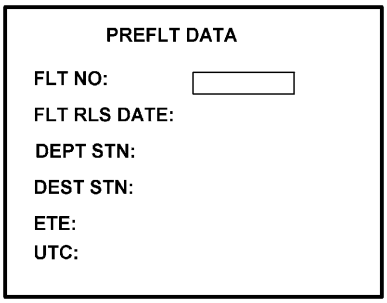


Figure 4-104

(c) Insert a one digit number (eg. 1) in FLT NO: field and press ENTER key. Cursor will move FLT RLS DATE: field.

(d) Insert a one digit number (eg. 1) in FLT RLS DATE: field and press ENTER key. Cursor will move to DEPT STN: field.

(e) Insert a three character departure station identifier (eg. MCI) in DEPT STN: field and press ENTER key. Cursor will move to DEPT STN: field.

(f) Insert a three character destination station identifier (eg. MCI) in DEST STN: field and press ENTER key. Cursor will move to ETE field.

(g) Enter 3577 in ETE field and press ENTER key. See Figure 4-105. Proceed to step 5.

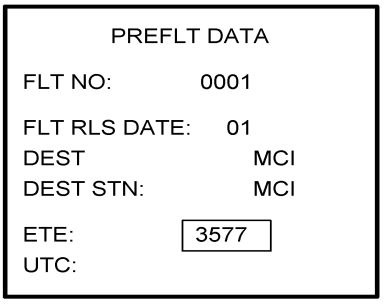


Figure 4-105

(h) Insert a three digit number (eg. 111) in FLT# field and press ENTER key. Cursor will move to DEPT field (see Figure 4-106).

(i) Insert a three character departure identifier (eg. MCI) in DEPT field and press ENTER key. Cursor will move to DEST field.

(j) Insert a three character destination identifier (eg MCI) in DEST field and press ENTER key. Cursor will move to ETD field.

(k) Enter 3577 in ETD field and press ENTER key. See Figure 4-106 and proceed to step 5.

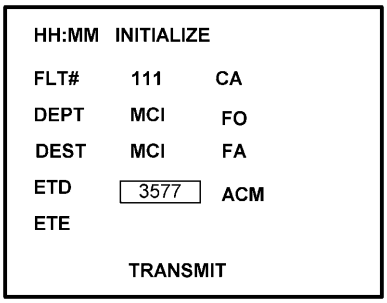


Figure 4-106

5. Select the AFIS configuration to be read or modified from the AFIS Configuration Menu Page (Figure 4-107) and press the ENTER Key.

   The dates of previously entered configurations are shown in Options 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Options 1 to 4 as desired and Figure 4-108 will be displayed.

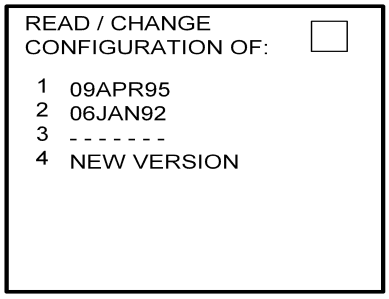


Figure 4-107

6. Insert the basic operating weight and press ENTER. See Figure 4-108.

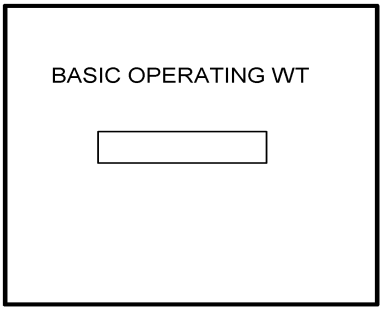


Figure 4-108

7. Insert the default for Auto Report and press ENTER. See Figure 4-109.

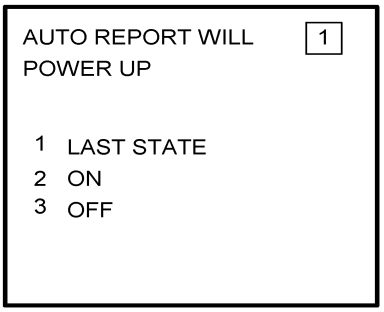


Figure 4-109

8. Insert 15 as the Auto Reporting time interval unless advised differently by the pilot/operator and press ENTER. See Figure 4-110.

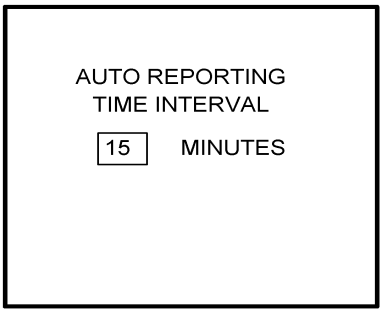


Figure 4-110

9. Select Option 1 if reports are not wanted on the ground. Select Option 2 if reports on the ground are required. See Figure 4-111.

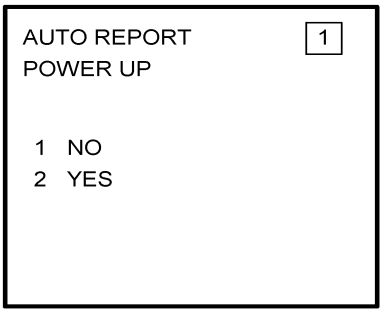


Figure 4-111

10. Insert complete aircraft registration number (tail number) in the cursor field and press ENTER. See Figure 4-112.

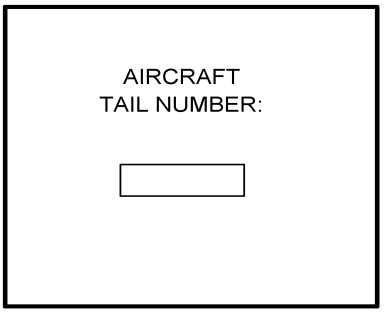


Figure 4-112

11. Insert GS as the Airline ID number and press ENTER. See Figure 4-113.

NOTE:

Currently, GS is the only valid entry except for the following: XJ for MESABA Airlines, DH for Atlantic Coast Aviation, Part Numbers 400-045500-0003 or 400-045500-0130 ONLY.

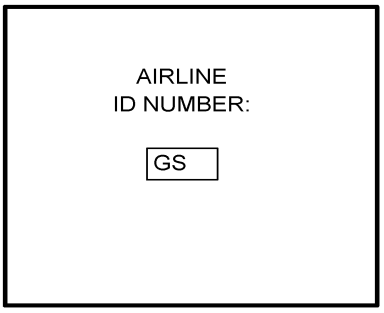


Figure 4-113

12. In the Flight Number cursor field, insert the number 0001 as shown in Figure 4-114. Press ENTER.

NOTE:

Currently, 0001 is the only valid entry and may change at a future time.

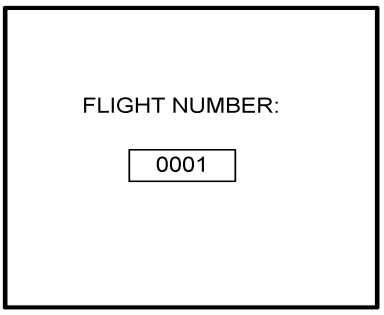


Figure 4-114

13. Insert 1 as shown in Figure 4-115 to indicate that Port 1 is connected to the GNS-1000, GNS-X, or other manufactures navigation system and press ENTER.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

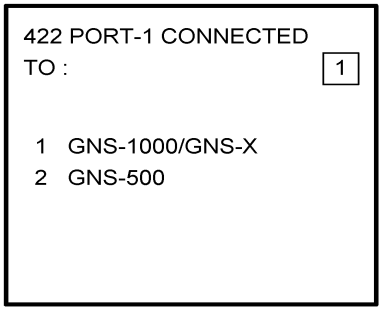


Figure 4-115

14. If applicable, insert 1 to designate that Port 2 is connected to the GNS-1000 or GNS-X system. Press ENTER. If no Global systems are connected, select Option 4. See Figure 4-116.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

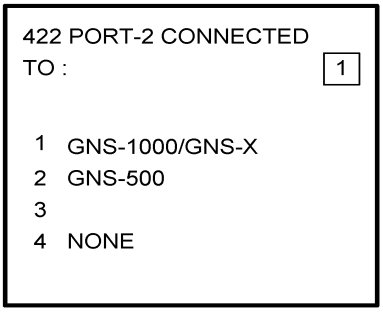


Figure 4-116

15. If applicable, insert 1 to designate that Port 3 is connected to the GNS-1000 or GNS-X system. Press ENTER. If no Global systems are connected, select Option 4. See Figure 4-117.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

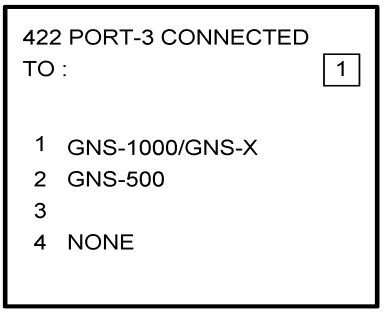


Figure 4-117

16. To designate Port 1 as the Master 422 Port, insert 1 and press ENTER. See Figure 4-118.

NOTE:

The master port refers to the use of one port by the software to have priority over the data from other ports (i.e. CDU2). Honeywell recommends use of Port 1.

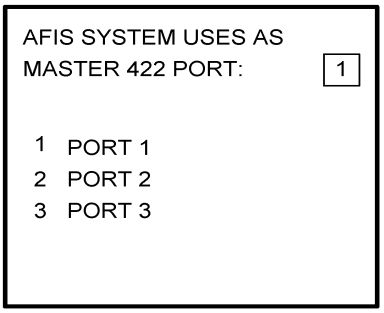


Figure 4-118

17. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-119.

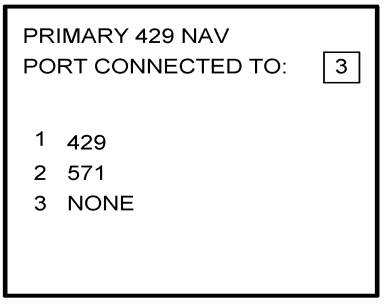


Figure 4-119

18. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-120.

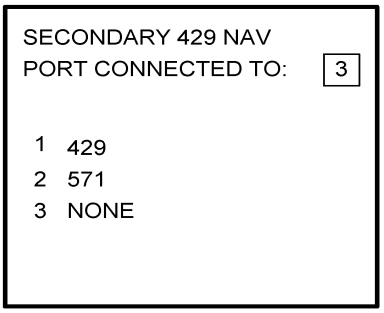


Figure 4-120

19. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-121.

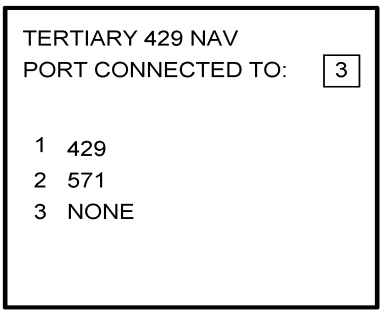


Figure 4-121

20. Select whether the AFIS system is using a separate antenna and press ENTER. See Figure 4-122.

NOTE:

The Antenna Switching Unit (ASU) allows the AFIS system to share an antenna with the VHF Comm or use its own antenna.

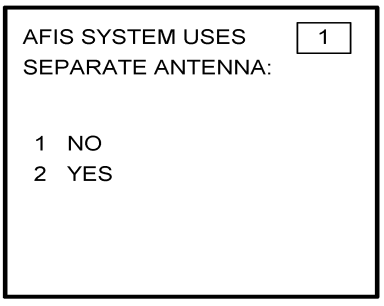


Figure 4-122

21. Insert type designator as listed in Table 4-1 and press ENTER. See Figure 4-123.

NOTE:

If the aircraft type is not listed in Table 4-1, contact Global Data Center to obtain type designator.

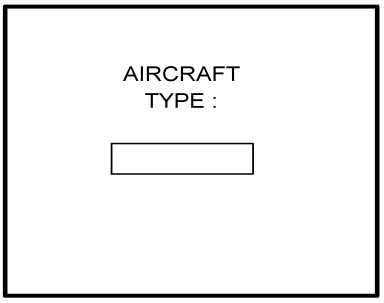


Figure 4-123

22. Select Option 1 for ARINC network or Option 2 for SITA or AVICOM network. Press ENTER to continue. See Figure 4-124.

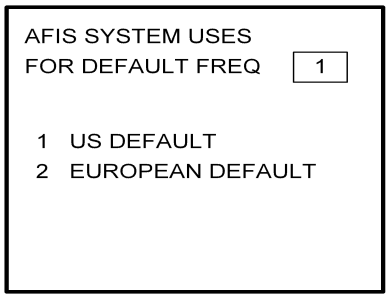


Figure 4-124

23. Fuel Flow option is not available for GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS. Insert 1 and press the ENTER Key. See Figure 4-125. If DMU P/N 400-045500-0004, 400-045500-0006 or other NAV system is used, select the appropriate fuel flow pages.

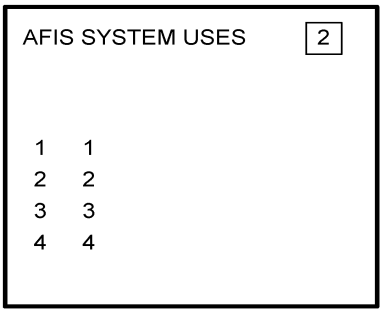


Figure 4-125

24. Fuel Flow option is not available for GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS. Select 1 and press the ENTER Key. See Figure 4-126.

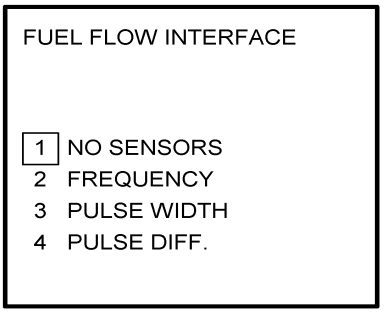


Figure 4-126

25. Select the applicable special feature option and press the ENTER Key to continue.

(a) If Airline ID of GS has been entered the special selection features page will appear as in Figure 4-127.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times.

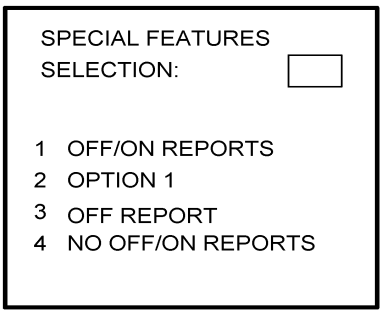


Figure 4-127

(b) If Airline ID XJ or DH has been inserted the special feature option will be displayed as Figure 4-128.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times. ACARS REPORTS = Customer defined non-standard AFIS features.

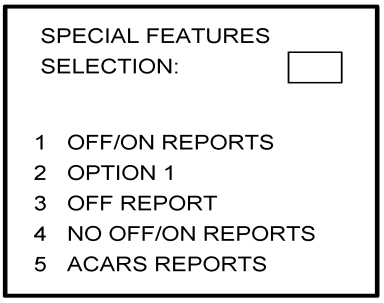


Figure 4-128

NOTE:

If Airline ID is GS, ACARS reports can be accessed by pressing *A or *M and then pressing ENTER key.

If ACARS REPORTS, 5, has been selected see Figure 4-129 otherwise proceed to step 27.

(c) If Airline ID of DH or *A has been entered, the following page selections will be available.

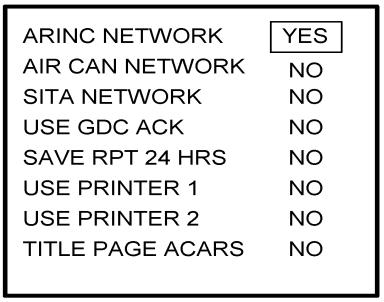


Figure 4-129

Use UP or DOWN arrow keys or right hand line select keys to position cursor over selections. Depress BACK key to cycle between YES and No selection. Press ENTER key to select. Cursor will move to next entry below selection. If cursor is on TITLE PAGE ACARS selection, then pressing ENTER key will activate the page shown in Figure 4-130.

BACK key - depressed with cursor off page causes SPECIAL FEATURES selection to appear. ENTER key - depressed with cursor off page causes screen shown in Figure 4-130 to appear.

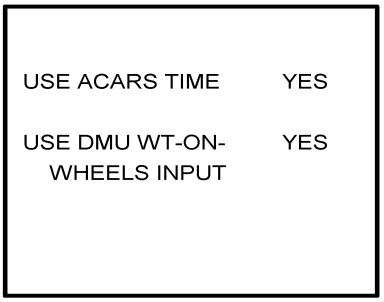


Figure 4-130

Use UP or Down arrow or right hand LINE SELECT keys to position cursor over option.

BACK key - depressed to cycle between YES and NO with cursor over desired selection. ENTER key - depress to select. Cursor will move to next entry below selection. If over USE DMU WT-ON-WHEELS INPUT selection, pressing ENTER key will proceed to step 27.

(d) If Airline ID of XJ or *M has been entered, the following configuration selection will be available. See Figure 4-131.

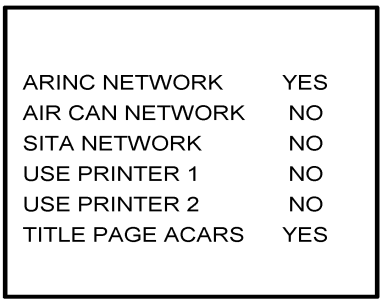


Figure 4-131

Use UP or Down arrow or right hand LINE SELECT keys to position cursor over selections.

BACK key - depressed to cycle between YES and NO with cursor over desired selection.

ENTER key - depress to select. Cursor will move to next entry below selection. If over TITLE PAGE ACARS selection, pressing ENTER key will display the page shown in Figure 4-130.

26. Select whether stored flight plans, messages and weather will be retained in memory when power is interrupted. Press the ENTER Key to continue. See Figure 4-132.

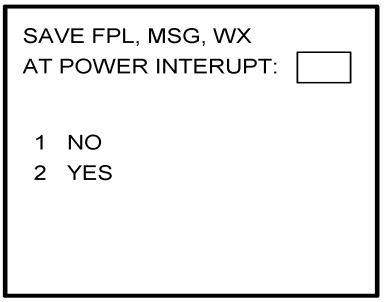


Figure 4-132

27. Select the desired option for Auto Weather update status at power up and press the ENTER Key. See Figure 4-133.

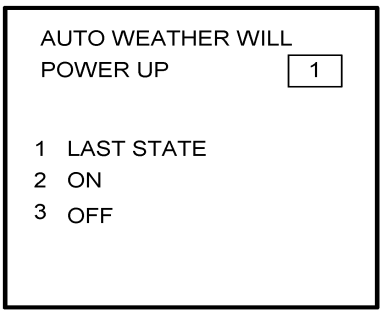


Figure 4-133

28. This step is only applicable to GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS with Satellite Data Communication System option DMU P/N 400-045500-0003, 400-045500-0004, 400-045500-0005, 400-045500-0006 or 400-045500-0130.

    If other versions of the DMU are used, proceed to Step 30. If applicable, select Satcom Option 2 and press the ENTER Key. See Figure 4-134.

    Select GWS option for AERO-C satellite system, ARINC 741 for Aeronautical Standard (ARINC 741) satellite system and SATFONE for SATFONE system. ARINC 741 and SATFONE can only be selected when using DMU P/N 400-045500-0005 or 400-045500-0006.

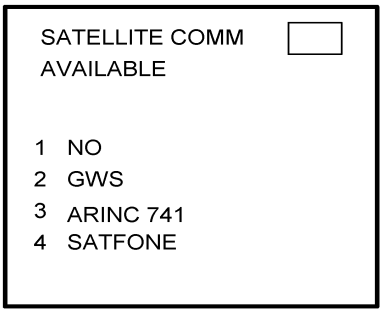


Figure 4-134

29. Select the desired option and press the ENTER Key. See Figure 4-135.

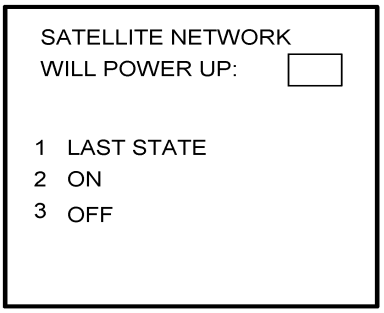


Figure 4-135

30. Write configuration data to the Configuration Module by selecting 2 and press the ENTER Key. See Figure 4-136.

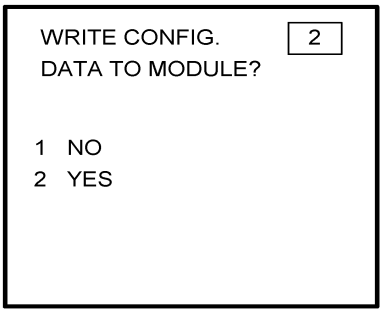


Figure 4-136

31. Power Off DMU and restart.

4.5 CONFIGURATION MODULE PROGRAMMING FOR GNS-1000, GNS-X, GNS-XES, GNS-XL OR GNS-XLS WITH DMU P/N 400-045500-0210 OR 400-045500-2010.

1. Install test connector P/N 12870-1 to the front of the DMU on J102.

2. Turn system on. Press the ENTER Key to accept DATE, GMT, and Position.

If DMU has been previously configured for ACARS proceed to step 4(a) otherwise step 3.

3. Press the PLAN Key or AFIS Key to display the AFIS MENU Page. See Figures 4-137 through 4-139.

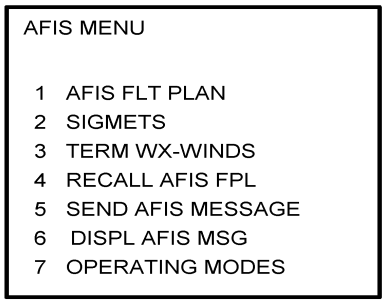


Figure 4-137

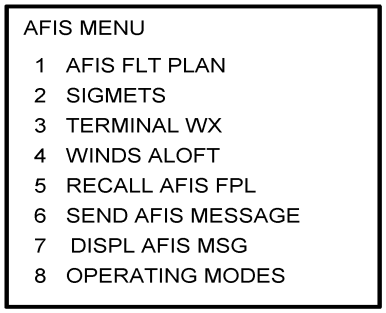


Figure 4-138

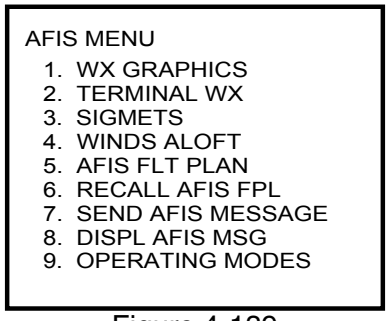


Figure 4-139

4. Use the UP or DOWN Arrow Key or Line >Select keys to position the cursor over the RECALL AFIS FPL option and press the ENTER Key. The RECALL AFIS FPL Page appears. Use the UP or DOWN Arrow Key or Line Select keys to position the cursor over the DATE field and enter 357777. Press the ENTER Key. See Figure 4-140.

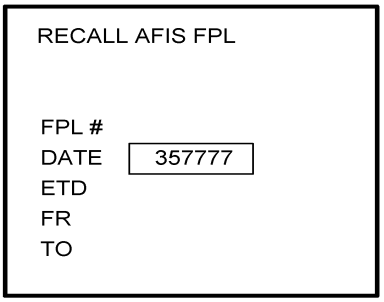


Figure 4-140

NOTE:
For non-ACARS programming, proceed to step 5.

(a) Press the PLAN key or AFIS key to display the ACARS page. See Figure 4-141 or 4-142.

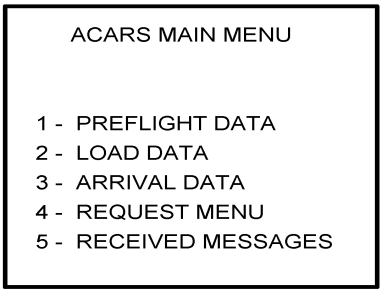


Figure 4-141

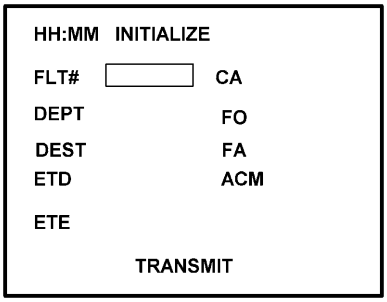


Figure 4-142

(b) If ACARS page shown in Figure 4-141 appears, press “1" key and the PREFLIGHT Data page, Figure 4-143 will appear. Otherwise proceed to step 4(h).

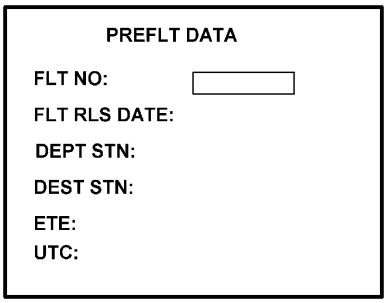


Figure 4-143

(c) Insert a one digit number (eg. 1) in FLT NO: field and press ENTER key. Cursor will move FLT RLS DATE: field.

(d) Insert a one digit number (eg. 1) in FLT RLS DATE: field and press ENTER key. Cursor will move to DEPT STN: field.

(e) Insert a three character departure station identifier (eg. MCI) in DEPT STN: field and press ENTER key. Cursor will move to DEPT STN: field.

(f) Insert a three character destination station identifier (eg. MCI) in DEST STN: field and press ENTER key. Cursor will move to ETE field.

(g) Enter 3577 in ETE field and press ENTER key. See Figure 4-144. Proceed to step 5.

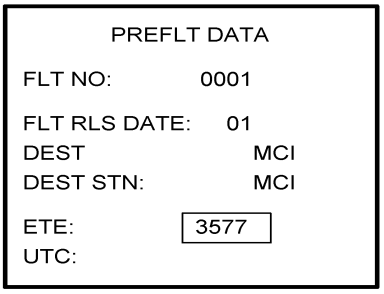


Figure 4-144

(h) Insert a three digit number (eg. 111) in FLT# field and press ENTER key. Cursor will move to DEPT field.

(i) Insert a three character departure identifier (eg. MCI) in DEPT field and press ENTER key. Cursor will move to DEST field.

(j) Insert a three character destination identifier (eg MCI) in DEST field and press ENTER key. Cursor will move to ETD field.

(k) Enter 3577 in ETD field and press ENTER key. See Figure 4-145 and proceed to step 5.

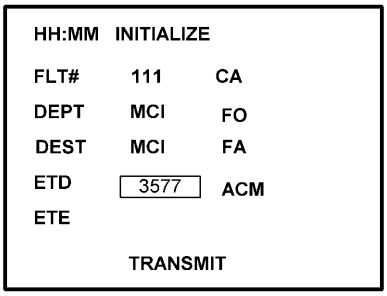


Figure 4-145

5. Select the AFIS configuration to be read or modified from the AFIS Configuration Menu Page (Figure 4-146) and press the ENTER Key.

   The dates of previously entered configurations are shown in Options 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Options 1 to 4 as desired and Figure 4-146 will be displayed.

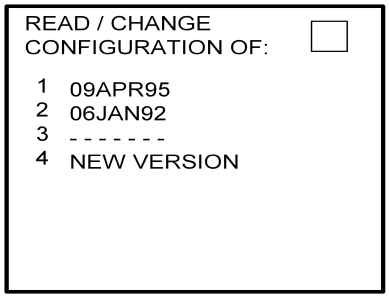


Figure 4-146

6. Insert the basic operating weight and press ENTER. See Figure 4-147.

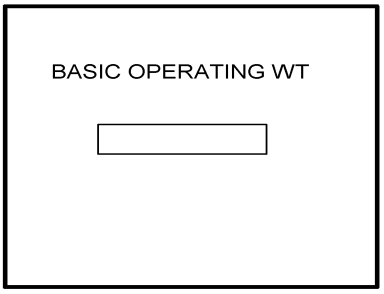


Figure 4-147

7. Insert the default for Auto Report and press ENTER. See Figure 4-148.

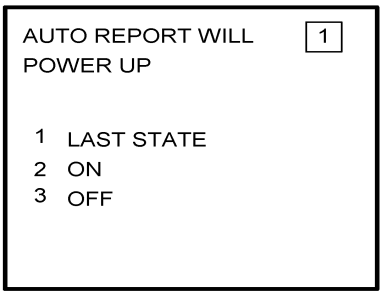


Figure 4-148

8. Insert 15 as the Auto Reporting time interval unless advised differently by the pilot/operator and press ENTER. See Figure 4-149.

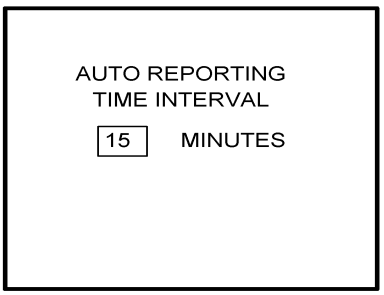


Figure 4-149

9. Select Option 1 if reports are not wanted on the ground. Select Option 2 if reports on the ground are required. See Figure 4-150.

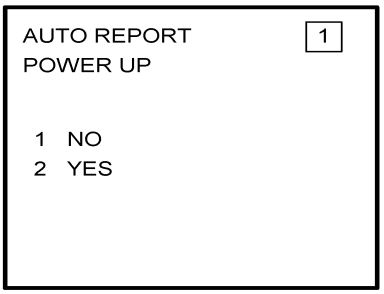


Figure 4-150

10. Insert complete aircraft registration number (tail number) in the cursor field and press ENTER. See Figure 4-151.

Figure 4-151

11. Insert GS as the Airline ID number and press ENTER. See Figure 4-152.

NOTE:

Currently, GS is the only valid entry except for the following: XJ for MESABA Airlines, DH for Atlantic Coast Aviation.

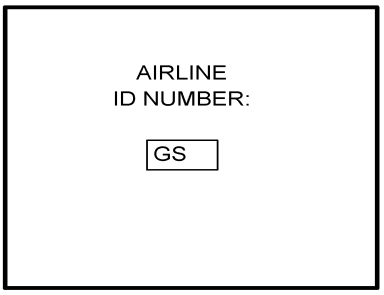


Figure 4-152

12. In the Flight Number cursor field, insert the number 0001 as shown in Figure 4-153. Press ENTER.

NOTE:

Currently, 0001 is the only valid entry and may change at a future time.

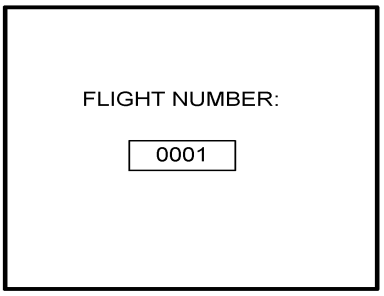


Figure 4-153

13. Insert 1 as shown in Figure 4-154 to indicate that Port 1 is connected to the GNS-1000, GNS-X, or other manufactures navigation system or insert 3 if a graphical GNS-XLS is attached to port 1. Press ENTER.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

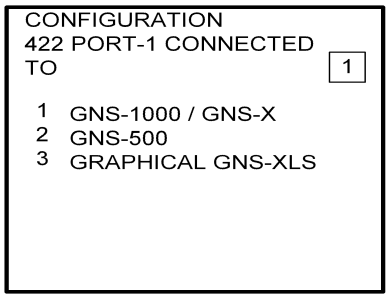


Figure 4-154

14. Insert 1 as shown in Figure 4-1555 to designate that Port 2 is connected to the GNS-1000, GNS-X or other manufacturers navigation system or insert 3 if a Graphical GNS-XLS is attached to Port 2. Press ENTER. If no Global systems are connected, select option 4.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

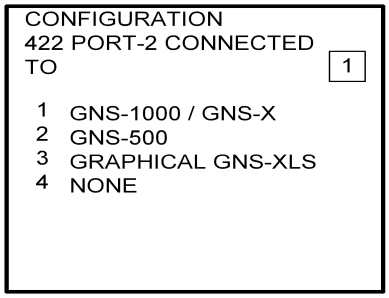


Figure 4-155

15. If applicable, insert 1 to designate that Port 3 is connected to the GNS-1000 or GNS-X system or insert 3 if Port 3 is connected to a Graphical GNS-XLS. Press ENTER. If no Global systems are connected, select Option 4. See Figure 4-156.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

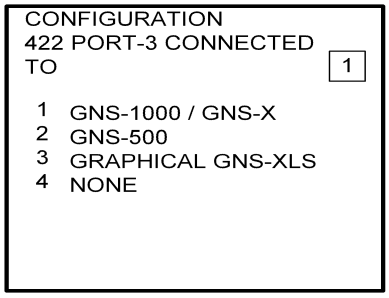


Figure 4-156

16. To designate Port 1 as the Master 422 port, insert 1 and press ENTER. See Figure 4-157.

NOTE:

The master port refers to the use of one port by the software to have priority over the data from other ports (i.e. CDU2). Global recommends use of Port 1.

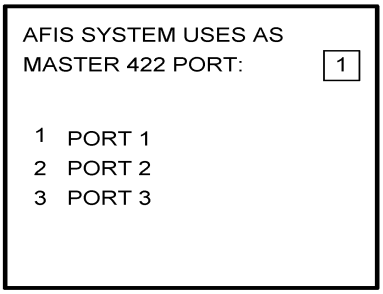


Figure 4-157

17. The 429 port option is only applicable when other manufacturers navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-158.

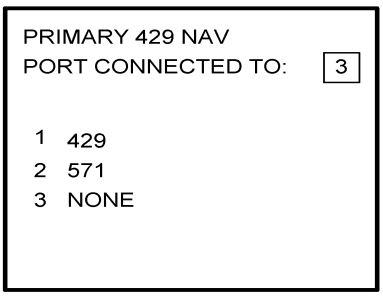


Figure 4-158

18. Insert a 2 if a weather graphics RPU is connected to Cabin Terminal Port 1. Otherwise, insert a 1. See Figure 4-159.

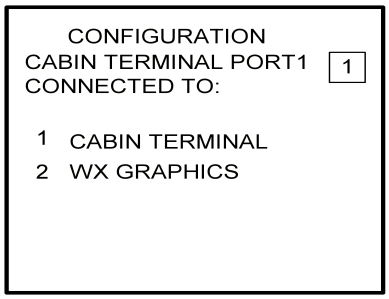


Figure 4-159

19. Insert a 2 if a weather graphics RPU is connected to Cabin Terminal Port 2. Otherwise, insert a 1. See Figure 4-160

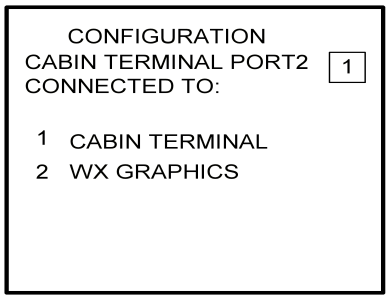


Figure 4-160

20. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-161.

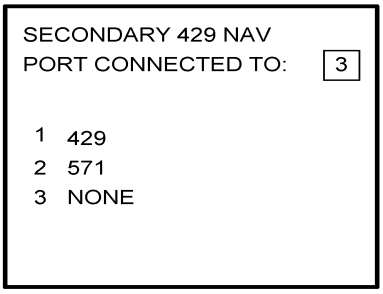


Figure 4-161

21. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-162.

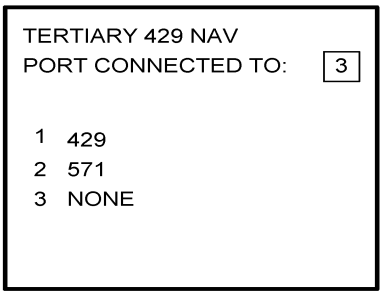


Figure 4-162

22. Select whether the AFIS system is using a separate antenna and press ENTER. See Figure 4-163.

NOTE:

The Antenna Switching Unit (ASU) allows the AFIS system to share an antenna with the VHF Comm or use its own antenna.

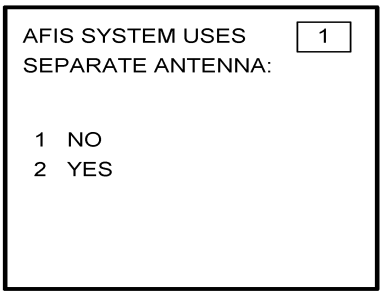


Figure 4-163

23. Insert type designator as listed in Table 4-1 and press ENTER. See Figure 4-164.

NOTE:

If the aircraft type is not listed in Table 4-1, contact Global Data Center to obtain type designator.

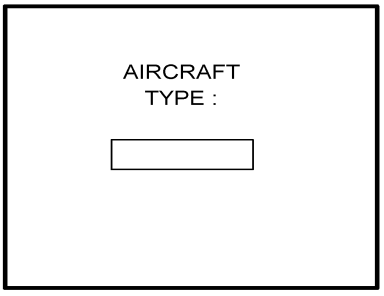


Figure 4-164

24. Select Option 1 for ARINC network or Option 2 for SITA or AVICOM network. Press ENTER to continue. See Figure 4-165.

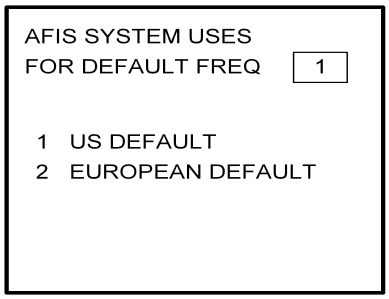


Figure 4-165

25. Fuel Flow option is not available for GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS. Insert 1 and press the ENTER Key. See Figure 4-166. If DMU P/N 400-045500-0004, 400-045500-0006 or other NAV system is used, select the appropriate fuel flow pages.

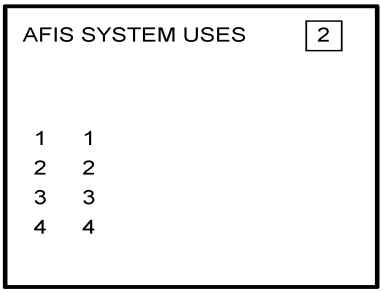


Figure 4-166

26. Fuel Flow option is not available for GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS. Select 1 and press the ENTER Key. See Figure 4-167.

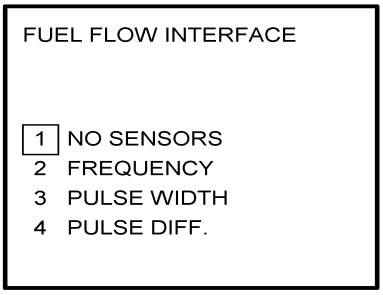


Figure 4-167

27. Select the applicable special feature option and press the ENTER Key to continue.

(a) If Airline ID of GS has been entered the special selection features page will appear as in Figure 4-168.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times.

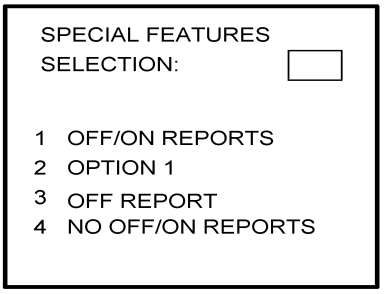


Figure 4-168

(b) If Airline ID XJ or DH has been inserted the special feature option will be displayed as Figure 4-169.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times. ACARS REPORTS = Customer defined non-standard AFIS features.

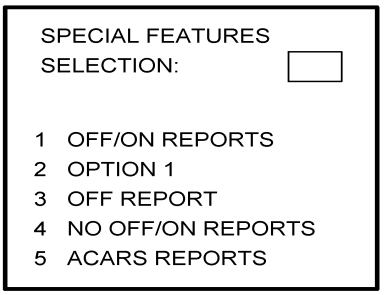


Figure 4-169

NOTE:

If Airline ID is GS, ACARS reports can be accessed by pressing *A or *M and then pressing ENTER key.

If ACARS REPORTS, 5, has been selected see Figure 4-170 otherwise proceed to step 28.

(c) If Airline ID of DH or *A has been entered, the following page selections will be available.

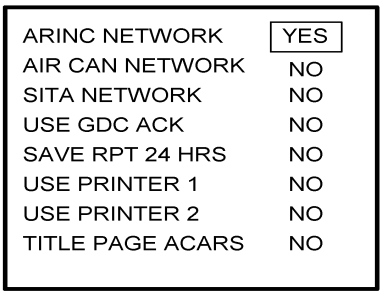


Figure 4-170

Use UP or DOWN arrow keys or right hand line select keys to position cursor over selections. Depress BACK key to cycle between YES and No selection. Press ENTER key to select. Cursor will move to next entry below selection. If cursor is on TITLE PAGE ACARS selection, then pressing ENTER key will activate the page shown in Figure 4-171.

BACK key - depressed with cursor off page causes SPECIAL FEATURES selection to appear.

ENTER key -depressed with cursor off page causes screen shown in Figure 4-171 to appear.

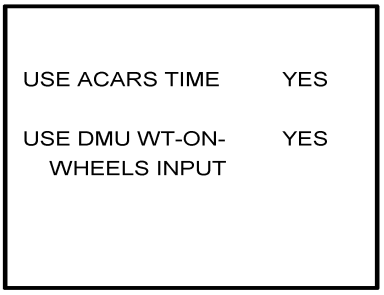


Figure 4-171

Use UP or Down arrow or right hand LINE SELECT keys to position cursor over option.

BACK key - depressed to cycle between YES and NO with cursor over desired selection.

ENTER key - depress to select. Cursor will move to next entry below selection. If over USE DMU WT-ON-WHEELS INPUT selection, pressing ENTER key will proceed to step 27.

(d) If Airline ID of XJ or *M has been entered, the following configuration selection will be available. See Figure 4-172.

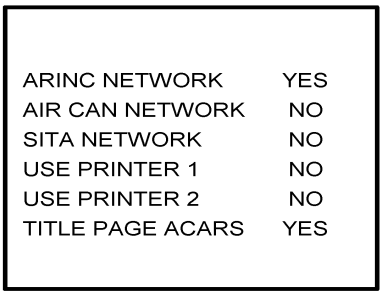


Figure 4-172

Use UP or Down arrow or right hand LINE SELECT keys to position cursor over selections.

BACK key - depressed to cycle between YES and NO with cursor over desired selection.

ENTER key - depress to select. Cursor will move to next entry below selection. If over TITLE PAGE ACARS selection, pressing ENTER key will display the page shown in Figure 4-171.

28. Select whether stored flight plans, messages and weather will be retained in memory when power is interrupted. Press the ENTER Key to continue. See Figure 4-173.

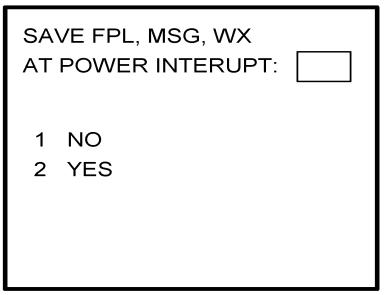


Figure 4-173

29. Insert 2 if the DMU is to use the weight on wheels input. See Figure 4-174.

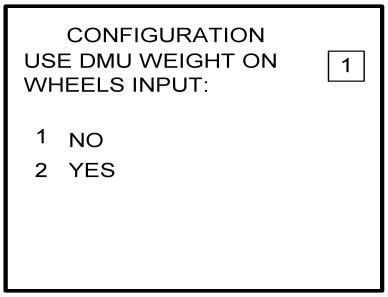


Figure 4-174

30. Select the desired option for Auto Weather update status at power up and press the ENTER Key. See Figure 4-175.

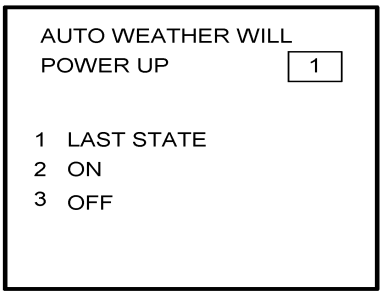


Figure 4-175

31. This step is only applicable to GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS with Satellite Data Communication System option DMU P/N 400-045500-0210 or 400-045500-2010.

    If other versions of the DMU are used, proceed to Step 33. If applicable, select Satcom Option 2 and press the ENTER Key. See Figure 4-176.

    Select GWS option for AERO-C satellite system, ARINC 741 for Aeronautical Standard (ARINC 741) satellite system and SATFONE for SATFONE system. ARINC 741 and SATFONE can only be selected when using DMU P/N 400-045500-2010.

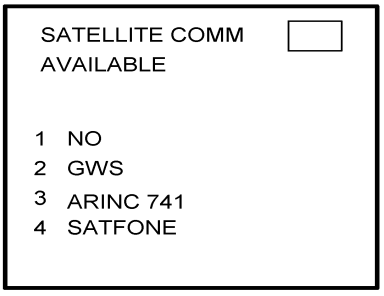


Figure 4-176

32. Select the desired option and press the ENTER Key. See Figure 4-177.

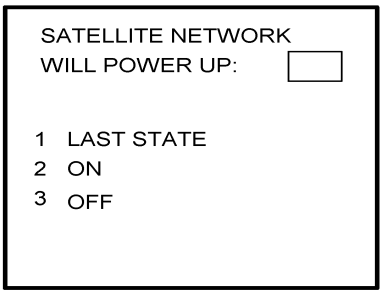


Figure 4-177

33. Write configuration data to the Configuration Module be selecting 2 and press the ENTER Key. See Figure 4-178.

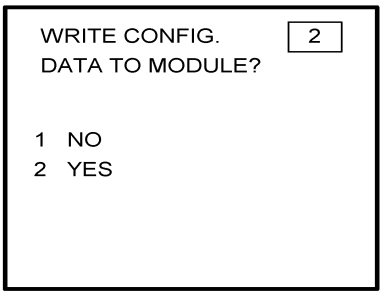


Figure 4-178

34. Power Off DMU and restart.

NOTE:
This completes AFIS configuration. For ACARS configuration, proceed to step 4(a).

4.6 CONFIGURATION MODULE PROGRAMMING FOR GNS-1000, GNS-X, GNS-XES, GNS-XL OR GNS-XLS WITH DMU P/N 400-045500-0211 OR 400-045500-2011.

1. Install test connector P/N 12870-1 to the front of the DMU on J102.

2. Turn system on. Press the ENTER Key to accept DATE, GMT, and Position.

If DMU has been previously configured for ACARS proceed to step 4(a) otherwise step 3.

3. Press the PLAN Key or AFIS Key to display the AFIS MENU Page. See Figures 4-179 through 4-181.

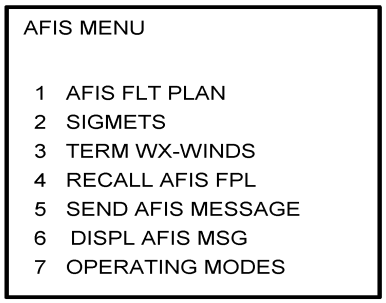


Figure 4-179

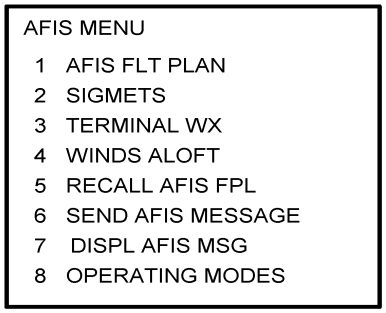


Figure 4-180

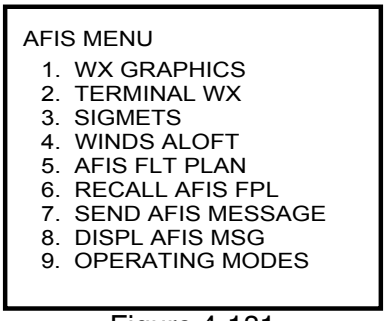


Figure 4-181

4. Use the UP or DOWN Arrow Key or Line >Select keys to position the cursor over the RECALL AFIS FPL option and press the ENTER Key. The RECALL AFIS FPL Page appears. Use the UP or DOWN Arrow Key or Line Select keys to position the cursor over the DATE field and enter 357777. Press the ENTER Key. See Figure 4-182.

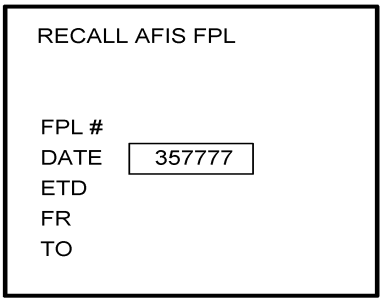


Figure 4-182

NOTE:
For non-ACARS programming, proceed to step 5.

(a) Press the PLAN key or AFIS key to display the ACARS page. See Figure 4-183 or 4-184.

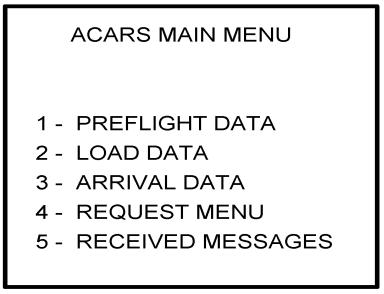


Figure 4-183

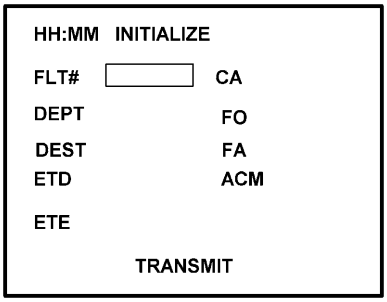


Figure 4-184

(b) If ACARS page shown in Figure 4-183 appears, press “1" key and the PREFLIGHT Data page, Figure 4-185 will appear. Otherwise proceed to step 4(h).

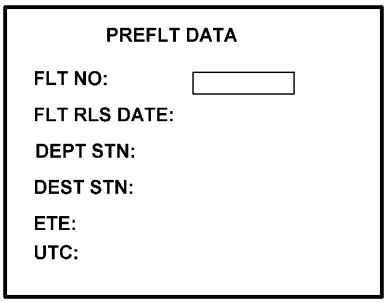


Figure 4-185

(c) Insert a one digit number (eg. 1) in FLT NO: field and press ENTER key. Cursor will move FLT RLS DATE: field.

(d) Insert a one digit number (eg. 1) in FLT RLS DATE: field and press ENTER key. Cursor will move to DEPT STN: field.

(e) Insert a three character departure station identifier (eg. MCI) in DEPT STN: field and press ENTER key. Cursor will move to DEPT STN: field.

(f) Insert a three character destination station identifier (eg. MCI) in DEST STN: field and press ENTER key. Cursor will move to ETE field.

(g) Enter 3577 in ETE field and press ENTER key. See Figure 4-186. Proceed to step 5.

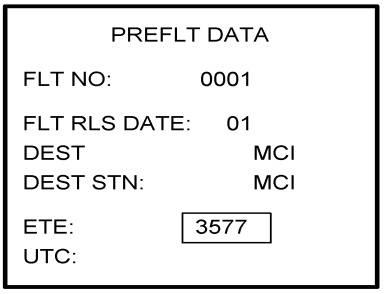


Figure 4-186

(h) Insert a four digit number (eg. 1111) in FLT# field and press ENTER key. Cursor will move to DEPT field.

(i) Insert a three character departure identifier (eg. MCI) in DEPT field and press ENTER key. Cursor will move to DEST field.

(j) Insert a three character destination identifier (eg MCI) in DEST field and press ENTER key. Cursor will move to ETD field.

(k) Enter 3577 in ETD field and press ENTER key. See Figure 4-145 and proceed to step 5.

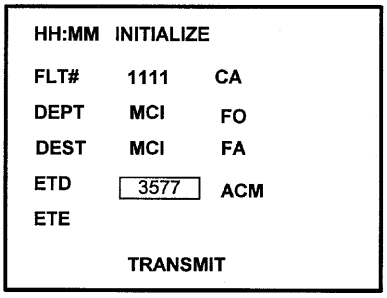


Figure 4-187

5. Select the AFIS configuration to be read or modified from the AFIS Configuration Menu Page (Figure 4-188) and press the ENTER Key.

   The dates of previously entered configurations are shown in Options 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Options 1 to 4 as desired and Figure 4-188 will be displayed.

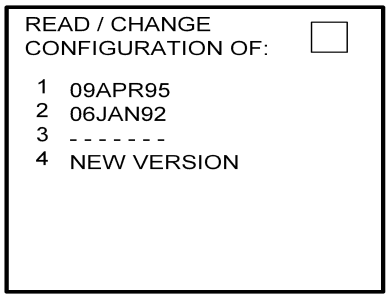


Figure 4-188

6. Insert the basic operating weight and press ENTER. See Figure 4-189.

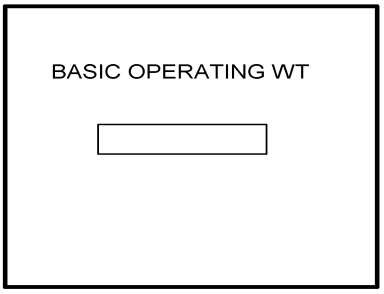


Figure 4-189

7. Insert the default for Auto Report and press ENTER. See Figure 4-190.

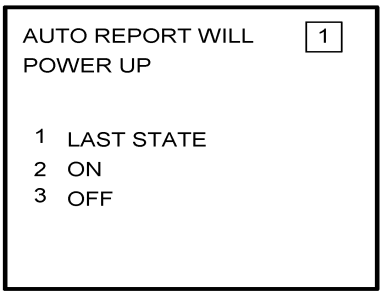


Figure 4-190

8. Insert 15 as the Auto Reporting time interval unless advised differently by the pilot/operator and press ENTER. See Figure 4-191.

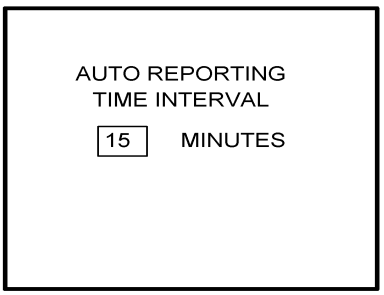


Figure 4-191

9. Select Option 1 if reports are not wanted on the ground. Select Option 2 if reports on the ground are required. See Figure 4-192.

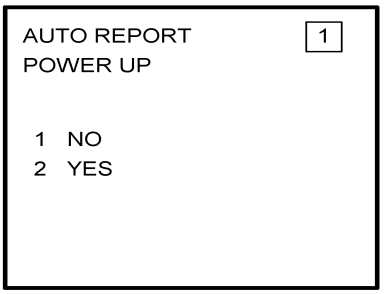


Figure 4-192

10. Insert complete aircraft registration number (tail number) in the cursor field and press ENTER. See Figure 4-193.

Figure 4-193

11. Insert GS as the Airline ID number and press ENTER. See Figure 4-194.

NOTE:

Currently, GS is the only valid entry except for the following: XJ for MESABA Airlines, DH for Atlantic Coast Aviation.

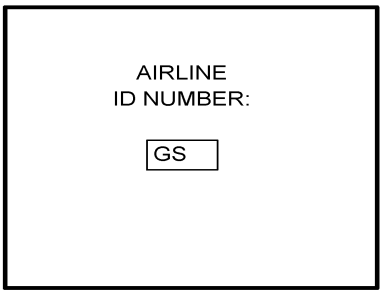


Figure 4-194

12. In the Flight Number cursor field, insert the number 0001 as shown in Figure 4-195. Press ENTER.

NOTE:

Currently, 0001 is the only valid entry and may change at a future time.

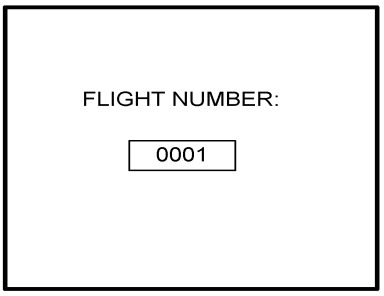


Figure 4-195

13. Insert 1 as shown in Figure 4-196 to indicate that Port 1 is connected to the GNS-1000, GNS-X, or other manufactures navigation system or insert 3 if a graphical GNS-XLS is attached to port 1. Press ENTER.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

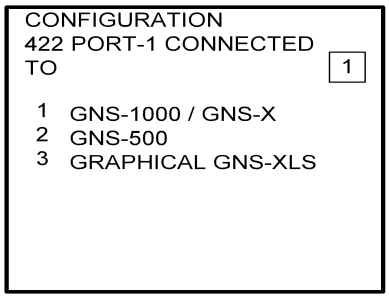


Figure 4-196

14. Insert 1 as shown in Figure 4-197 to designate that Port 2 is connected to the GNS-1000, GNS-X or other manufacturers navigation system or insert 3 if a Graphical GNS-XLS is attached to Port 2. Press ENTER. If no Global systems are connected, select option 4.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

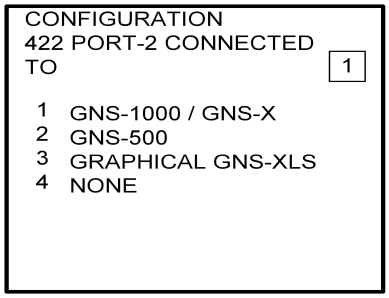


Figure 4-197

15. If applicable, insert 1 to designate that Port 3 is connected to the GNS-1000 or GNS-X system or insert 3 if Port 3 is connected to a Graphical GNS-XLS. Press ENTER. If no Global systems are connected, select Option 4. See Figure 4-198.

NOTE:

GNS-X applies also to GNS-XES, GNS-XL and GNS-XLS.

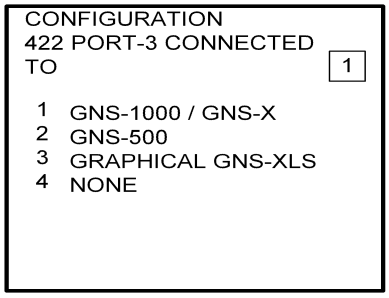


Figure 4-198

16. To designate Port 1 as the Master 422 port, insert 1 and press ENTER. See Figure 4-199.

NOTE:

The master port refers to the use of one port by the software to have priority over the data from other ports (i.e. CDU2). Global recommends use of Port 1.

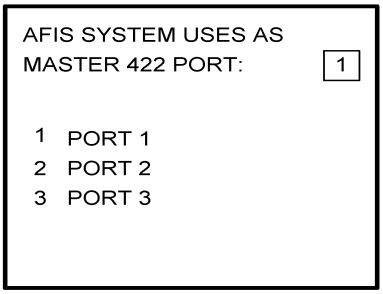


Figure 4-199

17. Insert a 2 if a weather graphics RPU is connected to Cabin Terminal Port 1. Otherwise, insert a 1. See Figure 4-200.

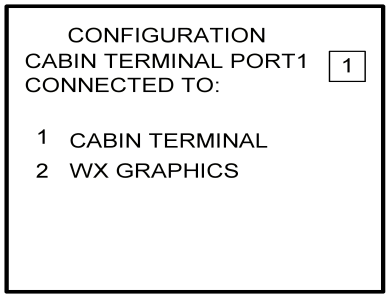


Figure 4-200

18. Insert a 2 if a weather graphics RPU is connected to Cabin Terminal Port 2. Otherwise, insert a 1. See Figure 4-201

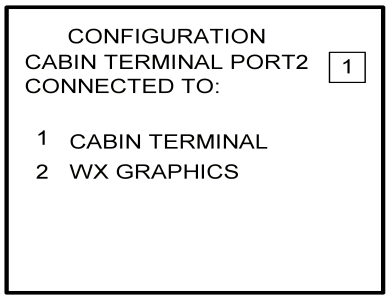


Figure 4-201

19. The 429 port option is only applicable when other manufacturers navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-202.

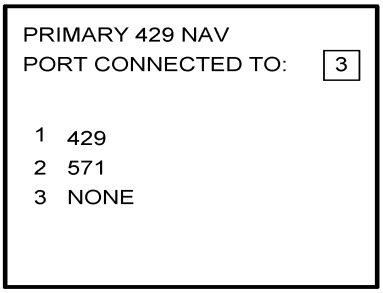


Figure 4-202

20. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-203.

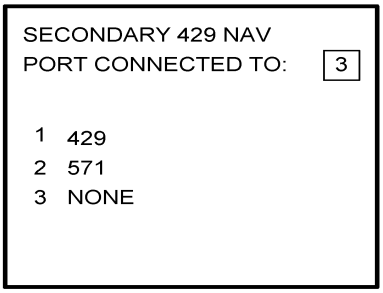


Figure 4-203

21. The 429 port option is only applicable when other manufacturer's navigation systems are installed. If only Global systems are used, insert 3 and press ENTER. See Figure 4-204.

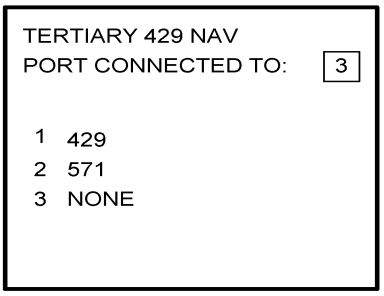


Figure 4-204

22. Select whether the AFIS system is using a separate antenna and press ENTER. See Figure 4-205.

NOTE:

The Antenna Switching Unit (ASU) allows the AFIS system to share an antenna with the VHF Comm or use its own antenna.

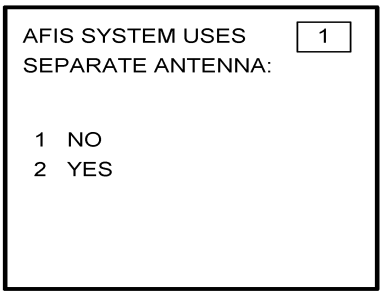


Figure 4-205

23. Insert type designator as listed in Table 4-1 and press ENTER. See Figure 4-206.

NOTE:

If the aircraft type is not listed in Table 4-1, contact Global Data Center to obtain type designator.

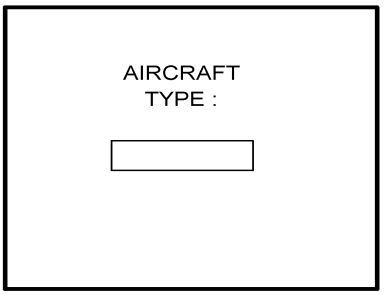


Figure 4-206

24. Select Option 1 for ARINC network or Option 2 for SITA or AVICOM network. Press ENTER to continue. See Figure 4-207.

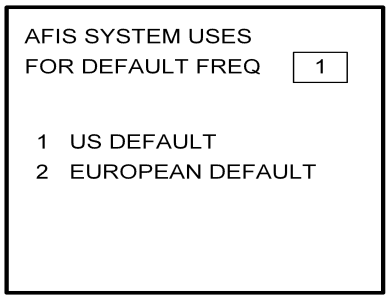


Figure 4-207

25. Select Option 2 if ACMS (FDAMS) hardware will be installed. Press ENTER key to continue. See Figure 4-208.

NOTE:

If option 1 is selected, skip to step 28.

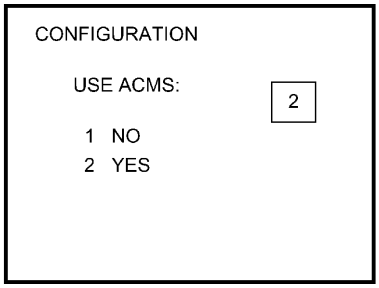


Figure 4-208

26. Select number of engines applicable. Press ENTER key to continue. See Figure 4-209.

NOTE:

This menu operation has been modified from its prior use in the Fuel Flow Menus.

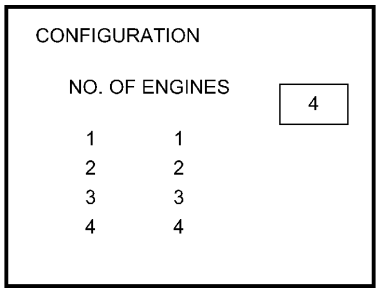


Figure 4-209

27. Insert 1-4 Engine Serial Numbers based on number entered in Step 26. Press ENTER key to continue. See Figure 4-210.

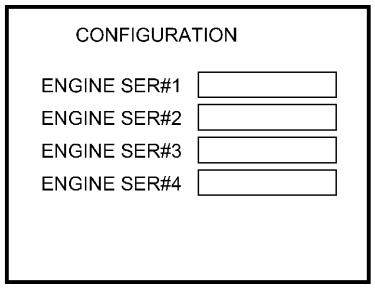


Figure 4-210

28. Select the applicable special feature option and press the ENTER Key to continue.

(a) If Airline ID of GS has been entered the special selection features page will appear as in Figure 4-211.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times.

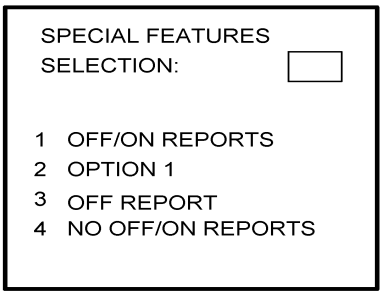


Figure 4-211

Pressing the ENTER key will proceed to step 31.

(b) If Airline ID XJ or DH has been inserted the special feature option will be displayed as Figure 4-212.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times. OPTION 1 = customer defined non-standard AFIS features. OFF REPORT = logging takeoff times. NO OFF/ON REPORTS = no logging of takeoff and landing times. ACARS REPORTS = Customer defined non-standard AFIS features.

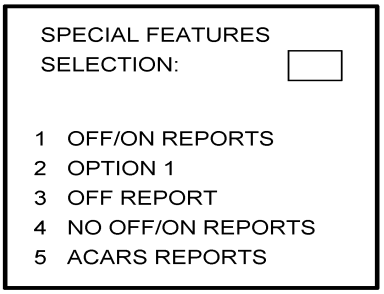


Figure 4-212

NOTE:

If Airline ID is GS, ACARS reports can be accessed by pressing *A or *M and then pressing ENTER key.

If ACARS REPORTS, 5, has been selected, see Figure 4-213 for Airline ID DH or see Figure 4-215 for Airline ID XJ; otherwise, proceed to step 31.

(c) If Airline ID of DH or *A has been entered, the following page selections will be available.

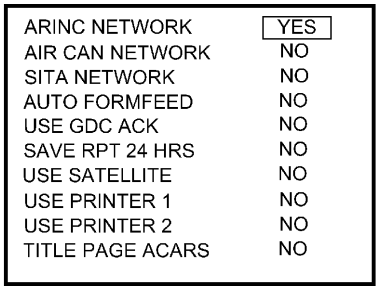


Figure 4-213

Use UP or DOWN arrow keys or right hand line select keys to position cursor over selections. Depress BACK key to cycle between YES and No selection. Press ENTER key to select. Cursor will move to next entry below selection. If cursor is on TITLE PAGE ACARS selection, then pressing ENTER key will activate the page shown in Figure 4-214.

BACK key - depressed with cursor off page causes SPECIAL FEATURES selection to appear.

ENTER key -depressed with cursor off page causes screen shown in Figure 4-214 to appear.

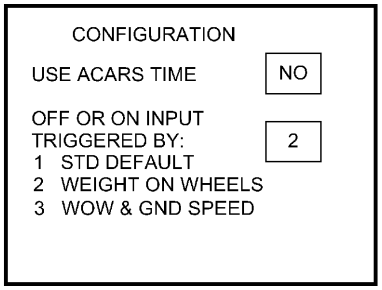


Figure 4-214

Use UP or Down arrow or right hand LINE SELECT keys to position cursor over option.

NOTE:

For airline ID of DH or *A, set OFF OR ON TRIGGERED BY: to 2.

BACK key - depressed to cycle between YES and NO with cursor over USE ACARS TIME.

ENTER key - depress to select. Cursor will move to next entry below selection. If over OFF OR ON TRIGGERED BY: selection, pressing ENTER key will proceed to step 32.

(d) If Airline ID of XJ or *M has been entered, the following configuration selection will be available. See Figure 4-215.

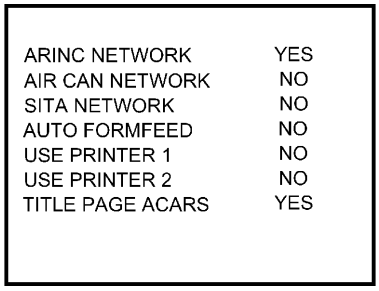


Figure 4-215

Use UP or Down arrow or right hand LINE SELECT keys to position cursor over selections.

BACK key - depressed to cycle between YES and NO with cursor over desired selection. depressed with cursor off page causes SPECIAL FEATURES selection to appear.

ENTER key - depress to select. Cursor will move to next entry below selection. If over TITLE PAGE ACARS selection, pressing ENTER key will display the page shown in Figure 4-216

29. Select applicable inputs for use ACARS TIME and OFF OR ON TRIGGERED BY.

NOTE:

If Airline ID of XJ or *M has been entered, set use ACARS TIME to NO using BACK key and insert 2 for OFF OR ON TRIGGERED BY. See Figure 4-216.

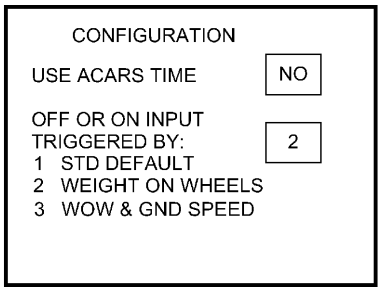


Figure 4-216

Press ENTER key from OFF OR ON TRIGGERED BY to continue to next page

30. Select 1 to disable DDTC (taxi clearance) and Pushback Request options; otherwise, select option 2. Press ENTER. See Figure 4-217.

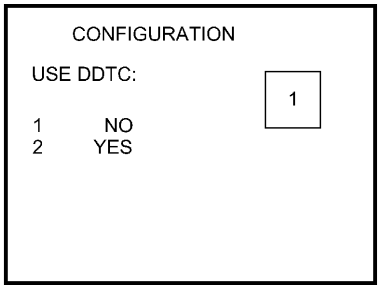


Figure 4-217

Pressing the ENTER key will proceed to step 32.

31. Select whether the AFIS system is using standard default (ground speed) or weight on wheels to trigger in-air detection. Enter selection and press ENTER (see Figure 4-218)

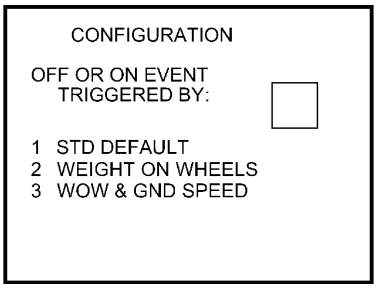


Figure 4-218

NOTE:
After making a selection, go to step 32.

32. Select whether stored flight plans, messages and weather will be retained in memory when power is interrupted. Press the ENTER Key to continue. See Figure 4-218.

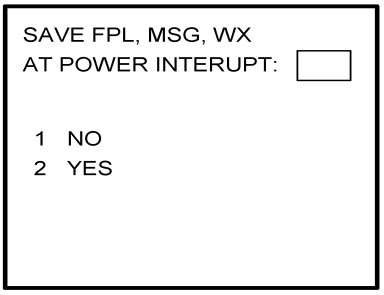


Figure 4-219

33. Select the desired option for Auto Weather update status at power up and press the ENTER Key. See Figure 4-220.

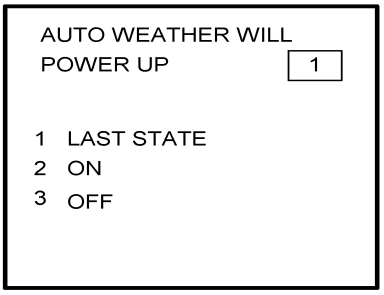


Figure 4-220

34. This step is only applicable to GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS with Satellite Data Communication System option DMU P/N 400-045500-0211 or 400-045500-2011.
If other versions of the DMU are used, proceed to Step 36. If applicable, select Satcom Option 2 and press the ENTER Key. See Figure 4-221.

Select AERO-C option for AERO-C satellite system, ARINC 741 for Aeronautical Standard (ARINC 741) satellite system and SATFONE for SATFONE system. ARINC 741 and SATFONE can only be selected when using DMU P/N 400-045500-2011.

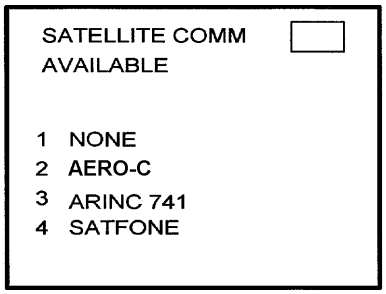


Figure 4-221

35. Select the desired option and press the ENTER Key. See Figure 4-222.

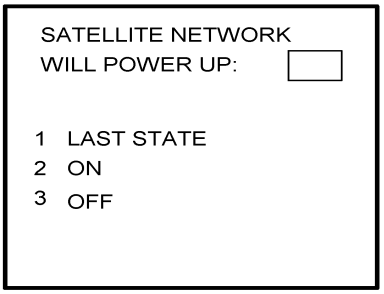


Figure 4-222

36. Write configuration data to the Configuration Module be selecting 2 and press the ENTER Key. See Figure 4-223.

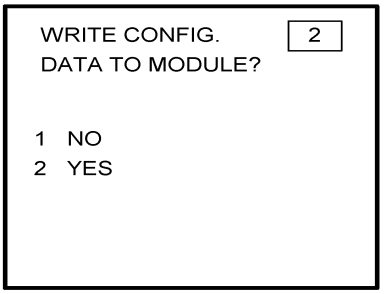


Figure 4-223

37. Power Off DMU and restart.

NOTE:

This completes AFIS configuration. For ACARS configuration, proceed to step 4(a).

4.7 CONFIGURATION MODULE PROGRAMMING FOR 739 MCDU AND OTHER FMS MANUFACTURERS WITH DMU P/N 400-45000-2011 OR 400-45000-0211

1. Install test connector P/N 12870-1 to the front of the DMU on J102.
2. Turn system on.

If DMU has been configured for ACARS proceed to step 5 otherwise go to step 3.

3. Press line-select-key L4 to access Recall FPL Page. See Figure 4-224.

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	
	0								A	F	I	S		M	E	N	U								
	1																								
L1	2	<	F	L	T		P	L	A	N							F	P	L		L	I	S	T	> - R1
	3																								
L2	4	<	T	E	R	M	I	N	A	L		W	X					F	L	T		P	R	G	> - R2
	5																								
L3	6	<	W	I	N	D	S		A	L	O	F	T				S	I	G	M	E	N	T	S	> - R3
	7																								
L4	8	<	R	E	C	A	L	L		F	P	L					U	P	D	T		F	P	L	> - R4
	9																								
L5	0	<	S	E	N	D		M	S	G				D	I	S	P	L	A	Y		M	S	G	> - R5
	1																								
L6	2	<	O	P	E	R	A	T	I	N	G		M	O	D	E	S								> - R6
	3																								

Figure 4-224

4. Enter 357777 on scratch pad, line 13, and press L3. See figure 4-225. Go to step 5.

	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	
	0				R	E	C	A	L	L		A	F	I	S		F	P	L			1	/	1	
	1	F	P	L		N	U	M	B	E	R														
L1	2	X	X	X	X	X																			- R1
	3																								
L2	4																								- R2
	5		D	A	T	E															F	R	O	M	
L3	6	1	1	N	O	V	9	8													K	D	E	N	- R3
	7		E	T	D																	T	O		
L4	8	0	1	:	1	1															K	L	A	X	- R4
	9																								
L5	0																								- R5
	1																								
L6	2	<	M	E	N	U											T	R	A	N	S	M	I	T	> - R6
	3	3	5	7	7	7	7																		

Figure 4-225

5. Enter 3577 in line 13 and press L4. See figure 4-226.

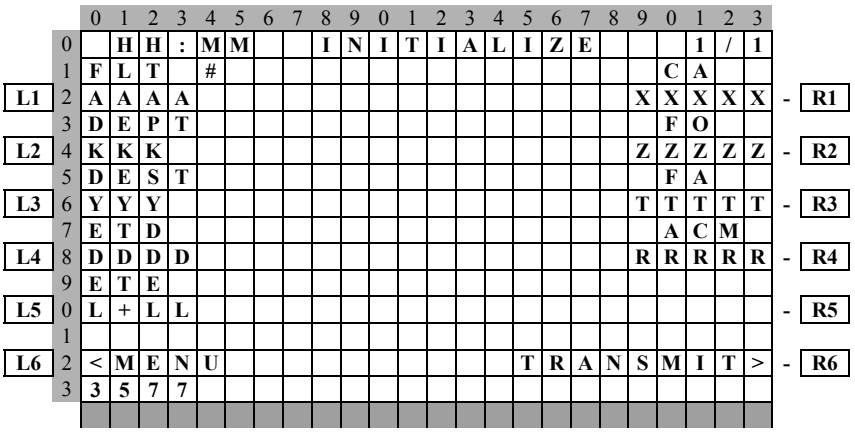


Figure 4-226

6. Enter six numeric digits represent day, month, and year and press line-select-key L3. See Figure4-227.

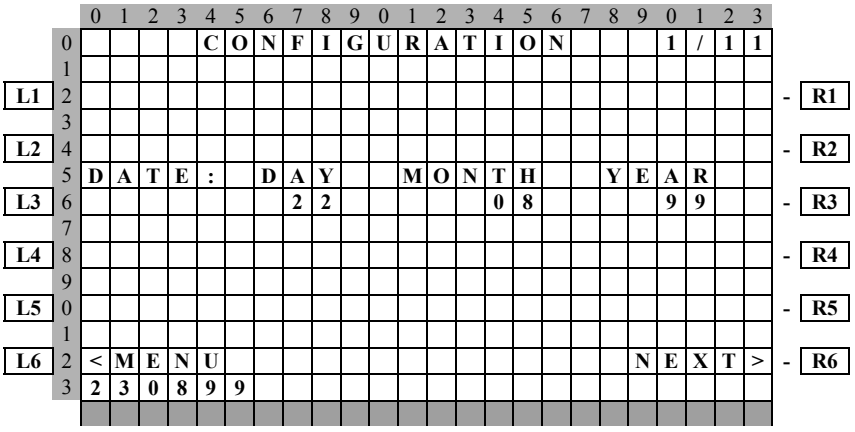


Figure 4-227

7. Select the AFIS configuration to be read or modified from the AFIS configuration Menu Page (Figure 4-228) by pressing adjacent line-select-key. The dates of previously entered configurations are shown in Option 1 to 3. The newest configuration date appears first. Option 4 allows for the entry of a new configuration. Select Option 1 to 4 as desired and Figure 4-229 will be displayed.

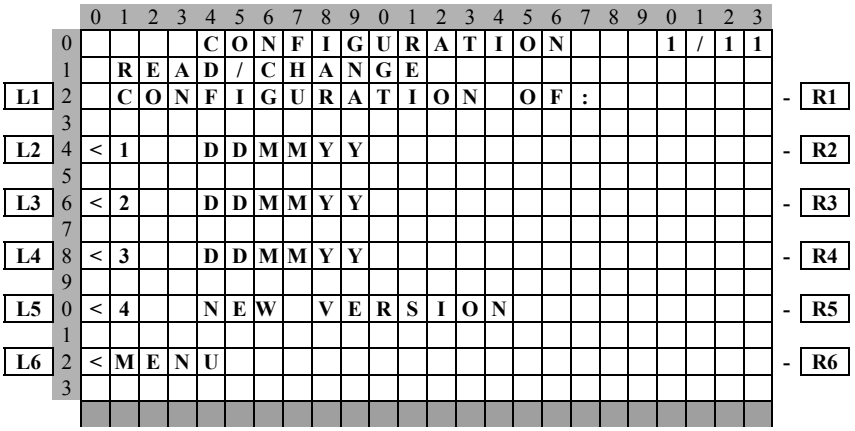


Figure 4-228

8. See Figure 4-229 and perform the following steps:

   a. Enter complete aircraft registration number (tail number) in the scratch pad line 13 and press line-select-key L1.
   b. Enter aircraft id in the scratch pad line 13 and press line-select-key L3.
   c. Enter flight number in line 13 and press line-select-key L5.
   d. Press line-select-key R6 to go to the next page.

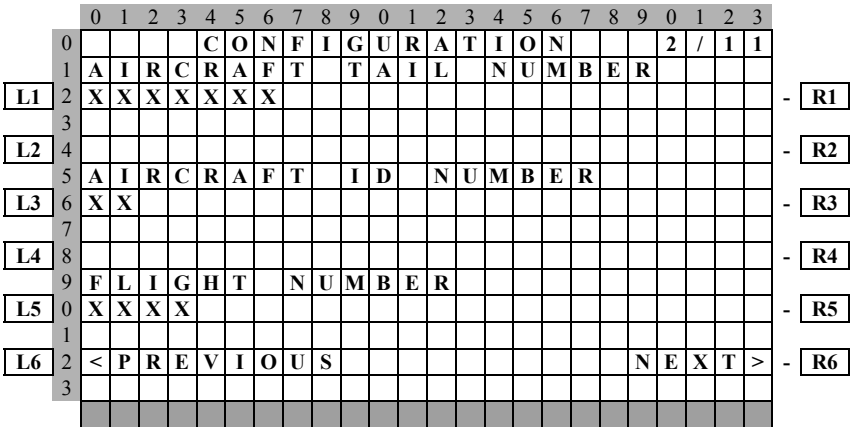


Figure 4-229

9. See Figure 4-230 and perform the following steps:

   a. Enter aircraft type in the scratch pad line 13 and press line-select-key L1.
   b. Enter basic operating weight in the scratch pad line 13 and press line-select-key L2.
   c. Press line-select-key L3 to toggle separate antenna to yes or no.
   d. Press line-select-key L4 to toggle default frequency between U.S. DEFAULT and EUROPEAN DEFAULT.
   e. Press line-select-key R6 to go to the next page.

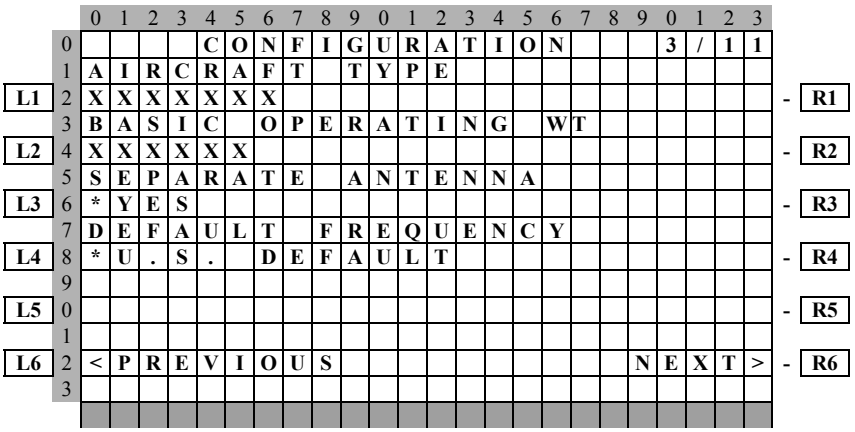


Figure 4-230

10. See Figure 4-231 and perform the following steps:

   a. Press line-select-key L1 to toggle the default for Auto RPT Will PWR Up between last state, on, or off.
   b. Enter the Auto Reporting time interval unless advised differently by the pilot/operator in the scratch pad line 13 and press line-select-key L3.
   c. Press line-select-key L3 to toggle the Auto Reporting on Ground between YES, and NO.
   d. Press line-select-key R6 to go to the next page.

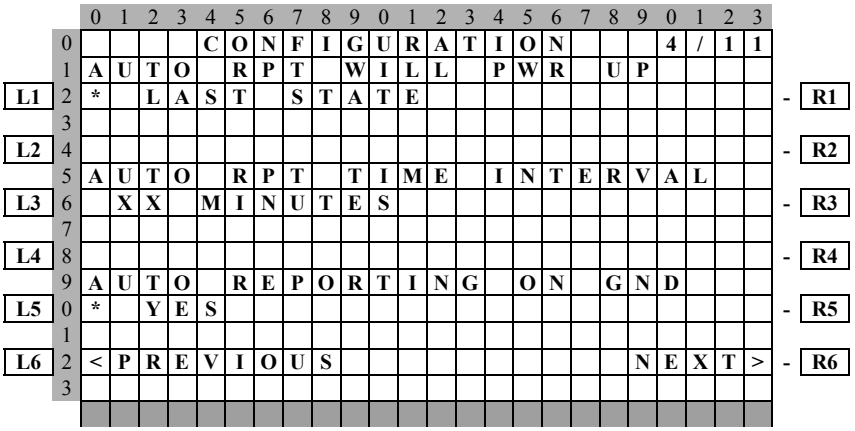


Figure 4-231

11. See Figure 4-232 and perform the following steps:

    a. Press line-select-key L1 to toggle the default for Port 1 between GNS-1000/GNS-X and GNS-500.
    b. Press line-select-key L3 to toggle the default for Port 2 between GNS-1000/GNS-X and GNS-500
    c. Press line-select-key L5 to toggle the default for Port 3 between GNS-1000/GNS-X, GNS-500, and NONE.
    d. Press line-select-key R6 to go to the next page.

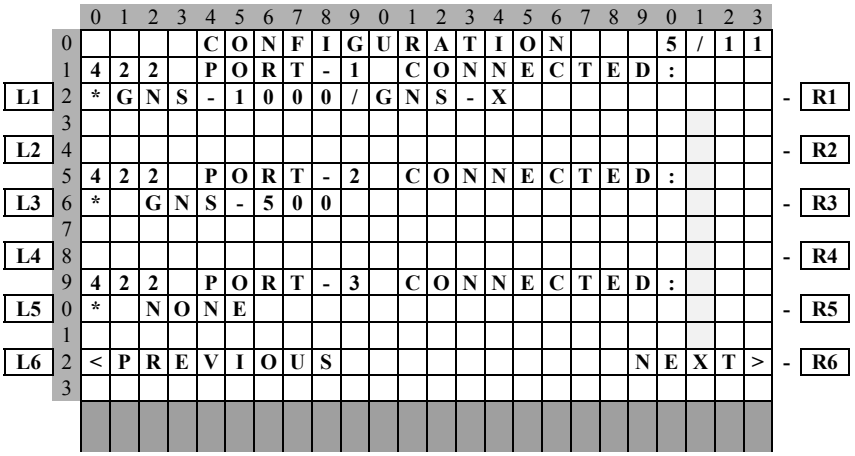


Figure 4-232

12. See Figure 4-233 and perform the following steps:

    a. Press line-select-key L1 to toggle the default for Port 1 between 429, 571, and OFF.
    b. Press line-select-key L3 to toggle the default for Port 2 between 429, 571, and OFF.
    c. Press line-select-key L5 to toggle the default for Port 3 between 429, 571, and OFF.
    d. Press line-select-key R6 to go to the next page.

NOTE:

For 739 MCDU select L1 or L2 or L3 to indicate which port is connected.

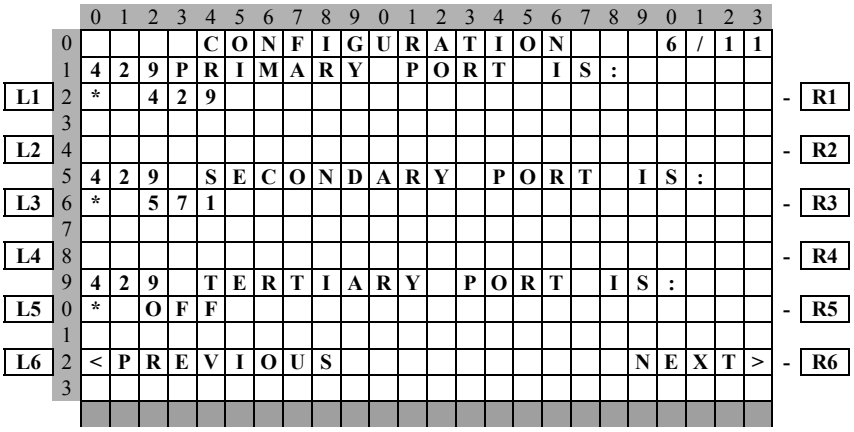


Figure 4-233

13. Select whether stored flight plans, messages and weather will be retained in memory when power is interrupted. See Figure 4-234.

    a. Press line-select-key L1 to toggle the default for Auto Weather Will PWR Up between LAST STATE, ON, and OFF.
    b. Press line-select-key L3 to toggle the default for Save FPL, MSG, WX between YES or NO.
    c. Press line-select-key R6 to go to the next page.

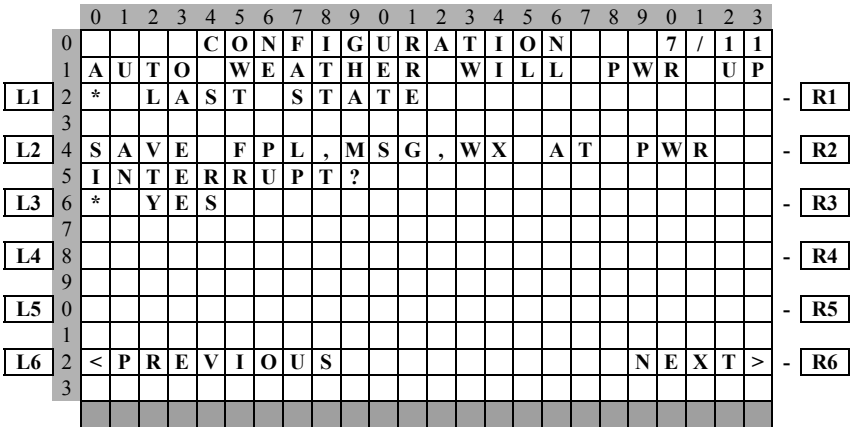


Figure 4-234

14. This step is only applicable to GNS-1000, GNS-X, GNS-XES, GNS-XL or GNS-XLS with Satellite Date Communication System option DMU P/N 400-045500-2011. If other versions of the DMU are used, proceed to step 15. If applicable, select Satcom AERO-C Option for Honeywell satellite system, ARINC741 for Aeronautical Standard (ARINC 741) satellite system and SATFONE for SATFONE system. ARINC 741 and SATFONE can only be selected when using DMU P/N 400-045500-2011.

See Figure 4-235.

a. Press line-select-key L1 to toggle the default for SAT System Available between NO, AERO-C, ARINC741, and SATFONE.
b. Press line-select-key L3 to toggle the default for SAT Network Will PWR Up between LAST STATE, ON or OFF.
c. Press line-select-key R6 to go to the next page.

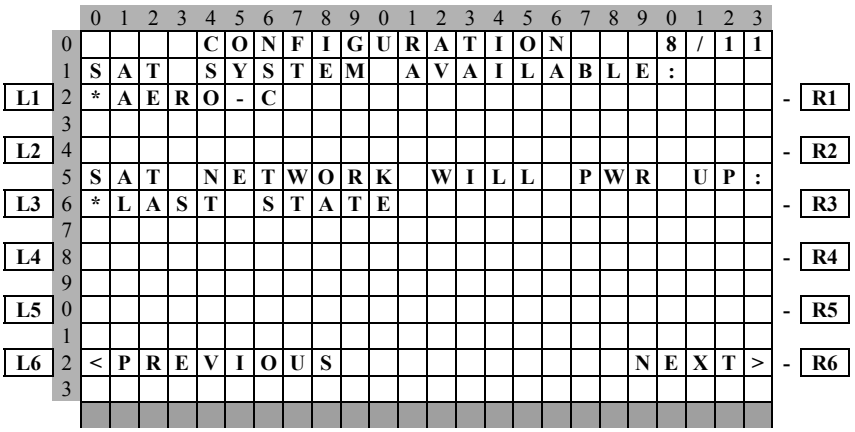


Figure 4-235

15. The master port refers to the use of one port by the software to have priority over the data from other ports (i.e. CDU 2). Honeywell recommends use of Port 1. To designate Port 1 as the Master 422 Port, toggle line-select-key L1 until Port 1 is displayed, see Figure 4-236.

a. Press line-select-key L3 to toggle the Use DMU WT-ON-WHEEL Input between YES or NO.

b. If Airline ID XJ, DH or CRJ has been entered, the ACARS REPORTS will be one of the available options when L5 is toggling through the feature selection options.

c. If Airline ID is GS, ACARS REPORTS can be accessed by entering .A or .M on the scratch pad, line 13, and then press line-select-key L5.

NOTE:

OFF/ON REPORTS = logging takeoff and landing times/
OPTION 1 = customer defined non-standard AFIS features.
OFF REPORT = logging takeoff times.
NO OFF/ON REPORTS = no logging of takeoff and landing times.
ACARS REPORTS = Customer defined non-standard AFIS features.

d. Press line-select-key R6 to go to the next page.

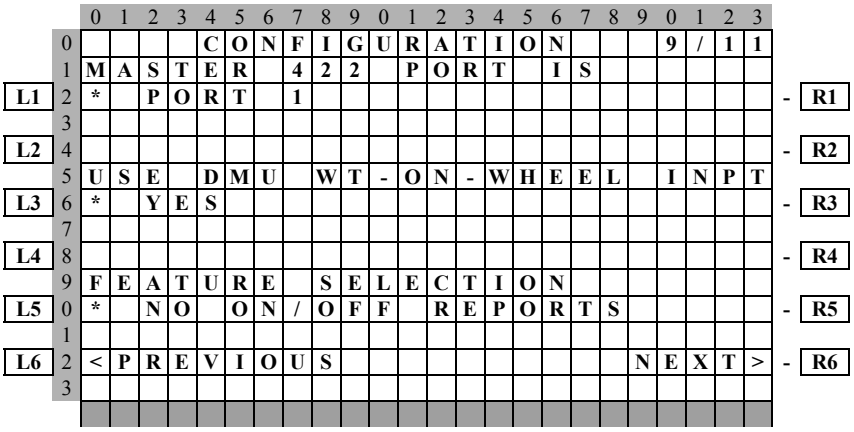


Figure 4-236

16. If ACARS REPORT has been selected, see Figure 4-237; otherwise, proceed to step 17.
    If Airline ID of DH or CRJ or .A has been entered, the following page selections will be available.

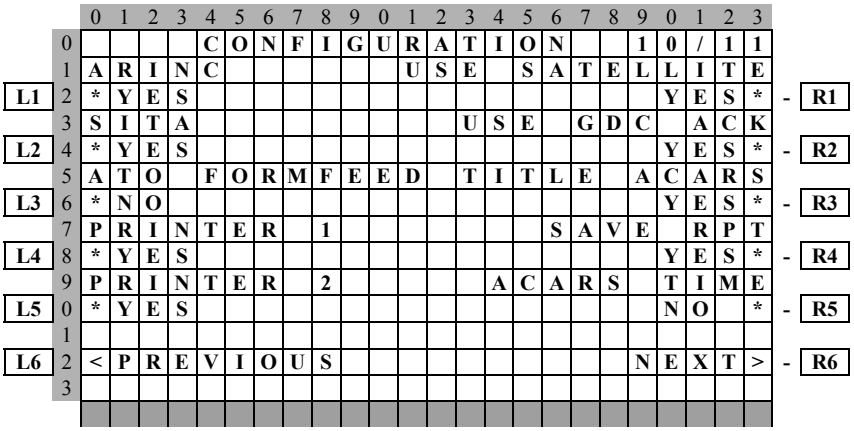


Figure 4-237

17. Use adjacent line-select-key to toggle and select the configuration items.
    Press line-select-key R6 to go to the next page (See Figure 4-238).

    If Airline ID of XJ or .M has been entered, the following page selections will be available.

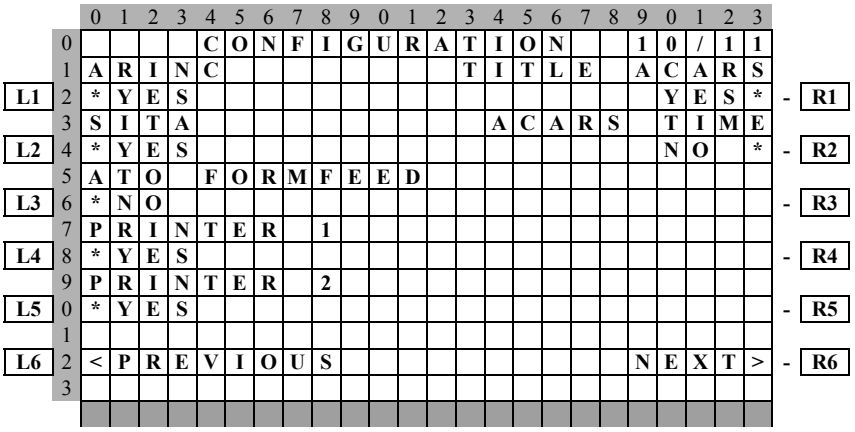


Figure 4-238

18. Use adjacent line-select-key to toggle and select the configuration items. Press line-select-key R6 to go to the next page.

    Write configuration data to the Configuration Module by pressing L3. See Figure 4-239.

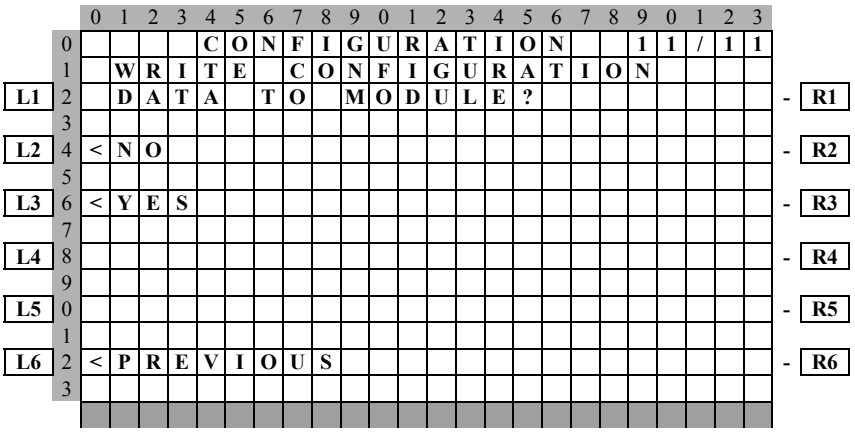


Figure 4-239

19. Power Off DMU and restart.

4.8 AFIS DATA MANAGEMENT UNIT (DMU) (ProComm Plus™ Reconfiguration Procedure)

4.8.1 General

This section contains instructions for configuring the AFIS DMU through the test port using a personal computer (PC) and Symantec Corporation's ProComm Plus™ for Windows software. The aircraft specific configuration settings reside on the configuration module, not in the DMU itself. Access to the configuration module is through the DMU test port via a PC (laptop computer) using the interconnect cable (see figure 4-240) described herein. An advantage of storing the configuration settings on a configuration module is to allow easy replacement or exchange of the DMU without having to reconfigure the DMU each time it's removed.

NOTE:

The purpose of this aid is to provide information on configuring the AFIS system using ProComm Plus™ software and a laptop computer. It is assumed that the user will be able to install ProComm Plus™ according the manufacturers recommended procedure. There are numerous versions of ProComm Plus™ software, this procedure is general in nature and readers may find some incongruity depending on the version of ProComm™ being used.

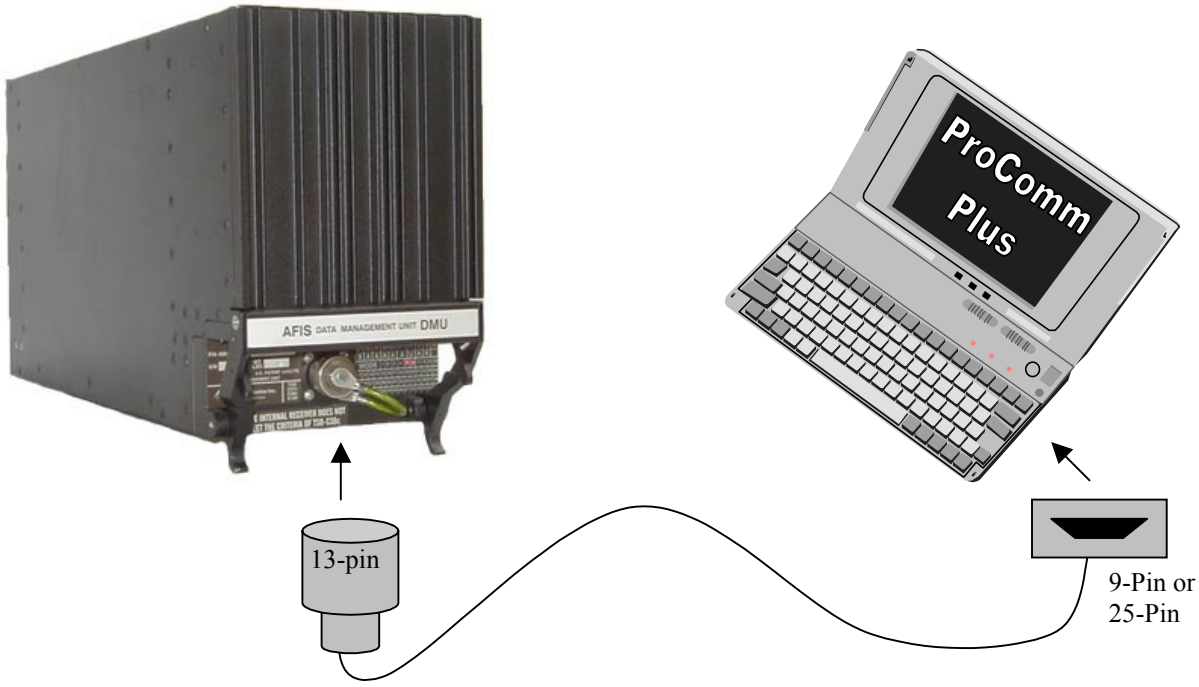


Figure 4-240
Interconnect Cable

4.8.2 Equipment Required

A. AFIS System. DMU P/N 400-045500-XXXX Mod 6 and above.
B. Computer: (IBM or compatible 386, 486, or higher.
   1. Windows 3.1 or higher in enhanced mode.
   2. A minimum of 4 Megabytes of RAM.
   3. Operating system PC-DOS or MS-DOS, version 3.1 or higher.
C. ProComm Plus™ (for Windows software.
D. User Fabricated Interconnect cable.

   The user may construct the interconnect cable wiring to accommodate either a 9-Pin serial or 25-Pin D-Sub PC RS-232 serial port depending on system availability. Pinouts for both are described below.

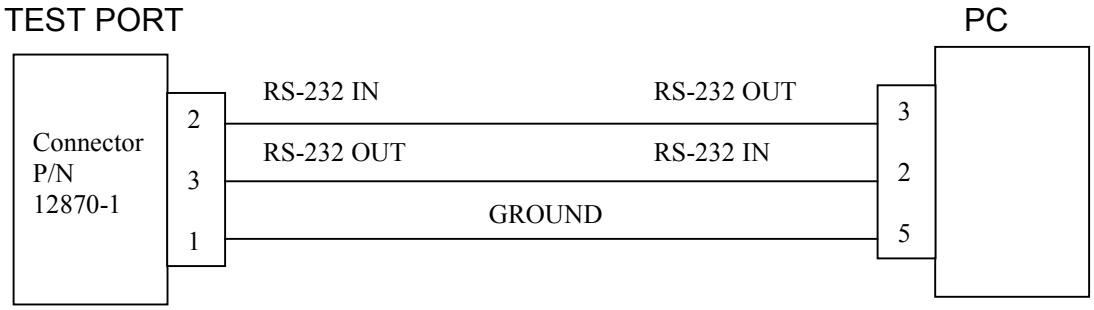


Figure 4-241
Test Port to 9-Pin PC Connector Pinout Diagram

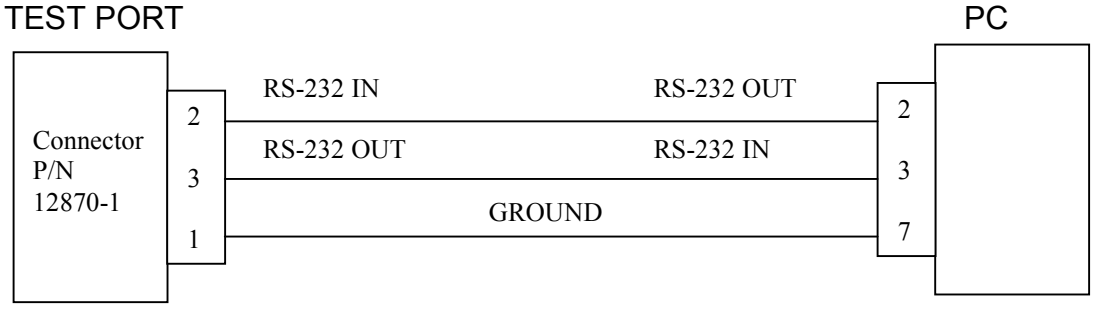


Figure 4-242
Test Port to 25-Pin PC Connector Pinout Diagram

4.8.3 Configuration of Terminal Mode

1. Follow the manufacturer instruction for installing ProComm Plus™.
2. Run the ProComm Plus™ program. (Note: If you're using a DOS version, it will be necessary to change to the PCPLUS directory from the DOS prompt)
3. The Terminal Window should now be displayed.
4. Select Port Settings from the Setup Menu, or access Port Settings with the command ALT-P (see figure 4-243).
5. Set your Port settings as follows:
   a) BAUD RATE: 9600
   b) PARITY: None
   c) DATA BIT: 8
   d) STOP BITS: 1
   e) DUPLEX: Full
   f) BREAK LENGTH: 5 or 350 millisecs
   g) SOFTWARE FLOW CONTROL (Xon/Xoff): Set Off
   h) Save your settings (ALT-S to save).
6. Set your Data Modem/Connection Settings as follows:
   a) Select Connection Setup.
   b) Select the local Comm port to be used (unique to your PC).
   c) Deselect the following:
      1) Use Modem Pacing
      2) Drop DTR to hang up
      3) Drop DTR between calls
      4) Use hardware flow control
   d) Ensure that the baud rate is set at 9600.
7. Click on Terminal Options and ensure that the following are selected: (see figure 4-244).
   a) Current Terminal: ADM31,TVI925, or TVI950.
   b) Terminal Update: Incremental
   c) Terminal Size: Rows 24, Columns 80
   d) Terminal Keyboard file: ADM31,TVI925, or TVI950.
   e) Enquiry OFF
   f) Keep cursor in view
   g) Screen scroll
   h) Strip bit 8
   i) Destructive Backspace
   j) Tab stops every 8 positions
   k) Line wrap
   l) Incoming CR to CR/LF
   m) Block cursor
   n) Disable host printing
8) Click OK or enter ALT-S to save and return to the Terminal Window.

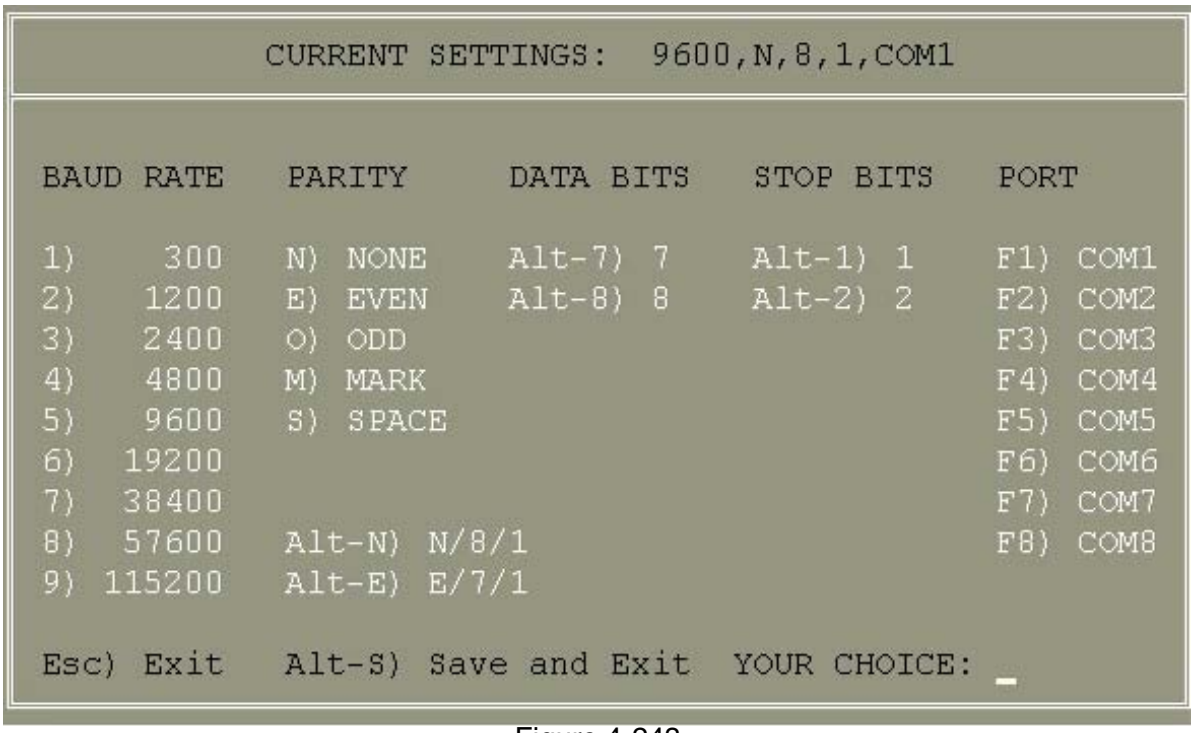


Figure 4-243
Sample Port Settings

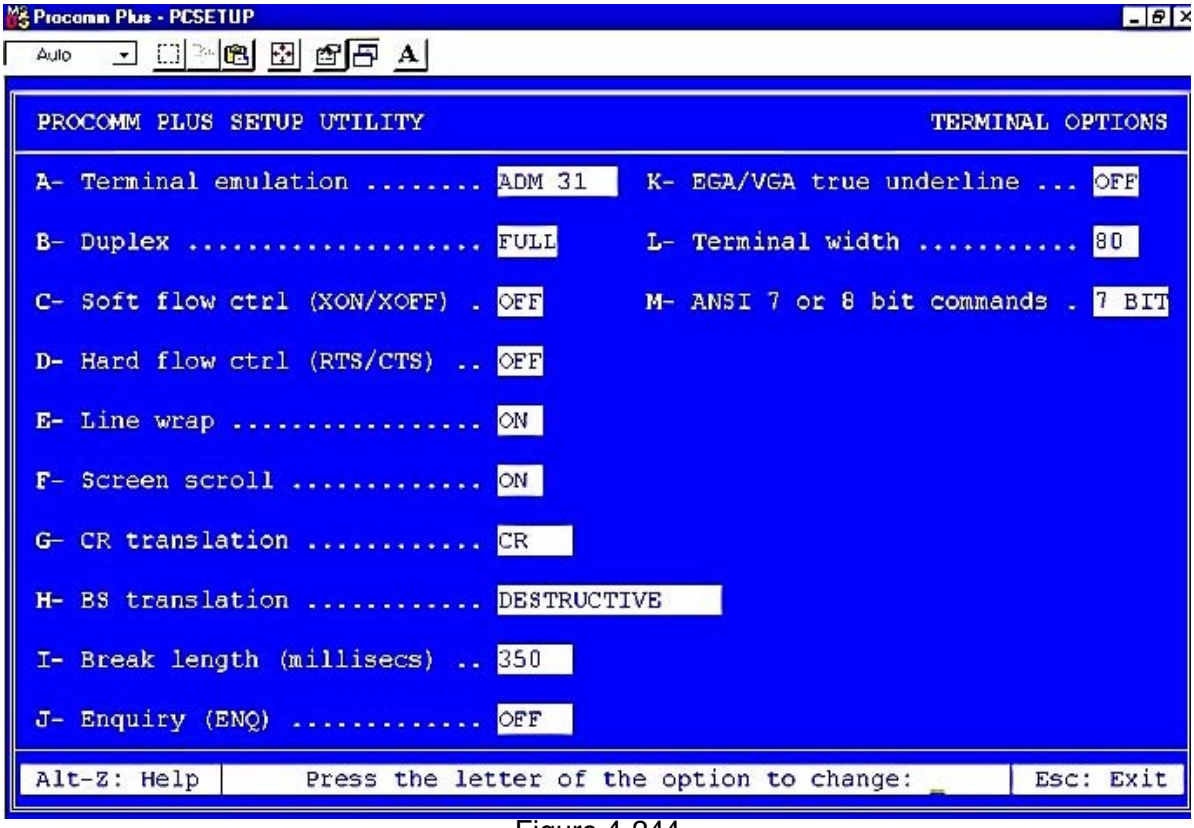


Figure 4-244
Sample Terminal Options

4.8.4 Programming the AFIS DMU

1) Attach the interconnect cable to the DMU Test Port, and to the laptop.
2) Start the ProComm™ program. Windows users click the ProComm Plus™ icon to get to the Terminal Window.
3) Apply power to the DMU. The DMU will indicate that it is ready by sending a string of U's which appear on the screen at the CMD prompt as indicated in figure 4-245 below.

NOTE:

The Caps Lock on your computer keyboard must be locked "ON".

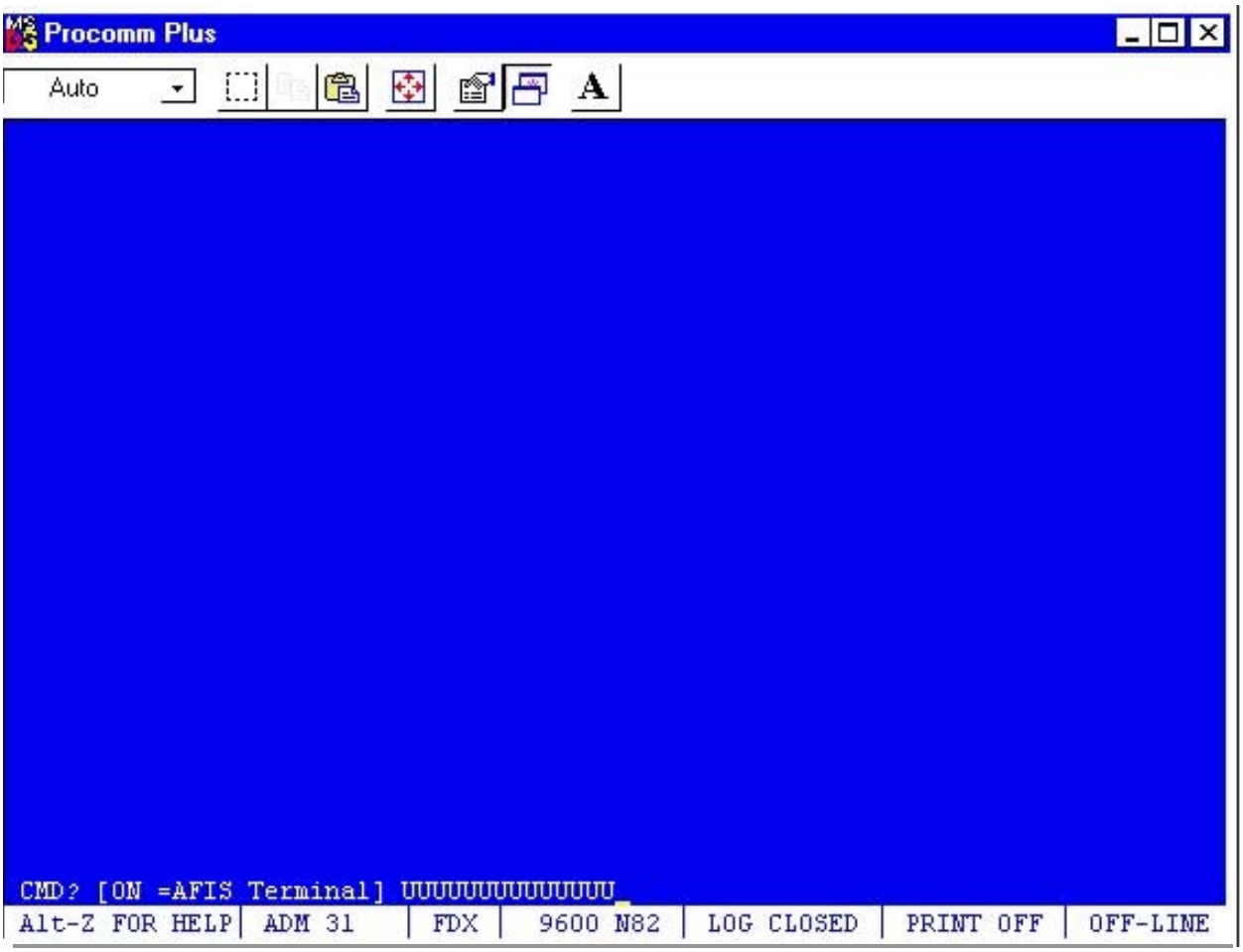


Figure 4-245
Terminal Window

4) Type ON to open the AFIS Terminal.
5) Press ENTER. The message “terminal mode on” will appear briefly followed by the terminal display (see figure 4-246 below).

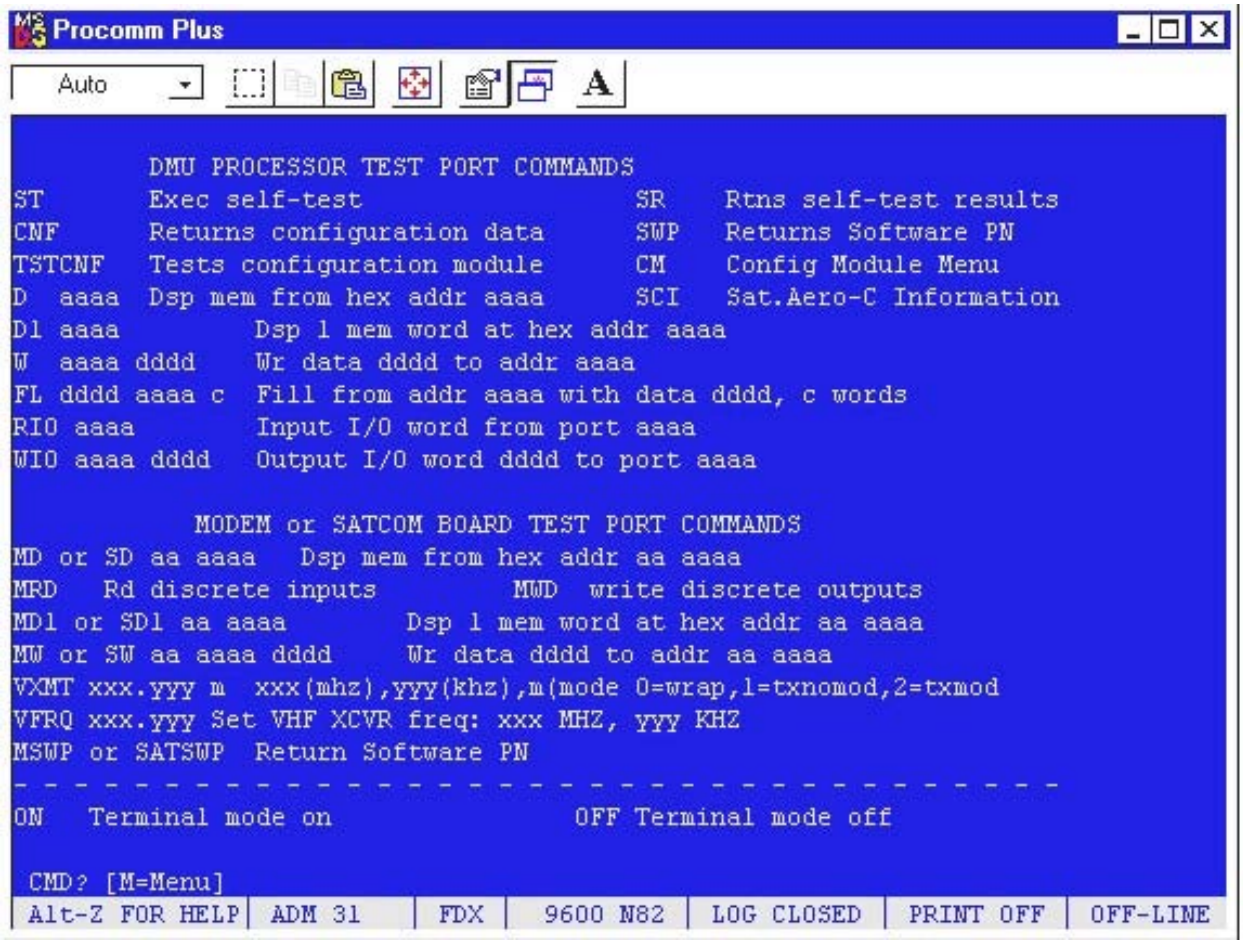


Figure 4-246
Terminal Display Page

6) From the command line, type CM
7) Press ENTER
8) The Configuration Module Menu will be displayed (see figure 4-247 below).

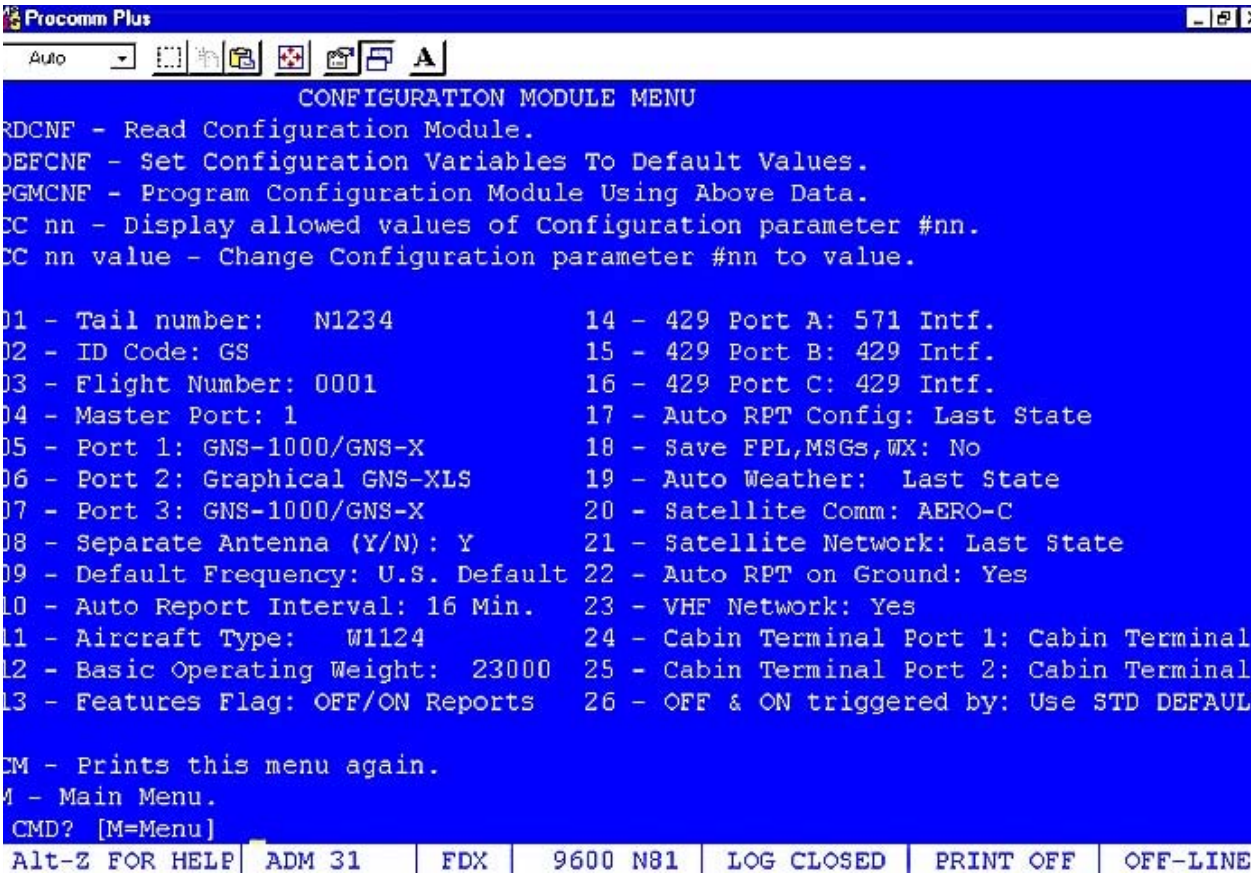


Figure 4-247
Configuration Module Menu

9) For specifics on choosing the parameters shown above please reference the appropriate section of the AFIS Installation manual. To change a parameter, at the CMD prompt type:

CC NN VALUE (then press ENTER)
Where:
CC = Change Configuration
NN = The two-digit line number you wish to change
VALUE = The parameter you wish to change/add

NOTE:

To view the parameters which are permitted, type: CC NN (then press ENTER)

Example:
To change the tail number to N5432, type: CC 01 N5432 (then press ENTER).

NOTE:

Don't forget to use spaces between the CC, NN, and VALUE characters as shown in the example above.

10) After you are finished changing the configuration data, type: PGMCNF (then press ENTER) Entering this command will program the AFIS configuration module with the settings from the ProComm™ Configuration Module Menu page shown in Figure 4-247 above.
11) The configuration change is now complete. To return to the Main menu, at the command prompt type: M (then press ENTER).
12) At the command prompt, type: OFF (then press ENTER) to turn off the terminal mode.
13) Turn OFF power the DMU, and close all ProComm Plus™ windows to exit ProComm™.
14) End of Procedure.

4.9 GENERAL

This section presents the basic test procedure that should be performed after the AFIS system has been installed.

If AFIS is installed with a GNS-500A Series 4/5 system, be sure the GNS-500A System Checkout is done per Report 1228, GNS-500A Series 4/5 Installation Manual, before performing AFIS checkout.

If AFIS is installed with a GNS-1000 system, be sure the GNS-1000 System Checkout is done per Report 1158, GNS-1000 Flight Management System Installation Manual, before performing AFIS checkout.

If AFIS is installed with a GNS-X system, be sure the GNS-X System Checkout is done per Report 1275, GNS-X NAV Management System Installation Manual, before performing AFIS checkout.

Verify that AFIS configuration has been performed per Section 4, AFIS CONFIGURATION.

NOTE:

GNS-X applies to GNS-X, GNS-XES, GNS-XL and GNS-XLS. If configured for ACARS (Special Features item 5), temporarily reconfigure with Airline ID of GS and Special Features, NO OFF/ON REPORTS (item 4). When finished with this checkout reconfigure Airline ID and SPECIAL FEATURES as appropriate.

4.10 SYSTEM TEST AND CHECKOUT WITH CUSTOMER SUPPLIED PRE-PROGRAMMED AFIS DISK

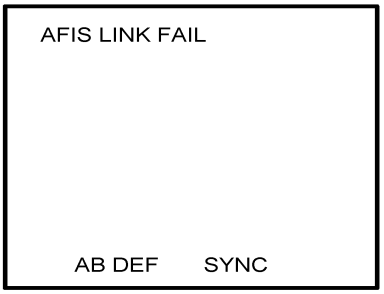
A. Insert pre-programmed AFIS disk in DTU.

NOTE:

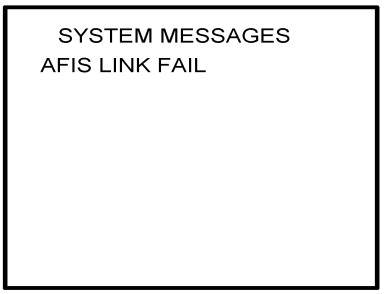
Disk must be programmed for the configured aircraft type and must be programmed with AFIS Flight Plans.

B. Energize the system to initiate SELF TEST.

C. Press the MSG Key to display System Message page. If the AFIS system cannot communicate with the Global Navigation System an AFIS LINK FAIL message appears. See Figure 4-248 and 4-249.



GNS-500A
SYSTEM MESSAGE PAGE
Figure 4-248



GNS-1000 OR GNS-X
SYSTEM MESSAGE PAGE
Figure 4-249

1. If the message AFIS LINK FAIL appears on the GNS-500 system message page:

   (a) Check aircraft wiring connection between CDU and DMU per Section 3.

   (b) Verify that the + 28 VDC is present on the DMU at the appropriate pin locations as defined in Section 3.

      1 Pin designation for + 28 VDC on DMU PN 42000-XX-XX is J1-5, J1-3 with a return on J1-4.

      2 Pin designation for + 28 VDC on DMU PN 400-045500-XXXX is J2-6, J2-7 with a return on J2-1 and J2-2.

2. If the message AFIS LINK FAIL appears on the GNS-1000 Message Page:

   (a) Check aircraft wiring connection between the FMC and DMU per Section 3.

   (b) Verify that the + 28 VDC is present on the DMU at the appropriate pin locations as defined in Section 3.

1 Pin designation for + 28 VDC on DMU PN 42000-XX-XX is J1-5, J1-3 with a return on J1-4.

2 Pin designation for + 28 VDC on DMU PN 400-045500-XXXX is J2-6, J2-7 with a return on J2-1 and J2-2.

3. If the message AFIS LINK FAIL appears on the GNS-X Message Page:

   (a) Check aircraft wiring connection between the NMU and DMU and between the CDU and DMU (+ 28 VDC Switched On Power Control) per Section 3.

   (b) Verify that the + 28 VDC is present on the DMU at the appropriate pin locations as defined in Section 3.

   1 Pin designation for + 28 VDC on DMU PN 42000-XX-XX is J1-5, J1-3 with a return on J1-4.

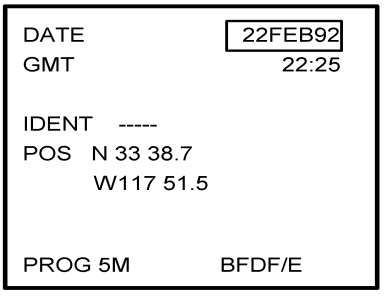
   2 Pin designation for + 28 VDC on DMU PN 400-045500-XXXX is J2-6, J2-7 with a return on J2-1 and J2-2.

4. If the message AFIS CONFIG CHG is displayed, verify that the AFIS configuration module is programmed per Section 4, AFIS CONFIGURATION.

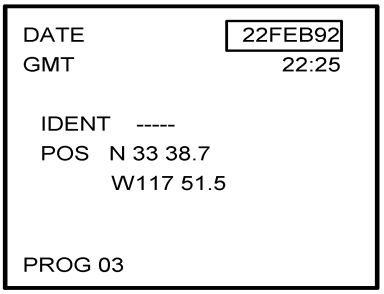
5. If the message AFIS CONFIG FAIL is displayed, check wiring connection between the Configuration Module and the DMU.

6. If the message AFIS CONFIG LOST is displayed, check wiring connection between the Configuration Module and the DMU.

D. If no AFIS failure messages appear, release MSG Key and CRT will display the Initialization Page. See Figure 4-250 or Figure 4-251



GNS-1000 OR GNS-X
INITIALIZATION PAGE
Figure 4-250



GNS-1000 OR GNS-X
INITIALIZATION PAGE
Figure 4-251

E. With cursor positioned over the DATE field, perform the following:

1. To accept DATE display, press ENTER key.

2. To enter new date make numerical entry from keyboard in order of day-month-year and press ENTER key.

NOTE:

For example, 5 Feb 1992 would be entered as 050292. Errors in fields may be corrected as follows: If incorrect digit is entered in a field with cursor still over the field the BACK key may be used to erase the digit. To correct the field after the field has been entered or to enter a new date use the ⇓ key to position cursor over field and enter the new date.

F. Observe that the cursor is over the GMT field after the date was entered. If GMT is correct, press ENTER. If the GMT requires updating, update GMT in the order of hours then minutes and press ENTER.

G. Present Position Entry Procedure

1. Observe that the cursor is over the IDENT field. Enter IDENT or accept existing IDENT and press ENTER.

2. If system does not recognize the entered IDENT, the Waypoint page should appear.

3. Insert present position coordinates or accept existing coordinates by placing cursor over the coordinates indicated and press ENTER. AFIS Flight Plan List Page appears. See Figure 4-252.

H. Verify that the AFIS Flight Plan List Page displays the programmed Flight Plan.

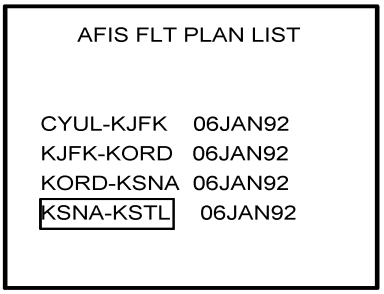


Figure 4-252

1. If the NO DISK message appears, verify that the pre-programmed AFIS disk is in the DTU. If the message persists, check wiring between the DMU and DTU per Section 3. See Figure 4-253.

Figure 4-253

I. SEND MESSAGE Test Procedure for AFIS Users NOT EQUIPPED with Satellite Data Communications System (System Functional Test)

NOTE:

Aircraft must be in range of ARINC/ACARS or SITA Aircomm, or ground station and the appropriate ground network must be enabled for message to be sent to and received from the Global Data Center.

1. Press the DATA key on the GNS-500A or the PLAN key or AFIS key on the GNS-1000 or GNS-X until the AFIS MENU Page appears. See Figures 4-254 through 4-256.

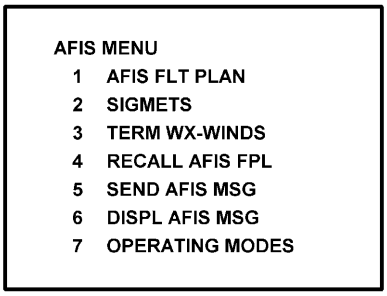


Figure 4-254

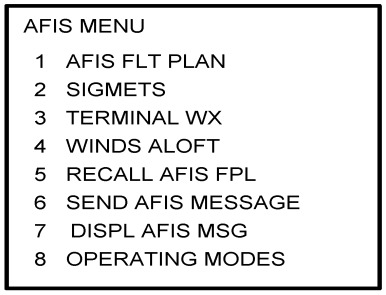


Figure 4-255

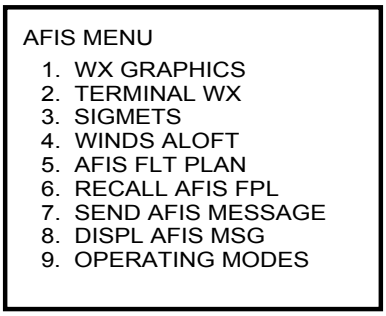


Figure 4-256

2. Position Cursor over option, SEND AFIS MSG, and press ENTER. MESSAGE page is displayed. See Figure 4-257.

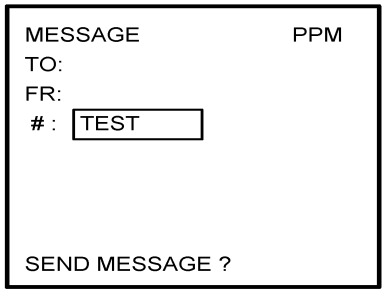


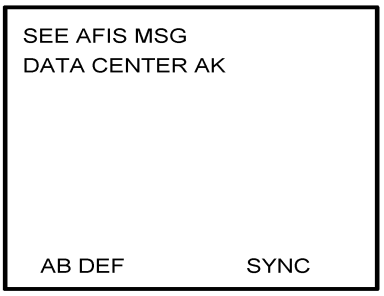
Figure 4-257

3. Position Cursor over the # field and insert the word TEST.
4. Press ENTER until cursor is over SEND MESSAGE? field.
5. Press ENTER to send the TEST message.
6. When MSG annunciator blinks, press MSG key. SEE AFIS MSG appears on the System Message Page. See Figure 4-258 or Figure 4-259.

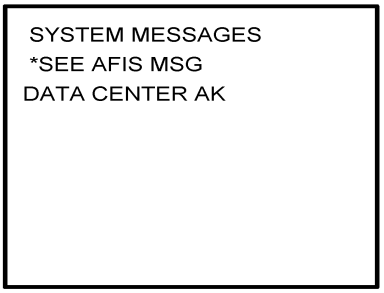
NOTE:

If ARINC/ACARS or SITA Aircomm, or ground station is not within receiving range, the message NO COMM is displayed on the message page.

For Aircraft equipped with the Antenna Switching Unit, if DATA LINK DISABLED message appears, enable the AFIS air to ground data link.



GNS-500A
SYSTEM MESSAGE PAGE
Figure 4-258



GNS-1000 OR GNS-X
SYSTEM MESSAGE PAGE
Figure 4-259

7. Press DATA key on the GNS-500A or Plan key or AFIS key on the GNS-1000 or GNS-X until the AFIS MENU page appears.

8. Position Cursor over option, DISPL AFIS MSG (see Figures 4-260 through 4-262) and press ENTER. AFIS MESSAGE page is displayed with message from Global Data Center. See Figure 4-263.

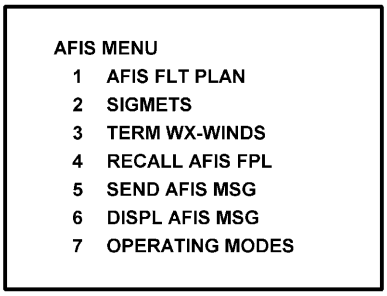


Figure 4-260

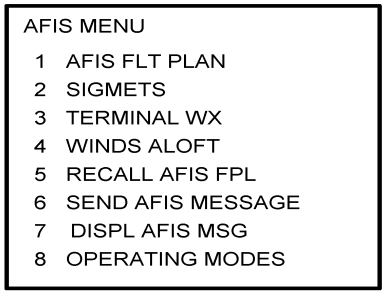


Figure 4-261

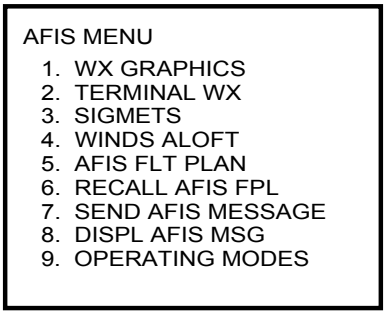


Figure 4-262

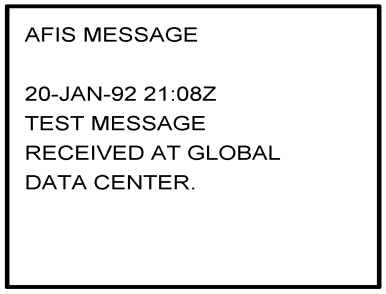


Figure 4-263

J. SEND MESSAGE Test Procedure for AFIS Users EQUIPPED with Satellite Data Communication System (System Functional Test).

1. Using VHF Network to Send Test Message

NOTE:

Aircraft must be in range of ARINC/ACARS or SITA Aircomm, or ground station and the appropriate ground network must be enabled for message to be sent to and received from the Global Data Center.

(a) Press the DATA key on the GNS-500A or the PLAN key or AFIS key on the GNS-1000 or GNS-X until the AFIS MENU page appears. See Figures 4-264 through 4-266.

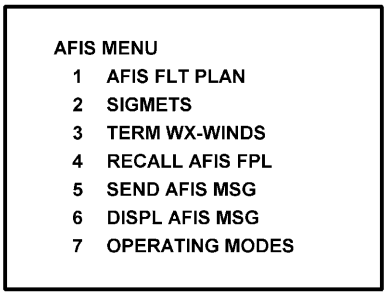


Figure 4-264

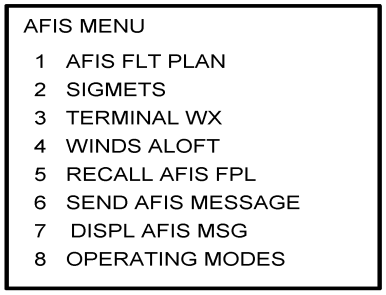


Figure 4-265

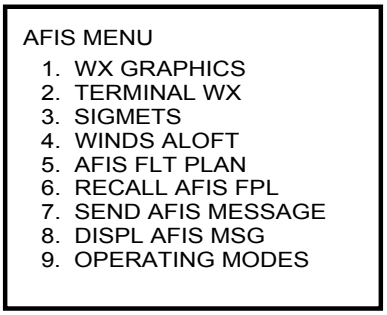


Figure 4-266

(b) Position Cursor over option, OPERATING MODES, and press ENTER. OPERATING MODES page is displayed. See Figure 4-267.

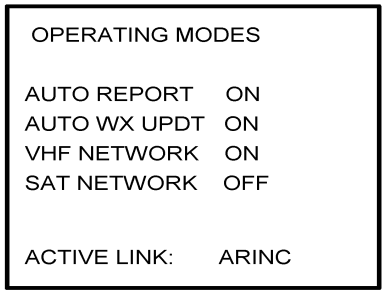


Figure 4-267

(c) Verify VHF NETWORK is ON and SAT NETWORK is OFF or perform the following:

To turn VHF NETWORK on, position cursor over OFF option of VHF network field, press BACK key and then press ENTER key to turn on. Figure 4-268, VHF LINK CONTROL page appears. Depress ENTER until cursor is off the page and OPERATING MODES page is displayed.

To turn SAT NETWORK off, position cursor over ON option of SAT network field, press BACK key and then press ENTER key to turn off. See Figure 4-267.

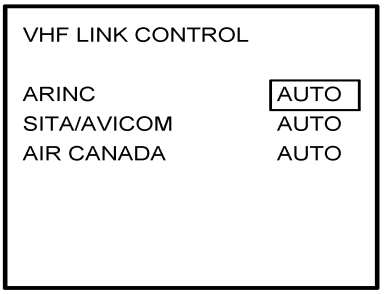


Figure 4-268

(d) Press BACK key to return to AFIS MENU page.

(e) Position cursor over option, SEND AFIS MSG, and press ENTER. MESSAGE page is displayed. See Figure 4-269.

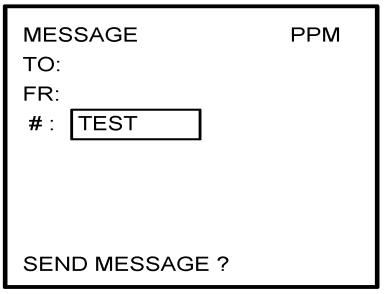


Figure 4-269

(f) Position cursor over the # field and insert the word TEST.

(g) Press ENTER until cursor is over SEND MESSAGE? field.

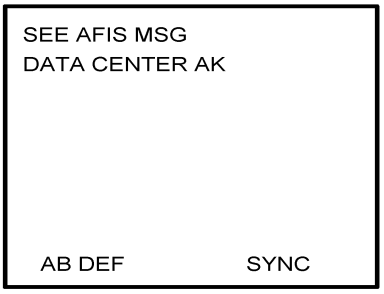
(h) Press ENTER to send the TEST message.

(i) When MSG annunciator blinks, press MSG key. SEE AFIS MSG appears on the System Message Page. See Figure 4-270 or Figure 4-271.

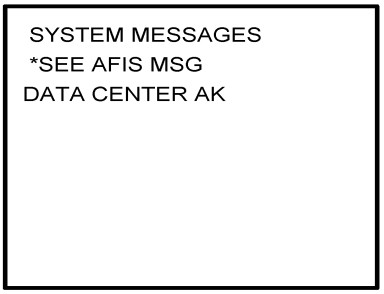
NOTE:

If ARINC/ACARS or SITA Aircomm, or ground station is not within receiving range, the message NO COMM is displayed on the message page

For Aircraft equipped with the Antenna Switching Unit, if DATA LINK DISABLED message appears, enable the AFIS air to ground data link.



GNS-500A
SYSTEM MESSAGE PAGE
Figure 4-270



GNS-1000 OR GNS-X
SYSTEM MESSAGE PAGE
Figure 4-271

(j) Press DATA key on the GNS-500A or PLAN key or AFIS key on the GNS-1000 or GNS-X until AFIS MENU page appears.

(k) Position cursor over option, DISPL AFIS MSG (see Figure 4-272 through 4-274) and press ENTER. AFIS MESSAGE page is displayed with message from Global Data Center. See Figure 4-275.

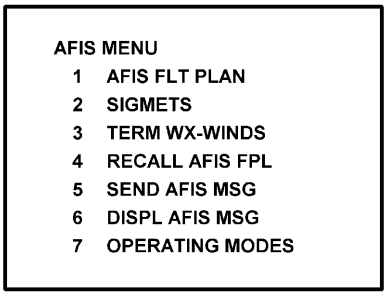


Figure 4-272

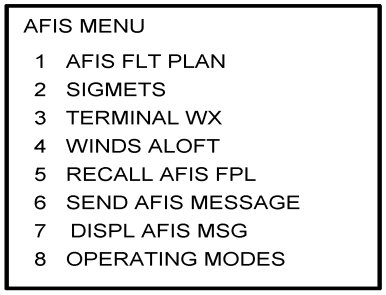


Figure 4-273

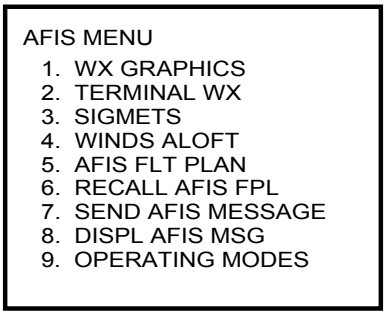


Figure 4-274

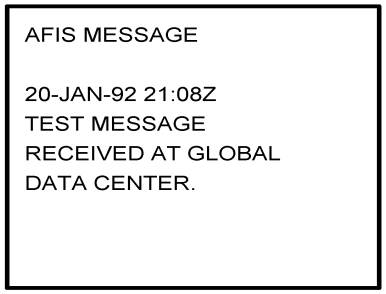


Figure 4-275

2. Using Satellite Network to Send Test Message

(a) Press the DATA key on the GNS-500A or the PLAN key or AFIS key on the GNS-1000 or GNS-X, XL, XES or XLS until the AFIS MENU page appears. See Figures 4-276 through 4-278.

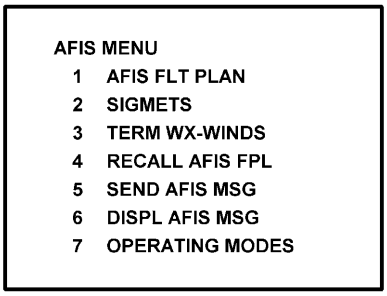


Figure 4-276

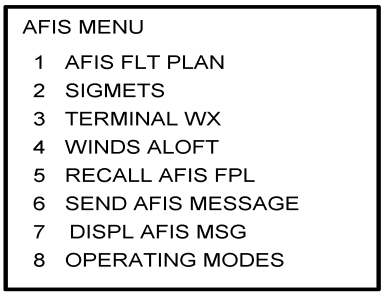


Figure 4-277

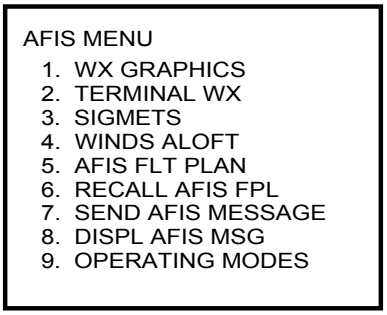


Figure 4-278

(b) Position cursor over option, OPERATING MODES, and press ENTER. OPERATING MODES page is displayed. See Figure 4-279.

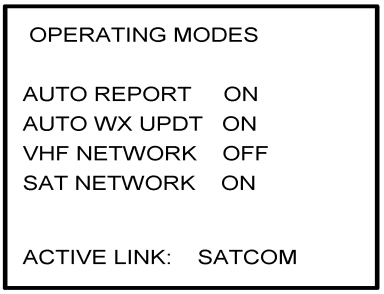


Figure 4-279

NOTE:

This page will not appear if the system is configured for ARINC 741 or SATFONE systems.

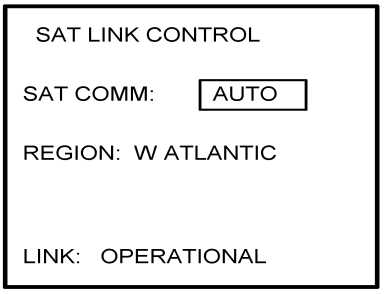


Figure 4-280

(d) Press BACK key to return to AFIS MENU page.

(e) Position cursor over option, SEND AFIS MSG, and press ENTER. MESSAGE page is displayed. See Figure 4-281.

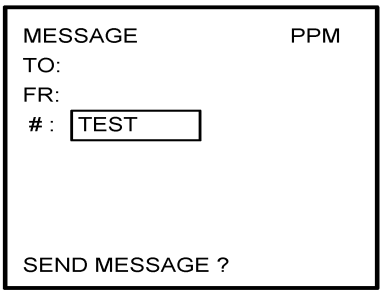


Figure 4-281

(f) Position cursor over the # field and insert the word TEST.

(g) Press ENTER until cursor is over SEND MESSAGE? field.

(h) Press ENTER to send the TEST message.

(i) When MSG annunciator blinks, press MSG key. SEE AFIS MSG appears on the System Message Page. See Figure 4-282 or Figure 4-283.

NOTE:

If unable to communicate through satellite network, the message NO COMM is displayed on the message page.

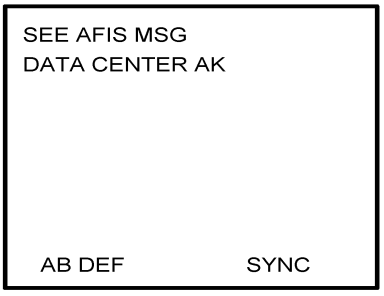


Figure 4-282

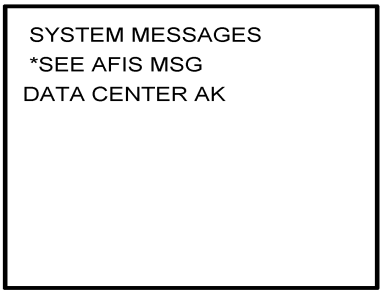


Figure 4-283

(j) Press DATA key on the GNS-500A or PLAN key or AFIS key on the GNS-1000 or GNS-X until AFIS MENU page appears.

(k) Position cursor over option, DISPL AFIS MSG (see Figures 4-284 through 4-286) and press ENTER. AFIS MESSAGE page is displayed with message from Global Data Center. See Figure 4-287.

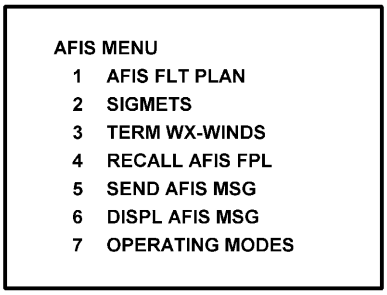


Figure 4-284

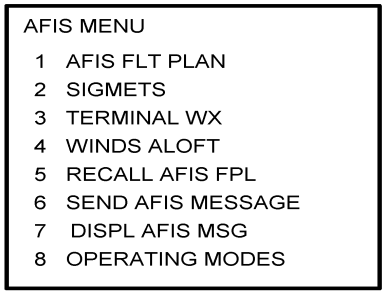


Figure 4-285

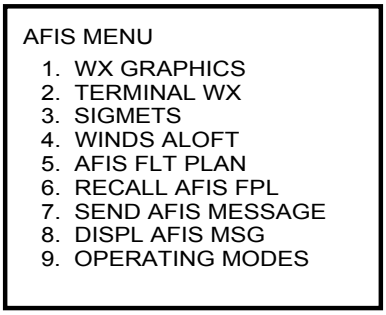


Figure 4-286

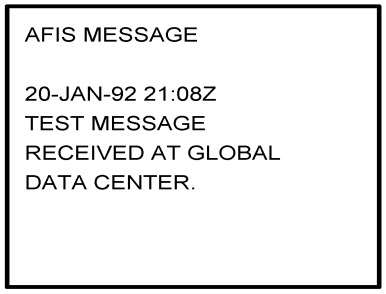


Figure 4-287

K. Fuel Flow Test

NOTE:

Fuel flow is a customer specified AFIS option for GNS-500A users with DMU P/N 42000-02-02, P/N 42000-04-03, P/N 400-045500-0002, P/N 400-045500-0004 or P/N 400-045500-0006. Since automatic fuel flow from the DMU to the GNS-500A is an advisory feature, it is recommended that the system fuel flow be checked against the aircraft's primary fuel flow gauges. The data should not replace the aircraft's primary fuel flow and quantity gauges.

1. Start aircraft engines.

2. Press NAV key on GNS-500A until the Flight Plan Progress Page appears. See Figure 4-288.

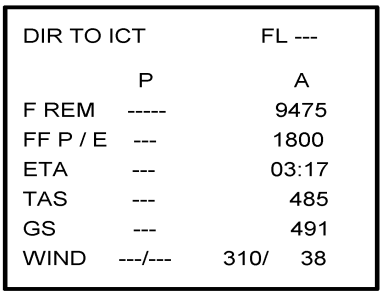


Figure 4-288

3. Compare actual field (A) for Fuel Flow Per Engine with value displays on panel indicators. The Fuel Flow Per Engine is an average value and will display a reasonable comparison to aircraft fuel flow indicators.

4. If Actual field is blank or value is unreasonable, check configuration module for proper programming.

5. Correct if necessary and repeat test.

   (a) If configuration module is OK, check aircraft wiring between fuel indicator and DMU.

   (b) If tracking is not consistent, check aircraft wiring per Section 3.

L. Graphical Weather Test

The Graphical Weather test has been deleted. The AFIS DMU does not control the software for these pages. If for some reason these pages changed, this manual would also be revised.

These pages can be found in the Pilots Guide for the GNS-XLS, Enhanced.

THIS PAGE IS RESERVED

ENVIRONMENTAL QUALIFICATION APPENDIX

THIS PAGE IS RESERVED

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

NOMENCLATURE:	DATA MANAGEMENT UNIT
PART NUMBER:	400-045500-,0001,0002,0003,0004,0005,0006,0130, 0210, 0211, 2010, 2011
INSTALLATION KIT PART NUMBER:	149-017305-6850
TSO NUMBER:	C109, C37c, C38c
MANUFACTURE'S SPECIFICATION:	FACTORY TEST PROCEDURE 650-014526
MANUFACTURER:	HONEYWELL INTERNATIONAL INC.
ADDRESS:	ONE TECHNOLOGY CENTER 23500 W. 105TH STREET OLATHE, KS 66061 USA

CONDITIONS	PARA	CONDUCTED TESTS
TEMPERATURE AND ALTITUDE	4.0	CATEGORY E1
TEMPERATURE VARIATION	5.0	CATEGORY B
HUMIDITY	6.0	CATEGORY A
SHOCK	7.0	OPERATIONAL AND CRASH SAFTEY
VIBRATION	8.0	CATEGORY MNB
EXPLOSION	9.0	CATEGORY E1
WATERPROOFNESS	10.0	CATEGORY X (NOT TESTED)
FLUIDS SUSCEPTIBILITY	11.0	CATEGORY X (NOT TESTED)
SAND AND DUST	12.0	CATEGORY X (NOT TESTED)
FUNGUS	13.0	CATEGORY X (NOT TESTED)
SALT SPRAY	14.0	CATEGORY X (NOT TESTED)
MAGNETIC EFFECT	15.0	CATEGORY A
POWER INPUT	16.0	CATEGORY A
VOLTAGE SPIKE CONDUCTED	17.0	CATEGORY A
AUDIO FREQUENCY CONDUCTED SUSCEPTIBILTY - POWER INPUTS	18.0	CATEGORY A
INDUCED SIGNAL SUSCEPTIBILITY	19.0	CATEGORY A
RADIO FREQUENCY SUSCEPTIBILITY	20.0	CATEGORY U
RADIO FREQUNECY EMISSION	21.0	CATEGORY A
LIGHTNING INDUCED TRANSIENT SUSCEPTIBILITY	22.0	CATEGORY K
LIGHTNING DIRECT EFFECTS	23.0	NOT TESTED
ICING	24.0	NOT TESTED

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

REVISION HISTORY

REVISION NUMBER	ECO NUMBER	DATE
-	PRN 127203	10-23-97
A	CO 138656	03-25-98
B	CO 147284	10-08-98
C	CO 162898	09-23-99
D	CO 166337	02-15-00
E	CO 182922	02-27-01

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

REMARKS

The internal VHF receiver, MCX-1000, does not meet the audio frequency response criteria outlined in the TSO C38c.

THIS PAGE IS RESERVED

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

NOMENCLATURE:	DATA MANAGEMENT UNIT
PART NUMBER:	42000-03-03, 42000-04-03
TSO NUMBER	C109, C37C, C38C
MANUFACTURE'S SPECIFICATION:	FACTORY TEST PROCEDURE 42020
MANUFACTURER:	ALLIEDSIGNAL AVIONICS INC.
ADDRESS:	400 NORTH ROGERS ROAD OLATHE, KS 66062 USA

CONDITIONS	PARA	CONDUCTED TESTS
TEMPERATURE AND ALTITUDE	4.0	CATEGORY E1
TEMPERATURE VARIATION	5.0	CATEGORY B
HUMIDITY	6.0	CATEGORY A
SHOCK	7.0	OPERATIONAL AND CRASH SAFTEY
VIBRATION	8.0	CATEGORY MNB
EXPLOSION	9.0	CATEGORY E1
WATERPROOFNESS	10.0	CATEGORY X (NOT TESTED)
FLUIDS SUSCEPTIBILITY	11.0	CATEGORY X (NOT TESTED)
SAND AND DUST	12.0	CATEGORY X (NOT TESTED)
FUNGUS	13.0	CATEGORY X (NOT TESTED)
SALT SPRAY	14.0	CATEGORY X (NOT TESTED)
MAGNETIC EFFECT	15.0	CATEGORY A
POWER INPUT	16.0	CATEGORY A
VOLTAGE SPIKE CONDUCTED	17.0	CATEGORY A
AUDIO FREQUENCY CONDUCTED SUSCEPTIBILTY – POWER INPUTS	18.0	CATEGORY A
INDUCED SIGNAL SUSCEPTIBILITY	19.0	CATEGORY A
RADIO FREQUENCY SUSCEPTIBILITY	20.0	CATEGORY U
RADIO FREQUNECY EMISSION	21.0	CATEGORY A
LIGHTNING INDUCED TRANSIENT SUSCEPTIBILITY	22.0	CATEGORY K
LIGHTNING DIRECT EFFECTS	23.0	NOT TESTED
ICING	24.0	NOT TESTED

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

REVISION HISTORY

REVISION	ECO NUMBER	DATE
-	PRN 127203	10-23-97
A	CO 138656	03-25-98

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

REMARKS

The internal VHF receiver, MCX-1000, does not meet the audio frequency response criteria outlined in the TSO C38C.

THIS PAGE IS RESERVED

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

NOMENCLATURE:	DATA TRANSFER UNIT
PART NUMBER:	15655-0101, 15655-0201
TSO NUMBER	C109, C115a
MANUFACTURE'S SPECIFICATION:	ENGINEERING DRAWING 400-015655
MANUFACTURER:	ALLIEDSIGNAL AVIONICS INC.
ADDRESS:	400 NORTH ROGERS ROAD OLATHE, KS 66062 USA

CONDITIONS	PARA	CONDUCTED TESTS
TEMPERATURE AND ALTITUDE	4.0	CATEGORY E1
TEMPERATURE VARIATION	5.0	CATEGORY B
HUMIDITY	6.0	CATEGORY A
SHOCK	7.0	OPERATIONAL AND CRASH SAFTEY
VIBRATION	8.0	CATEGORY MN
EXPLOSION	9.0	CATEGORY E1
WATERPROOFNESS	10.0	CATEGORY X (NOT TESTED)
FLUIDS SUSCEPTIBILITY	11.0	CATEGORY X (NOT TESTED)
SAND AND DUST	12.0	CATEGORY X (NOT TESTED)
FUNGUS	13.0	CATEGORY X (NOT TESTED)
SALT SPRAY	14.0	CATEGORY X (NOT TESTED)
MAGNETIC EFFECT	15.0	CATEGORY Z
POWER INPUT	16.0	CATEGORY A
VOLTAGE SPIKE CONDUCTED	17.0	CATEGORY A
AUDIO FREQUENCY CONDUCTED SUSCEPTIBILTY – POWER INPUTS	18.0	CATEGORY A
INDUCED SIGNAL SUSCEPTIBILITY	19.0	CATEGORY A
RADIO FREQUENCY SUSCEPTIBILITY	20.0	CATEGORY V
RADIO FREQUNECY EMISSION	21.0	CATEGORY A
LIGHTNING INDUCED TRANSIENT SUSCEPTIBILITY	22.0	CATEGORY K
LIGHTNING DIRECT EFFECTS	23.0	CATEGORY X (NOT TESTED)
ICING	24.0	CATEGORY X (NOT TESTED)

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

REVISION HISTORY

REVISION	ECO NUMBER	DATE
-	PRN 127203	10-23-97
A	CO 138656	03-25-98

RTCA/DO-160C
ENVIRONMENTAL QUALIFICATION FORM

NOMENCLATURE:	CONFIGURATION MODULE UNIT
PART NUMBER:	31990-1
TSO NUMBER	C109, C115a
MANUFACTURE'S SPECIFICATION:	FACTORY TEST PROCEDURE
MANUFACTURER:	ALLIEDSIGNAL AVIONICS INC.
ADDRESS:	400 NORTH ROGERS ROAD OLATHE, KS 66062 USA

CONDITIONS	PARA	CONDUCTED TESTS
TEMPERATURE AND ALTITUDE	4.0	CATEGORY E1
TEMPERATURE VARIATION	5.0	CATEGORY B
HUMIDITY	6.0	CATEGORY A
SHOCK	7.0	OPERATIONAL AND CRASH SAFTEY
VIBRATION	8.0	CATEGORY MNB
EXPLOSION	9.0	CATEGORY E1
WATERPROOFNESS	10.0	CATEGORY X (NOT TESTED)
FLUIDS SUSCEPTIBILITY	11.0	CATEGORY X (NOT TESTED)
SAND AND DUST	12.0	CATEGORY X (NOT TESTED)
FUNGUS	13.0	CATEGORY X (NOT TESTED)
SALT SPRAY	14.0	CATEGORY X (NOT TESTED)
MAGNETIC EFFECT	15.0	CATEGORY A
POWER INPUT	16.0	CATEGORY A
VOLTAGE SPIKE CONDUCTED	17.0	CATEGORY A
AUDIO FREQUENCY CONDUCTED SUSCEPTIBILTY – POWER INPUTS	18.0	CATEGORY A
INDUCED SIGNAL SUSCEPTIBILITY	19.0	CATEGORY A
RADIO FREQUENCY SUSCEPTIBILITY	20.0	CATEGORY V
RADIO FREQUNECY EMISSION	21.0	CATEGORY A
LIGHTNING INDUCED TRANSIENT SUSCEPTIBILITY	22.0	CATEGORY K
LIGHTNING DIRECT EFFECTS	23.0	CATEGORY X (NOT TESTED)
ICING	24.0	CATEGORY X (NOT TESTED)

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REVISION HISTORY

REVISION	ECO NUMBER	DATE
-	PRN 127203	10-23-97
A	CO 138656	03-25-98

TSO'D UNITS
WITHOUT INDIVIDUAL ENVIRONMENTAL QUALIFICATION FORMS

Part Number	Unit Description	TSO Categories	DO-160B Environmental Categories
44000-1	ASU	C109	E1E1 A MNO E1 XXXXX AAAAA
42000-01-01	AFIS DMU	C37c, C38c, C109c	E1E1 A MNO E1 XXXXX AAAAA
42000-02-02	AFIS DMU	C37c, C38c, C109c	E1E1 A MNO E1 XXXXX AAAAA

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