Modify ACMS Data Bus Communication Configuration
File: H_CRP_AOC_2BCM.xls
Author: dsalt-hp

Procedure Summary

Objectives

The objective of this Herschel ACMS contingency procedure is to mofify the ACMS Data Bus Communication Configuration for those units that use the 1553 data bus.

The procedure involves the following activities:
- checking current status of 1553 bus units
- selecting the step(s) to command the 1553 bus used the units, as necessary

NOTE: The ACMS units that use the 1553 data bus are the star trackers (i.e. STR1 & STR2) and the GYR electronics (i.e. GYRE1 & GYRE2).

Summary of Constraints

Execution of this procedure must be approved/authorised by the SOM

Spacecraft Configuration

Start of Procedure

Health & status of units on 1553 bus have been assesses and proposed action to switch to the alternate bus is understood and agreed.

End of Procedure

Specific units on 1553 bus switched to the alternate bus, as agreed

Reference File(s)

Input Command Sequences

Output Command Sequences

HRA2BCM2
HRA2BCM3
HRA2BCM4
HRA2BCM5
HRA2BCM6
HRA2BCM7
HRA2BCM8
HRA2BCM9

Referenced Displays

ANDs	GRDs	SLDs
ZAA01999		
ZAZ7S999		

Configuration Control Information

Status : Version 2 - Updated
Last Checkin: 07/01/10

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DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
12/01/09	2	1	Created	dsalt-hp	
07/01/10	3	2	First and last steps for DTM (define/enable, disable/clear) removed as relevant bus TM now included in the '9-stars' packed (SPID=240011990) permanently enabled for FD	dsalt-hp	

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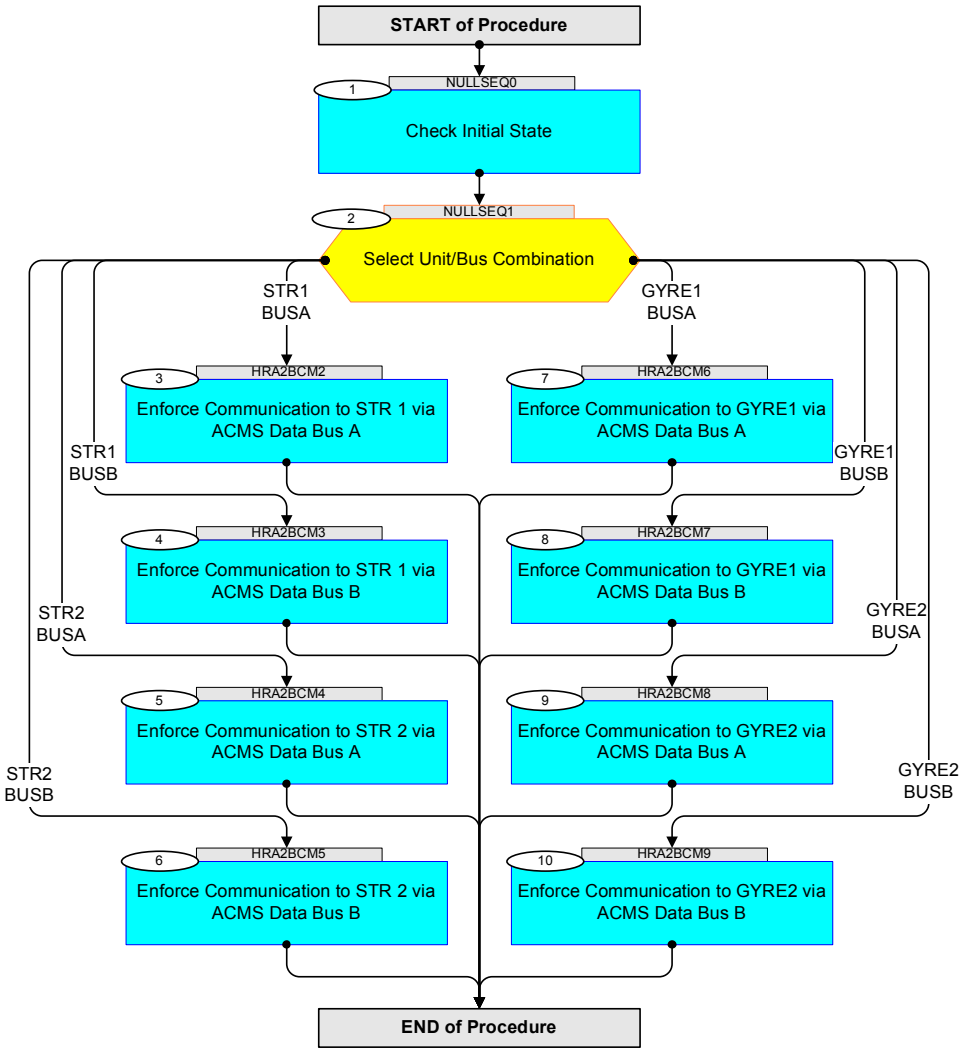
Procedure Flowchart Overview



Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Beginning of Procedure		
		TC Seq. Name :NULLSEQ0 ( ) *TimeTag Type:* *Sub Schedule ID:* □		
1		*Check Initial State*		Next Step: 2
1.1		*Check ACMS Data Bus Communication Configuration*		□
		Verify Telemetry **Comm bus STR1 AES75002**	**<to be read>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**<to be read>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<to be read>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**<to be read>**	AND=ZAA01999
1.2		*Check ACMS Data Bus Validity Table*		□
		Verify Telemetry **Valid bus STR1A AES61002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<to be read>**	AND=ZAZ7S999
1.3		*Check Current Bus Selection (for each unit)*		□

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Valid bus STR1 AES6A002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<to be read>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<to be read>**	AND=ZAZ7S999
		TC Seq. Name :NULLSEQ1 ( ) *TimeTag Type:* *Sub Schedule ID:*		
2		*Select Unit/Bus Combination*		Next Step: STR1 BUSA 3 STR1 BUSB 4 STR2 BUSA 5 STR2 BUSB 6 GYRE1 BUSA 7 GYRE1 BUSB 8 GYRE2 BUSA 9
				GYRE2 BUSB 10
		Select the unit/bus combination that you want to enforce communication to: *STR 1 via data bus A -> GO TO STEP 4* *STR 1 via data bus B -> GO TO STEP 5* *STR 2 via data bus A -> GO TO STEP 6* *STR 2 via data bus B -> GO TO STEP 7*		
		TC Seq. Name :HRA2BCM2 (EnfStr1CommsViaBusA) *TimeTag Type: N* *Sub Schedule ID:*		

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
3		*Enforce Communication to STR 1 via ACMS Data Bus A*		Next Step: END
		This step forces communication from/to STR 1 over ACMS data bus A. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus B, and 2) STR 1 is declared healthy/valid on ACMS data bus A.		
		Verify Telemetry **Comm bus STR1 AES75002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Valid bus STR1A AES61002**	**= Healthy**	AND=ZAZ7S999
3.1		*Uplink Sequence HRA2BCM2*		□
		Execute Telecommand **STR 1 BUS A** *Command Parameter(s) :* **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - STR 1 BUS A	**ACZ91109** **Enable 86** **Enable 86**	
3.2		*Check ACMS Data Bus Communication Configuration*		□
		Verify Telemetry **Comm bus STR1 AES75002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**<no change>**	AND=ZAA01999
3.3		*Check ACMS Data Bus Validity Table*		□
		Verify Telemetry **Valid bus STR1A AES61002**	**= Healthy**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<no change>**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Valid bus STR2A AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<no change>**	AND=ZAZ7S999
3.4		*Check Current Bus Selection (for each unit)*		□
		Verify Telemetry **Valid bus STR1 AES6A002**	**= Use bus A**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<no change>**	AND=ZAZ7S999
		TC Seq. Name :HRA2BCM3 (EnfStr1CommsViaBusB) *TimeTag Type: N* *Sub Schedule ID:* □		
4		*Enforce Communication to STR 1 via ACMS Data Bus B*		Next Step: END
		This step forces communication from/to STR 1 over ACMS data bus B. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus A, and 2) STR 1 is declared healthy/valid on ACMS data bus B.		
		Verify Telemetry **Comm bus STR1 AES75002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Valid bus STR1B AES62002**	**= Healthy**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
4.1		*Uplink Sequence HRA2BCM3*		
		Execute Telecommand **STR 1 BUS B** *Command Parameter(s) :* **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - STR 1 BUS B	**ACZ92109** **Enable 86** **Enable 86**	
4.2		*Check ACMS Data Bus Communication Configuration*		
		Verify Telemetry **Comm bus STR1 AES75002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**<no change>**	AND=ZAA01999
4.3		*Check ACMS Data Bus Validity Table*		
		Verify Telemetry **Valid bus STR1A AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**= Healthy**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<no change>**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
4.4		*Check Current Bus Selection (for each unit)*		
		Verify Telemetry **Valid bus STR1 AES6A002**	**= Use bus B**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<no change>**	AND=ZAZ7S999
		TC Seq. Name :HRA2BCM4 (EnfStr2CommsViaBusA) *TimeTag Type: N* *Sub Schedule ID:*		
5		*Enforce Communication to STR 2 via ACMS Data Bus A*		Next Step: END
		This step forces communication from/to STR 2 over ACMS data bus A. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus B, and 2) STR 2 is declared healthy/valid on ACMS data bus A.		
		Verify Telemetry **Comm bus STR2 AES76002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Valid bus STR2A AES63002**	**= Healthy**	AND=ZAZ7S999
5.1		*Uplink Sequence HRA2BCM4*		
		Execute Telecommand **STR 2 BUS A** *Command Parameter(s) :* **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - STR 2 BUS A	**ACZ93109** **Enable 86** **Enable 86**	

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
5.2		*Check ACMS Data Bus Communication Configuration*		
		Verify Telemetry **Comm bus STR1 AES75002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**<no change>**	AND=ZAA01999
5.3		*Check ACMS Data Bus Validity Table*		
		Verify Telemetry **Valid bus STR1A AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**= Healthy**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<no change>**	AND=ZAZ7S999
5.4		*Check Current Bus Selection (for each unit)*		
		Verify Telemetry **Valid bus STR1 AES6A002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**= Use bus A**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<no change>**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		TC Seq. Name :HRA2BCM5 (EnfStr2CommsViaBusB) *TimeTag Type: N* *Sub Schedule ID:*		
6		*Enforce Communication to STR 2 via ACMS Data Bus B*		Next Step: END
		This step forces communication from/to STR 2 over ACMS data bus B. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus A, and 2) STR 2 is declared healthy/valid on ACMS data bus B.		
		Verify Telemetry **Comm bus STR2 AES76002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Valid bus STR2B AES64002**	**= Healthy**	AND=ZAZ7S999
6.1		*Uplink Sequence HRA2BCM5*		
		Execute Telecommand **STR 2 BUS B**	**ACZ94109**	
		Command Parameter(s) : **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001**	**Enable 86** **Enable 86**	
		TC Control Flags : **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - STR 2 BUS B		
6.2		*Check ACMS Data Bus Communication Configuration*		
		Verify Telemetry **Comm bus STR1 AES75002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**<no change>**	AND=ZAA01999
6.3		*Check ACMS Data Bus Validity Table*		

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Valid bus STR1A AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**= Healthy**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<no change>**	AND=ZAZ7S999
6.4		*Check Current Bus Selection (for each unit)*		□
		Verify Telemetry **Valid bus STR1 AES6A002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**= Use bus B**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<no change>**	AND=ZAZ7S999
		TC Seq. Name :HRA2BCM6 (EnfGyrE1CommsViaBusA) *TimeTag Type: N* *Sub Schedule ID:* □		
7		*Enforce Communication to GYRE1 via ACMS Data Bus A*		Next Step: END
		This step forces communication from/to GYRE 1 over ACMS data bus A. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus B, and 2) GYRE 1 is declared healthy/valid on ACMS data bus A.		

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Comm bus GYRE1 AES77002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Val bus GYRE1A AES65002**	**= Healthy**	AND=ZAZ7S999
7.1		*Uplink Sequence HRA2BCM6*		□
		Execute Telecommand **GYRE 1 BUS A** *Command Parameter(s) :* **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - GYRE 1 BUS A	**ACZ99109** **Enable 86** **Enable 86**	
7.2		*Check ACMS Data Bus Communication Configuration*		□
		Verify Telemetry **Comm bus STR1 AES75002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**<no change>**	AND=ZAA01999
7.3		*Check ACMS Data Bus Validity Table*		□
		Verify Telemetry **Valid bus STR1A AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**= Healthy**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<no change>**	AND=ZAZ7S999
7.4		*Check Current Bus Selection (for each unit)*		
		Verify Telemetry **Valid bus STR1 AES6A002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**= Use bus A**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<no change>**	AND=ZAZ7S999
		TC Seq. Name :HRA2BCM7 (EnfGyrE1CommsViaBusB) *TimeTag Type: N* *Sub Schedule ID:*		
8		*Enforce Communication to GYRE1 via ACMS Data Bus B*		Next Step: END
		This step forces communication from/to GYRE 1 over ACMS data bus B. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus A, and 2) GYRE 1 is declared healthy/valid on ACMS data bus B.		
		Verify Telemetry **Comm bus GYRE1 AES77002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Val bus GYRE1B AES66002**	**= Healthy**	AND=ZAZ7S999
8.1		*Uplink Sequence HRA2BCM7*		

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand **GYRE 1 BUS B** *Command Parameter(s) :* **BusCnf DF86 Cmd** **AH8B1001** **BusCnf DD86 Cmd** **AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - GYRE 1 BUS B	**ACZA1109** **Enable 86** **Enable 86**	
8.2		*Check ACMS Data Bus Communication Configuration*		
		Verify Telemetry **Comm bus STR1** **AES75002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2** **AES76002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1** **AES77002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2** **AES78002**	**<no change>**	AND=ZAA01999
8.3		*Check ACMS Data Bus Validity Table*		
		Verify Telemetry **Valid bus STR1A** **AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B** **AES62002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A** **AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B** **AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A** **AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B** **AES66002**	**= Healthy**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A** **AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B** **AES68002**	**<no change>**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
8.4		*Check Current Bus Selection (for each unit)*		
		Verify Telemetry **Valid bus STR1 AES6A002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**= Use bus B**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**<no change>**	AND=ZAZ7S999
		TC Seq. Name :HRA2BCM8 (EnfGyrE2CommsViaBusA) *TimeTag Type: N* *Sub Schedule ID:*		
9		*Enforce Communication to GYRE2 via ACMS Data Bus A*		Next Step: END
		This step forces communication from/to GYRE 2 over ACMS data bus A. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus B, and 2) GYRE 2 is declared healthy/valid on ACMS data bus A.		
		Verify Telemetry **Comm bus GYRE2 AES78002**	**= Using bus B**	AND=ZAA01999
		Verify Telemetry **Val bus GYRE2A AES67002**	**= Healthy**	AND=ZAZ7S999
9.1		*Uplink Sequence HRA2BCM8*		
		Execute Telecommand **GYRE 2 BUS A** *Command Parameter(s) :* **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - GYRE 2 BUS A	**ACZA2109** **Enable 86** **Enable 86**	
9.2		*Check ACMS Data Bus Communication Configuration*		

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Comm bus STR1 AES75002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**= Using bus A**	AND=ZAA01999
9.3		*Check ACMS Data Bus Validity Table*		
		Verify Telemetry **Valid bus STR1A AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**= Healthy**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**<no change>**	AND=ZAZ7S999
9.4		*Check Current Bus Selection (for each unit)*		
		Verify Telemetry **Valid bus STR1 AES6A002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**= Use bus A**	AND=ZAZ7S999

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		TC Seq. Name :HRA2BCM9 (EnfGyrE2CommsViaBusB) *TimeTag Type: N* *Sub Schedule ID:*		
10		*Enforce Communication to GYRE2 via ACMS Data Bus B*		Next Step: END
		This step forces communication from/to GYRE 2 over ACMS data bus B. Before modifying the communication configuration verify that 1) communication currently goes via ACMS data bus A, and 2) GYRE 2 is declared healthy/valid on ACMS data bus B.		
		Verify Telemetry **Comm bus GYRE2 AES78002**	**= Using bus A**	AND=ZAA01999
		Verify Telemetry **Val bus GYRE2B AES68002**	**= Healthy**	AND=ZAZ7S999
10.1		*Uplink Sequence HRA2BCM9*		
		Execute Telecommand **GYRE 2 BUS B** *Command Parameter(s) :* **BusCnf DF86 Cmd AH8B1001** **BusCnf DD86 Cmd AH8B2001** *TC Control Flags :* **GBM IL DSE** **--Y -- ---** *Subsch. ID : 20* Det. descr. : TC(8,1) Specify ACMS data bus - GYRE 2 BUS B	**ACZA3109** **Enable 86** **Enable 86**	
10.2		*Check ACMS Data Bus Communication Configuration*		
		Verify Telemetry **Comm bus STR1 AES75002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus STR2 AES76002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE1 AES77002**	**<no change>**	AND=ZAA01999
		Verify Telemetry **Comm bus GYRE2 AES78002**	**= Using bus B**	AND=ZAA01999
10.3		*Check ACMS Data Bus Validity Table*		

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify Telemetry **Valid bus STR1A AES61002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR1B AES62002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2A AES63002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2B AES64002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1A AES65002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE1B AES66002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2A AES67002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Val bus GYRE2B AES68002**	**= Healthy**	AND=ZAZ7S999
10.4		*Check Current Bus Selection (for each unit)*		
		Verify Telemetry **Valid bus STR1 AES6A002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus STR2 AES6B002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE1 AES6C002**	**<no change>**	AND=ZAZ7S999
		Verify Telemetry **Valid bus GYRE2 AES6D002**	**= Use bus B**	AND=ZAZ7S999

End of Procedure