

Individual GYR reconfiguration  
 File: H\_CRP\_AOC\_4RCF.xls  
 Author: dsalt-hp



## Procedure Summary

### Objectives

The objective of this Herschel ACMS contingency procedure is to reconfigure the GYR set used by the ACC to determine S/C rates in nominal modes.

The procedure involves the following activities:

- check GYR health & status
- reconfigure ACC to use selected set
- verify reconfiguration

The procedure assumes no specific S/C mode.

### Summary of Constraints

S/C in nominal ACMS mode (SAM/OCM/SCM)

### Spacecraft Configuration

#### Start of Procedure

Spacecraft initial configuration  
 - any nominal ACMS mode (SAM/OCM/SCM)

#### End of Procedure

Spacecraft final configuration  
 - as initial but with reconfigured GYR set used by the ACC

### Reference File(s)

#### Input Command Sequences

#### Output Command Sequences

HRA4RCFA  
 HRA4RCFB  
 HRA4RCFC  
 HRA4RCFD

### Referenced Displays

<b>ANDs</b>	<b>GRDs</b>	<b>SLDs</b>
ZAA01999		
ZAA02999		

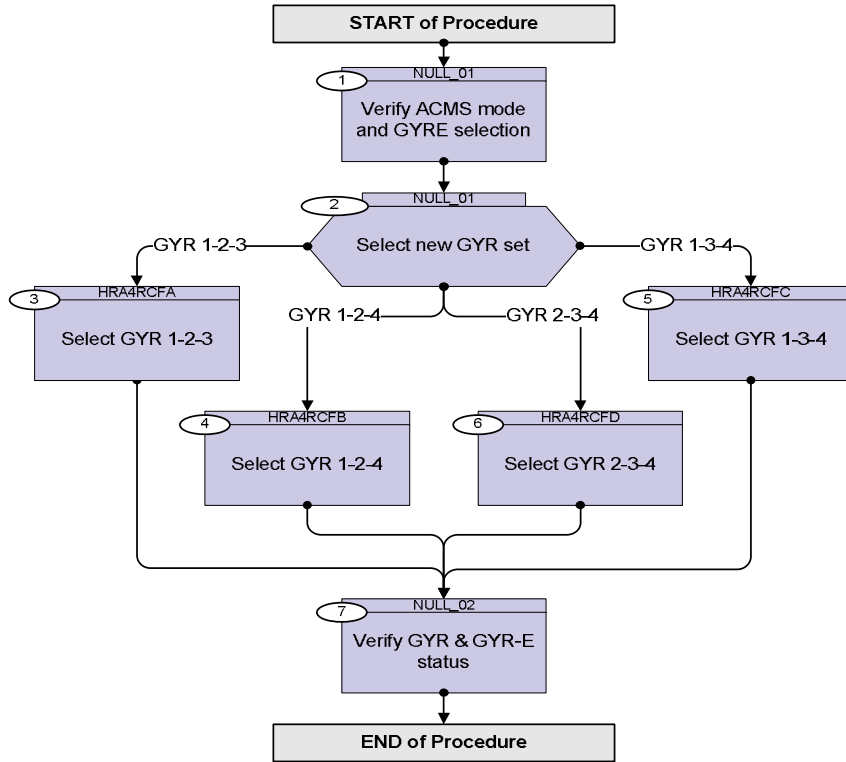
### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
12/01/09	2	1	Created	dsalt-hp	

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## Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
<b>Beginning of Procedure</b>				
TC Seq. Name : NULL_01 (Null sequence 01)				
TimeTag Type: Sub Schedule ID:  □				
1		Verify ACMS mode and GYRE selection		Next Step: 2
1.1		Check ACMS mode & status		□
		Verify Telemetry SpacecraftMode                    AESME002	= Nominal	AND=ZAA01999
		Verify Telemetry AcmsMode                            AESMG002	= OCM = SAM = SCM	AND=ZAA01999
1.2		Check GYR-E health & status		□
		Verify Telemetry Curr GYRE use                    AES20002	<to be read>	AND=ZAA01999
		Verify Telemetry GYRE1 Hlth Sts                    AESK3002	<to be read>	AND=ZAA02999
		Verify Telemetry GYRE2 Hlth Sts                    AESK4002	<to be read>	AND=ZAA02999
1.3		Check current GYR configuration & health		□
		Verify Telemetry Curr GYRs use                    AES19002	<to be read>	AND=ZAA01999
		Verify Telemetry GYR1 Health Sts                    AES41002	<to be read>	AND=ZAA02999
		Verify Telemetry GYR2 Health Sts                    AES42002	<to be read>	AND=ZAA02999
		Verify Telemetry GYR3 Health Sts                    AES43002	<to be read>	AND=ZAA02999
		Verify Telemetry GYR4 Health Sts                    AES44002	<to be read>	AND=ZAA02999

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
2		Select new GYR set		Next Step: GYR 1-2-3 3 GYR 1-2-4 4 GYR 1-3-4 5 GYR 2-3-4 6
		Based upon the above checks, decide the <u>new GYR set</u> to be used to determine S/C rates in nominal ACMS modes.		
<p>TC Seq. Name :HRA4RCFA (Select GYR 1-2-3)</p> <p>TimeTag Type: N            Sub Schedule ID:  <input type="checkbox"/></p>				
3		Select GYR 1-2-3		Next Step: 7
		Execute Telecommand Select GYR set 1-2-3 Command Parameter(s) : NomConf DF86Cmd            AH8N1001 NomConf DD86Cmd            AH8N2001 TC Control Flags : GBM IL DSE --Y -- --- Subsch. ID : 20 Det. descr. : TC(8,1) Mod Nom Conf - Select GYR set 1-2-3	ACZ07109  Enable 86 Enable 86	
		Verify Telemetry Curr GYRs use                    AES19002	= GYR 1-2-3	AND=ZAA01999
<p>TC Seq. Name :HRA4RCFB (Select GYR 1-2-4)</p> <p>TimeTag Type: N            Sub Schedule ID:  <input type="checkbox"/></p>				
4		Select GYR 1-2-4		Next Step: 7

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand <p style="text-align: center;">Select GYR set 1-2-4</p> Command Parameter(s) : NomConf DF86Cmd            AH8N1001        Enable 86 NomConf DD86Cmd            AH8N2001        Enable 86  TC Control Flags : <p style="text-align: center;">GBM IL DSE            --Y -- ---</p> Subsch. ID : 20 Det. descr. : TC(8,1) Mod Nom Conf - Select GYR set 1-2-4	ACZ08109	
		Verify Telemetry <p style="text-align: center;">Curr GYRs use                    AES19002</p>	= GYR 1-2-4	AND-ZAA01999
TC Seq. Name :HRA4RCFC (Select GYR 1-3-4)  TimeTag Type: N Sub Schedule ID:  <input type="checkbox"/>				
5		Select GYR 1-3-4		Next Step: 7
		Execute Telecommand <p style="text-align: center;">Select GYR set 1-3-4</p> Command Parameter(s) : NomConf DF86Cmd            AH8N1001        Enable 86 NomConf DD86Cmd            AH8N2001        Enable 86  TC Control Flags : <p style="text-align: center;">GBM IL DSE            --Y -- ---</p> Subsch. ID : 20 Det. descr. : TC(8,1) Mod Nom Conf - Select GYR set 1-3-4	ACZ09109	
		Verify Telemetry <p style="text-align: center;">Curr GYRs use                    AES19002</p>	= GYR 1-3-4	AND-ZAA01999
TC Seq. Name :HRA4RCFD (Select GYR 2-3-4)  TimeTag Type: N Sub Schedule ID:  <input type="checkbox"/>				
6		Select GYR 2-3-4		Next Step: 7

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Execute Telecommand  Select GYR set 2-3-4  Command Parameter(s) : NomConf DF86Cmd            AH8N1001            Enable 86 NomConf DD86Cmd            AH8N2001            Enable 86  TC Control Flags : GBM IL DSE --Y -- --  Subsch. ID : 20 Det. descr. : TC(8,1) Mod Nom Conf - Select GYR set 2-3-4	ACZ10109	
		Verify Telemetry  Curr GYRs use                AES19002	= GYR 2-3-4	AND=ZAA01999
TC Seq. Name : NULL_02 (Null sequence 02)  TimeTag Type: Sub Schedule ID:  <input type="checkbox"/>				
7		Verify GYR & GYR-E status		Next Step: END
7.1		Verify GYR-E health & status		<input type="checkbox"/>
		Verify Telemetry  Curr GYRE use                AES20002	<no change>	AND=ZAA01999
		Verify Telemetry  GYRE1 Hlth Sts               AESK3002	<no change>	AND=ZAA02999
		Verify Telemetry  GYRE2 Hlth Sts               AESK4002	<no change>	AND=ZAA02999
7.2		Verify GYR health		<input type="checkbox"/>
		Verify Telemetry  GYR1 Health Sts               AES41002	<no change>	AND=ZAA02999
		Verify Telemetry  GYR2 Health Sts               AES42002	<no change>	AND=ZAA02999
		Verify Telemetry  GYR3 Health Sts               AES43002	<no change>	AND=ZAA02999
		Verify Telemetry  GYR4 Health Sts               AES44002	<no change>	AND=ZAA02999
<b>End of Procedure</b>				