

CRP SpireEngCoolerRecycle  
 File: H\_CRP\_SPI\_CREC.xls  
 Author: R. Biggins



## Procedure Summary

### Objectives

This is a so-called 'lifeboat' procedure.  
 This procedure is to be used as part of a contingency recovery.  
 It should only be executed in co-ordination with SOE, SOM, SPIRE ICC and HSC.  
 This procedure will execute a SPIRE cooler recycle, which post-contingency will be required before SPIRE observations can resume.

Based on procedure:SpireEngCoolerRecycle  
 Generated by SPIRE ICC:28.06.2010

### Summary of Constraints

Note that some TM(5,1) packets [New\_Step\_Report] will be generated as a result of running this procedure.

### Spacecraft Configuration

**Start of Procedure**

SPIRE Mode = REDY

**End of Procedure**

During execution of this procedure SPIRE will transistion from REDY to CREC and then back to REDY.

### Reference File(s)

**Input Command Sequences**

HFKACQP2  
 HFKACQP1

**Output Command Sequences**

HRSCREC

### Referenced Displays

<b>ANDs</b>	<b>GRDs</b>	<b>SLDs</b>
SA_7_559		

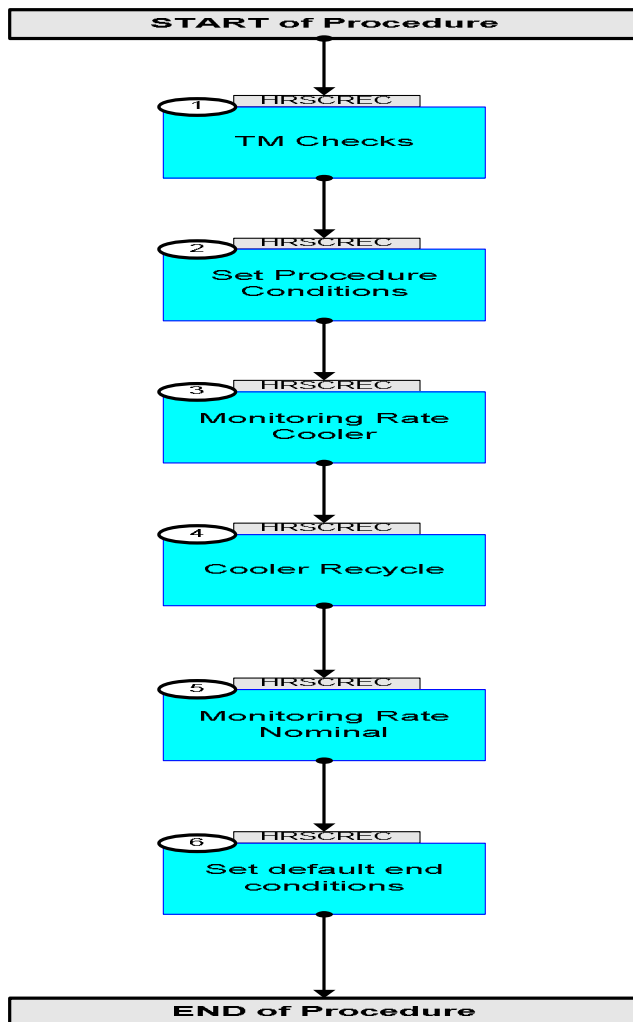
### Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
09/09/2010		1	Created	L.Lucas-hp	
25/11/2010		1.01	Validation : Text changes	L.Lucas-hp	
25/11/2010		1.02	Validation : Typo correction	L.Lucas-hp	
05/04/2011	3.1	2	Minimum delta between TCs updated to 1 second	R. Biggins	

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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 : HRSCREC (CRPSpireCoolerRecycl)  TimeTag Type: B Sub Schedule ID:  <input type="checkbox"/>				
1		TM Checks		Next Step: 2
		Before beginning this sequence confirm with SOE, SOM SPIRE ICC and HSC its applicability for use.		
		Check telemetry  <div style="text-align: center;"> <b>MODE</b>                      <b>SM00M500</b> </div>	= REDY	AND=SA_7_559
2		Set Procedure Conditions		Next Step: 3
	ET=+00.00.01 UT=+00.00.01	SET_BBID  Command Parameter(s) : <div style="text-align: center;"> <b>BUILDING_BLOCK_ID</b>                      <b>SP01N500</b> </div> TC Control Flags :  <div style="text-align: center;"> <b>GBM IL DSE</b>  <b>--Y -- ---</b> </div> Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID                      SC001500  BUILDING_BLOCK_ID                      SP01N500                      80020001 <hex>	
	ET=+00.00.01 UT=+00.00.01	RESET_DRCU_COUNTERS  Subsch. ID : 370 Det. descr. : RESET DRCU COUNTERS	RESET_DRCU_COUNTERS                      SCD00505	
	ET=+00.00.06 UT=+00.00.06	SET_OBS_STEP  Command Parameter(s) : <div style="text-align: center;"> <b>OBSERVATION_STEP</b>                      <b>SP03N500</b> </div> Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP                      SC003500  OBSERVATION_STEP                      SP03N500                      1 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_OBSID  Command Parameter(s) : <div style="text-align: center;"> <b>OBSERVATION_ID</b>                      <b>SP00N500</b> </div> Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SET_OBSID                      SC000500  OBSERVATION_ID                      SP00N500                      2999000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP  SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP            SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SC003500  0 <hex>	
	ET=+00.00.06 UT=+00.00.06	SET_BBID_RAW  SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID            SP01N500  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SC001500  8A080001 <hex>	
3		Monitoring Rate Cooler		Next Step: 4
		Set the CCU sampling rate to 8 seconds, for cooler recycle.		
	ET=+00.00.06 UT=+00.00.06	Execute Sequence HFKACQP2 CCU ACQ Recyc/Decont v10 Sequence Grouping = -  SSID : 0		SEQ
4		Cooler Recycle		Next Step: 5
		These commands will execute a cooler recycle.		
	ET=+00.00.01 UT=+00.00.01	SET_OBS_MODE_RAW  SET_OBS_MODE  Command Parameter(s) : OBSERVING_MODE            SP02N500  TC Control Flags :  GBM IL DSE --Y -- ---  Subsch. ID : 370 Det. descr. : SET OBSERVING MODE	SC002500  600 <hex>	



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Note that a <b>TM(5,1)</b> packet [New_Step_Report] is generated after each of the following SET_OBS_STEP telecommands		
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SC003500  0 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SC001500  80030001 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SC003500  1 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_OBSID  Command Parameter(s) : OBSERVATION_ID SP00N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION IDENTIFIER	SET_OBSID  SC000500  00000000 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_OBS_STEP  Command Parameter(s) : OBSERVATION_STEP SP03N500  Subsch. ID : 370 Det. descr. : SET OBSERVATION STEP	SET_OBS_STEP  SC003500  0 <hex>	
	ET=+00.00.01 UT=+00.00.01	SET_BBID  Command Parameter(s) : BUILDING_BLOCK_ID SP01N500  Subsch. ID : 370 Det. descr. : SET BUILDING BLOCK IDENTIFIER	SET_BBID  SC001500  80000000 <hex>	

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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
	ET=+00.00.01 UT=+00.00.01	SET_OBSID_RAW  SET_OBSID  <i>Command Parameter(s) :</i> OBSERVATION_ID                    SP00N500  <i>Subsch. ID : 370</i> <i>Det. descr. : SET OBSERVATION IDENTIFIER</i>	SC000500  50000000 <hex>	
<b>End of Procedure</b>				