

**HERSCHEL
FLIGHT OPERATIONS PLAN**

**VOLUME 6
FCP Related Nominal Flight Control Procedures**

SPIRE FCP's

PT-HMOC-OPS-FOP-6001-OPS-OAH

Issue 3.1

05/09/11



DOCUMENT APPROVAL

The Approval Page for all Volumes of the FOP can be found in Volume 1.



DISTRIBUTION LIST

The Distribution List for all Volumes of the FOP can be found in Volume 1.

CHANGE SUMMARY

Date	FOP Issue	Version	Modification Description	Author	SPR Ref
01/08/2008		1	Created	mvoegele-hp	
04/08/2008		2	Updated for Issue 1.0	mvoegele-hp	
05/08/2008	1.0	3	Changed title	mvoegele-hp	
02/02/2009	2.0	4	Updated change control history for Issue 2.0	mvoegele-hp	
06/03/2009	2.1	5	Updated change control history for Issue 2.1	mvoegele-hp	
26/03/2009	2.2	6	Updated change control history for Issue 2.2	mvoegele-hp	
23/04/2009	2.3	7	Updated change control history for Issue 2.3	mvoegele-hp	
13/04/2010	3.0	8	Updated change control history for issue 3.0	mvoegele-hp	
05/09/2011	3.1	9	Updated change control history for issue 3.1	mvoegele-hp	

CHANGE RECORD SHEET

Change No.	Type of Change	Date of Issue	Section Affected	
1	1.0	06/08/08	All	
			Updated:	
			Added:	H_FCP_OBS_5110, H_FCP_OBS_5111, H_FCP_OBS_5112, H_FCP_OBS_5142, H_FCP_OBS_5144, H_FCP_OBS_5162, H_FCP_OBS_5164, H_FCP_SPI_BSMF, H_FCP_SPI_BSMI, H_FCP_SPI_BSMN, H_FCP_SPI_CLEM, H_FCP_SPI_CLOM, H_FCP_SPI_CPOM, H_FCP_SPI_CREC, H_FCP_SPI_MCUF, H_FCP_SPI_MCUN, H_FCP_SPI_NDRF, H_FCP_SPI_NDRN, H_FCP_SPI_NLBM, H_FCP_SPI_NSOF, H_FCP_SPI_NSON, H_FCP_SPI_PHOF, H_FCP_SPI_PHON, H_FCP_SPI_RDRF, H_FCP_SPI_RDRN, H_FCP_SPI_RLBM, H_FCP_SPI_RSOF, H_FCP_SPI_RSON, H_FCP_SPI_SCUF, H_FCP_SPI_SCUN, H_FCP_SPI_SDEF, H_FCP_SPI_SDEN, H_FCP_SPI_SMCF, H_FCP_SPI_SMCI, H_FCP_SPI_SMCN, LH_FCP_SPI_NSON
			Deleted:	
2	2.0	02/02/09	All – Complete re-print for Issue 2.0	
			Updated:	H_FCP_OBS_5142, H_FCP_SPI_NSON
			Added:	H_FCP_OBS_5122, H_FCP_OBS_5143
			Deleted:	LH_FCP_SPI_NSON
3	2.1	06/03/09	All – Complete re-print for Issue 2.1	
			Updated:	H_FCP_SPI_NDRF, H_FCP_SPI_NDRN, H_FCP_SPI_NLBM, H_FCP_SPI_NSOF, H_FCP_SPI_NSON, H_FCP_SPI_RLBM, H_FCP_SPI_RSOF, H_FCP_SPI_RSON
			Added:	
			Deleted:	
4	2.2	26/03/09	Front Page, Change Summary, Change Record Sheet and List of Procedures replaced.	
			Updated:	H_FCP_SPI_BSMN, H_FCP_SPI_MCUN, H_FCP_SPI_NSON, H_FCP_SPI_PHOF, H_FCP_SPI_RDRF, H_FCP_SPI_RDRN, H_FCP_SPI_RSON, H_FCP_SPI_SDEF, H_FCP_SPI_SMCI
			Added:	
			Deleted:	
5	2.3	23/04/09	All – Complete re-print for Issue 2.3	
			Updated:	H_FCP_OBS_5143, H_FCP_SPI_NLBM, H_FCP_SPI_RLBM
			Added:	
			Deleted:	
6	2.4	06/05/09	None	
7	2.5	07/10/09	None	
8	3.0	13/04/10	Complete re-print	
			Updated:	H_FCP_OBS_5110, H_FCP_OBS_5111, H_FCP_OBS_5112, H_FCP_SPI_BSMF, H_FCP_SPI_CLEM, H_FCP_SPI_CLOM,



HERSCHEL FOP
VOLUME 6: SPIRE FCP's








































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			H_FCP_SPI_PHOF
			Added:
			Deleted:
9	3.1	05/09/11	Front Page, Change Summary, Change Record Sheet and List of Procedures replaced.
			Updated: H_FCP_OBS_5112
			Added: H_FCP_SPI_APAT, H_FCP_SPI_DUMP
			Deleted:



Introduction

3.6 SPIRE Flight Control Procedures

	H_FCP_OBS_5110	Load SPIRE OBS from ASW	5	11/11/2009
	H_FCP_OBS_5111	Patch SPIRE OBS in PM	2	07/10/2009
	H_FCP_OBS_5112	Load SPIRE OBS from BSW	4	01/03/2011
	H_FCP_OBS_5122	Patch and dump SPIRE DPU PRAM memory	2	27/08/2008
	H_FCP_OBS_5142	Monitor dump of SPIRE DPU PRAM memory area	2	05/01/2009
	H_FCP_OBS_5143	Update SPIRE DPU PRAM ground image from memory dump	3	13/04/2009
	H_FCP_OBS_5144	Monitor dump of SPIRE DPU DRAM memory area	1	30/01/2008
	H_FCP_OBS_5162	Check SPIRE DPU PRAM memory area (checksum calculation)	1	30/01/2008
	H_FCP_OBS_5164	Check SPIRE DPU DRAM memory area (checksum calculation)	1	30/01/2008
	H_FCP_SPI_APAT	SpireEngPatchPM Patch Two Bit Flips April 2010	1	27/04/2010
	H_FCP_SPI_BSMF	BSM_OFF - Switch OFF the BSM	6	05/05/2009
	H_FCP_SPI_BSMI	BSM_INIT - Initialise the BSM	5	19/05/2008
	H_FCP_SPI_BSMN	BSM_ON - Switch ON the BSM	6	25/03/2009
	H_FCP_SPI_CLEM	Write the ASW to EEPROM	4	11/11/2009
	H_FCP_SPI_CLOM	Load a new OBSM image from the ASW	5	17/11/2009
	H_FCP_SPI_CPOM	Patch a new OBSM image from the ASW	2	19/05/2008
	H_FCP_SPI_CREC	CREC_VM - Recycle the Dilution Cooler	4	19/05/2008
	H_FCP_SPI_DUMP	SpireEngPMDump Dumpp and Check Memory	2	13/08/2010
	H_FCP_SPI_MCUF	MCU_OFF - Switch OFF the MCU	5	19/05/2008
	H_FCP_SPI_MCUN	MCU_BOOT - Switch ON the MCU	6	25/03/2009
	H_FCP_SPI_NDRF	DRCU_OFF - Switch OFF the nominal DRCU	6	04/03/2009
	H_FCP_SPI_NDRN	DRCU_START - Switch ON the nominal DRCU	5	04/03/2009
	H_FCP_SPI_NLBM	Load a new OBSM image from the BSW	5	20/04/2009
	H_FCP_SPI_NSOF	Switch OFF the nominal SPIRE units	5	04/03/2009
	H_FCP_SPI_NSON	DPU_START - Switch ON the nominal SPIRE units	11	25/03/2009
	H_FCP_SPI_PHOF	PDET_OFF - Switch OFF the Photometer	6	05/05/2009
	H_FCP_SPI_PHON	PDET_ON - Switch ON the Photometer	6	19/05/2008
	H_FCP_SPI_RDRF	DRCU_OFF - Switch OFF the redundant DRCU	6	25/03/2009
	H_FCP_SPI_RDRN	DRCU_START - Switch ON the redundant DRCU	5	25/03/2009
	H_FCP_SPI_RLBM	Load a new OBSM image from the BSW	5	20/04/2009
	H_FCP_SPI_RSOF	Switch OFF the redundant SPIRE units	5	04/03/2009
	H_FCP_SPI_RSON	DPU_START - Switch ON the redundant SPIRE units	9	25/03/2009
	H_FCP_SPI_SCUF	Switch OFF the SCU Thermometry	5	19/05/2008
	H_FCP_SPI_SCUN	SCU_ON - Switch ON the SCU Thermometry	5	19/05/2008
	H_FCP_SPI_SDEF	SDET_OFF - Switch OFF the Spectrometer	6	25/03/2009
	H_FCP_SPI_SDEN	SDET_ON - Switch ON the SPIRE Spectrometer	5	19/05/2008
	H_FCP_SPI_SMEC	SMEC_OFF - Switch OFF the SMEC	6	19/05/2008
	H_FCP_SPI_SMIC	SMEC_INIT - Initialise the SMEC	5	25/03/2009
	H_FCP_SPI_SMCN	SMEC_ON - Switch ON the SMEC	6	19/05/2008