

**HERSCHEL
FLIGHT OPERATIONS PLAN**

**VOLUME 4
COP Related Nominal Flight Control Procedures**

Payload FCP's

**HIFI
H_COP_HIF_SP31 to H_COP_HIF_WBFT**

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

Issue 3.0

13/04/10

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
24/04/2009		1	Created	mvoegele-hp	
24/04/2009	2.3	2	Book divided into 2 parts as follows: Volume 4 HIFI FCP's divided into 2 book as follows: H_COP_HIF_CFHR to H_COP_HIF_RFLE and H_COP_HIF_SP31 to H_COP_HIF_WBFT	mvoegele-hp	
06/05/2009	2.4	3	Updated change history for Issue 2.4	mvoegele-hp	
08/10/2009	2.5	4	Updated change history for Issue 2.5	dbleakle-hp	
13/10/2009		5	corrected typo in title	mvoegele-hp	
13/04/2010	3.0	6	Updated change control history for issue 3.0	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_COP_PAC_A001, H_COP_PAC_A002, H_COP_PAC_G001, H_COP_PAC_G002, H_COP_PAC_G003, H_COP_PAC_X001, H_COP_PAC_X002, H_COP_PAC_X003
Deleted:				
2	2.0	02/02/09	All – Complete re-print for Issue 2.0	
			Updated:	H_COP_PAC_A001, H_COP_PAC_A002, H_COP_PAC_G001, H_COP_PAC_G002, H_COP_PAC_G003, H_COP_PAC_X001, H_COP_PAC_X002, H_COP_PAC_X003
			Added:	H_COP_HIF_CFHR, H_COP_HIF_CFWB, H_COP_HIF_NCRT, H_COP_HIF_NFF1, H_COP_HIF_NFF2, H_COP_HIF_NFF3, H_COP_HIF_NFF4, H_COP_HIF_NFF5, H_COP_HIF_NFF6, H_COP_HIF_NFF7, H_COP_HIF_NFF8, H_COP_HIF_NFL1, H_COP_HIF_NFL2, H_COP_HIF_NFL3, H_COP_HIF_NFL4, H_COP_HIF_NFL5, H_COP_HIF_NFL6, H_COP_HIF_NFL7, H_COP_HIF_NFL8, H_COP_HIF_NFL9, H_COP_HIF_NFLA, H_COP_HIF_NFLB, H_COP_HIF_NFLC, H_COP_HIF_NFLD, H_COP_HIF_NFLE, H_COP_HIF_NIF1, H_COP_HIF_NIF2, H_COP_HIF_NIF3, H_COP_HIF_NIF4, H_COP_HIF_NIF5, H_COP_HIF_NIF6, H_COP_HIF_NIF7, H_COP_HIF_RCRT, H_COP_HIF_RFL1, H_COP_HIF_RFL2, H_COP_HIF_RFL3, H_COP_HIF_RFL4, H_COP_HIF_RFL5, H_COP_HIF_RFL6, H_COP_HIF_RFL7, H_COP_HIF_RFL8, H_COP_HIF_RFL9, H_COP_HIF_RFLA, H_COP_HIF_RFLB, H_COP_HIF_RFLC, H_COP_HIF_RFLD, H_COP_HIF_RFLE, H_COP_PAC_A003, H_COP_PAC_C101, H_COP_PAC_C102, H_COP_PAC_C103, H_COP_PAC_C201, H_COP_PAC_C202, H_COP_PAC_C203, H_COP_PAC_C204, H_COP_PAC_CX01, H_COP_PAC_CX02, H_COP_PAC_CX03, H_COP_PAC_CX04, H_COP_PAC_CX05, H_COP_PAC_D000, H_COP_PAC_D001, H_COP_PAC_D002, H_COP_PAC_D003, H_COP_PAC_D100, H_COP_PAC_D101, H_COP_PAC_D102, H_COP_PAC_D103, H_COP_PAC_D200, H_COP_PAC_D201, H_COP_PAC_D202, H_COP_PAC_D203, H_COP_PAC_D204, H_COP_PAC_D300, H_COP_PAC_D301, H_COP_PAC_D302, H_COP_PAC_D303, H_COP_PAC_D304, H_COP_PAC_D305, H_COP_PAC_D306, H_COP_PAC_D307, H_COP_PAC_F000,

			<p>H_COP_PAC_F001, H_COP_PAC_F002, H_COP_PAC_F003, H_COP_PAC_F100, H_COP_PAC_F101, H_COP_PAC_F102, H_COP_PAC_F103, H_COP_PAC_F104, H_COP_PAC_FDIR, H_COP_PAC_G000, H_COP_PAC_G101, H_COP_PAC_G201, H_COP_PAC_G202, H_COP_PAC_G203, H_COP_PAC_G204, H_COP_PAC_GX01, H_COP_PAC_GX02, H_COP_PAC_GX03, H_COP_PAC_GX04, H_COP_PAC_GX07, H_COP_PAC_GX08, H_COP_PAC_GX09, H_COP_PAC_GX10, H_COP_PAC_GX11, H_COP_PAC_L001, H_COP_PAC_LLOP, H_COP_PAC_SFTC, H_COP_PAC_SX01, H_COP_PAC_X004, H_COP_PAC_X005, H_COP_PAC_X006, H_COP_PAC_X007, H_COP_PAC_X008, H_COP_PAC_X009, H_COP_PAC_X010, H_COP_PAC_X011, H_COP_PAC_X012, H_COP_SPI_BS03, H_COP_SPI_BS06, H_COP_SPI_BS5A, H_COP_SPI_BS5B, H_COP_SPI_BSMF, H_COP_SPI_BSMI, H_COP_SPI_BSSC, H_COP_SPI_DCPN, H_COP_SPI_DCSC, H_COP_SPI_DCSN, H_COP_SPI_DPIC, H_COP_SPI_DPNC, H_COP_SPI_DPPS, H_COP_SPI_DRCN, H_COP_SPI_DSIC, H_COP_SPI_DSPS, H_COP_SPI_MCSC, H_COP_SPI_MCUF, H_COP_SPI_MCUN, H_COP_SPI_PCAC, H_COP_SPI_PHOF, H_COP_SPI_PHVT, H_COP_SPI_REDY, H_COP_SPI_SC2P, H_COP_SPI_SC4P, H_COP_SPI_SCAC, H_COP_SPI_SCAT, H_COP_SPI_SCDT, H_COP_SPI_SCSC, H_COP_SPI_SMCP, H_COP_SPI_SMCS, H_COP_SPI_SMEP, H_COP_SPI_SMER, H_COP_SPI_SMFP, H_COP_SPI_SMFR, H_COP_SPI_SMIP, H_COP_SPI_SMIR, H_COP_SPI_SMLP, H_COP_SPI_SMLR, H_COP_SPI_SMOF, H_COP_SPI_SMOL, H_COP_SPI_SMOS, H_COP_SPI_SMPP, H_COP_SPI_SMPR, H_COP_SPI_SOHC, H_COP_SPI_SPNO, H_COP_SPI_SPOF, H_COP_SPI_SPVT</p>
			Deleted:
3	2.1	06/03/09	<p>All – Complete re-print for Issue 2.1. Payload FCP's divided into 4 books. New Book added HIFI FCP's</p>
			<p>Updated: H_COP_HIF_CFHR, H_COP_HIF_CFWB, H_COP_HIF_NFF1, H_COP_HIF_NFF2, H_COP_HIF_NFF3, H_COP_HIF_NFF4, H_COP_HIF_NFF5, H_COP_HIF_NFF6, H_COP_HIF_NFF7, H_COP_HIF_NFF8, H_COP_HIF_NIF1, H_COP_HIF_NIF2, H_COP_HIF_NIF3, H_COP_HIF_NIF4, H_COP_HIF_NIF5, H_COP_HIF_NIF6, H_COP_HIF_NIF7</p>
			Added:
			Deleted:





4	2.2	26/03/09	None
5	2.3	23/04/09	All – New Book added. Volume 4 HIFI FCP's divided into 2 book as follows: H_COP_HIF_CFHR to H_COP_HIF_RFLE and H_COP_HIF_SP31 to H_COP_HIF_WBFT
			Updated:
			Added: H_COP_HIF_SP31, H_COP_HIF_SP32, H_COP_HIF_SP33, H_COP_HIF_CPR1, H_COP_HIF_CPR2, H_COP_HIF_CPR3, H_COP_HIF_CPRR, H_COP_HIF_FPFT, H_COP_HIF_HRFT, H_COP_HIF_IFFT, H_COP_HIF_LOFT, H_COP_HIF_NUT0, H_COP_HIF_SPUR, H_COP_HIF_SWON, H_COP_HIF_WBFT
Deleted:			
6	2.4	06/05/09	Front Page, Change Summary, Change Record Sheet and List of Procedures replaced.
			Updated: H_COP_HIF_SP33, H_COP_HIF_NUT0, H_COP_HIF_SWON
			Added:
Deleted:			
7	2.5	07/10/09	Front Page, Change Summary, Change Record Sheet and List of Procedures replaced.
			Updated: H_COP_HIF_SP31, H_COP_HIF_SP32, H_COP_HIF_SP33, H_COP_HIF_NUT0
			Added: H_COP_HIF_WU3B
Deleted:			
8	3.0	13/04/10	Complete re-print
			Updated: H_COP_HIF_CPR1, H_COP_HIF_CPR2, H_COP_HIF_CPR3, H_COP_HIF_CPRR, H_COP_HIF_FPFT, H_COP_HIF_SWON
			Added: H_COP_HIF_RUT0
Deleted:			
















Introduction

Chapter 3 Payload Flight Control Procedures

3.4 HIFI Flight Control Procedures

	H_COP_HIF_SP31	HIFI-COP-3-Spur_B3b_1	3	11/06/2009
	H_COP_HIF_SP32	HIFI-COP-3-Spur_B3b_2	3	11/06/2009
	H_COP_HIF_SP33	HIFI-COP-3-Spur_B3b_3	3	31/05/2009
	H_COP_HIF_WU3B	HifiManCmd_LO_Warmup_3b	1	09/06/2009

High-Level Procedures

	H_COP_HIF_CPR1	HIFI Open-Loop Small Steps	2	25/11/2009
	H_COP_HIF_CPR2	HIFI Open-Loop Scans	2	25/11/2009
	H_COP_HIF_CPR3	HIFI Closed-Loop Health Check	2	25/11/2009
	H_COP_HIF_CPRR	HIFI Chopper response time	2	26/11/2009
	H_COP_HIF_FPFT	HIFI FPU Functional Tests	2	26/11/2009
	H_COP_HIF_HRFT	HIFI HRS Functional Tests	1	09/04/2009
	H_COP_HIF_IFFT	HIFI IF Chain Functional Tests	1	09/04/2009
	H_COP_HIF_LOFT	HIFI LO functional tests	1	09/04/2009
	H_COP_HIF_NUT0	LCU Safety Table and Memory Patch Upload	4	13/06/2009
	H_COP_HIF_RUT0	LCU Safety Table and Memory Patch Upload	1	26/11/2009
	H_COP_HIF_SPUR	HIFI Dedicated Spurious Analysis (Band 3b)	1	09/04/2009
	H_COP_HIF_SWON	HIFI Switch On Redundant	2	25/11/2009
	H_COP_HIF_WBFT	HIFI WBS Functional Tests	1	09/04/2009