

SWA Power On
 File: IA-FCP-011.xls
 Author: daniel lakey




Procedure Summary

Objectives

Nominal SWA Power On

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

SWA Off

End of Procedure

SWA On

Reference File(s)

Input Command Sequences

ADMF705A
 AIAF801A
 AIAF801B
 AIAF251A

Output Command Sequences

AIAF011A

Referenced Displays

ANDs	GRDs	SLDs
DSMA0004		
DPWA0402		
DIAA0007		
DPWA0400		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
21/02/2018		1	Updates from Feb 2018	dlakey	M7
12/03/2018	0.2				M7
27/04/2018		2	Updates following comments from SWA 25/04/2018	dlakey	M7
12/06/2018		3	Added redundant switch-on and cross strapped procedures, and SpW interface selection	dlakey	M7
18/06/2018	0.3				M7
17/09/2018		3.01	Moved to PFM DB	dlakey	M7
15/02/2019		4	Updated for PFM DB / use dedicated FDIR enable/disable sequences	dlakey	M7
01/03/2019		5	FDIR Enable moved earlier	dlakey	M7
18/03/2019		1			M7

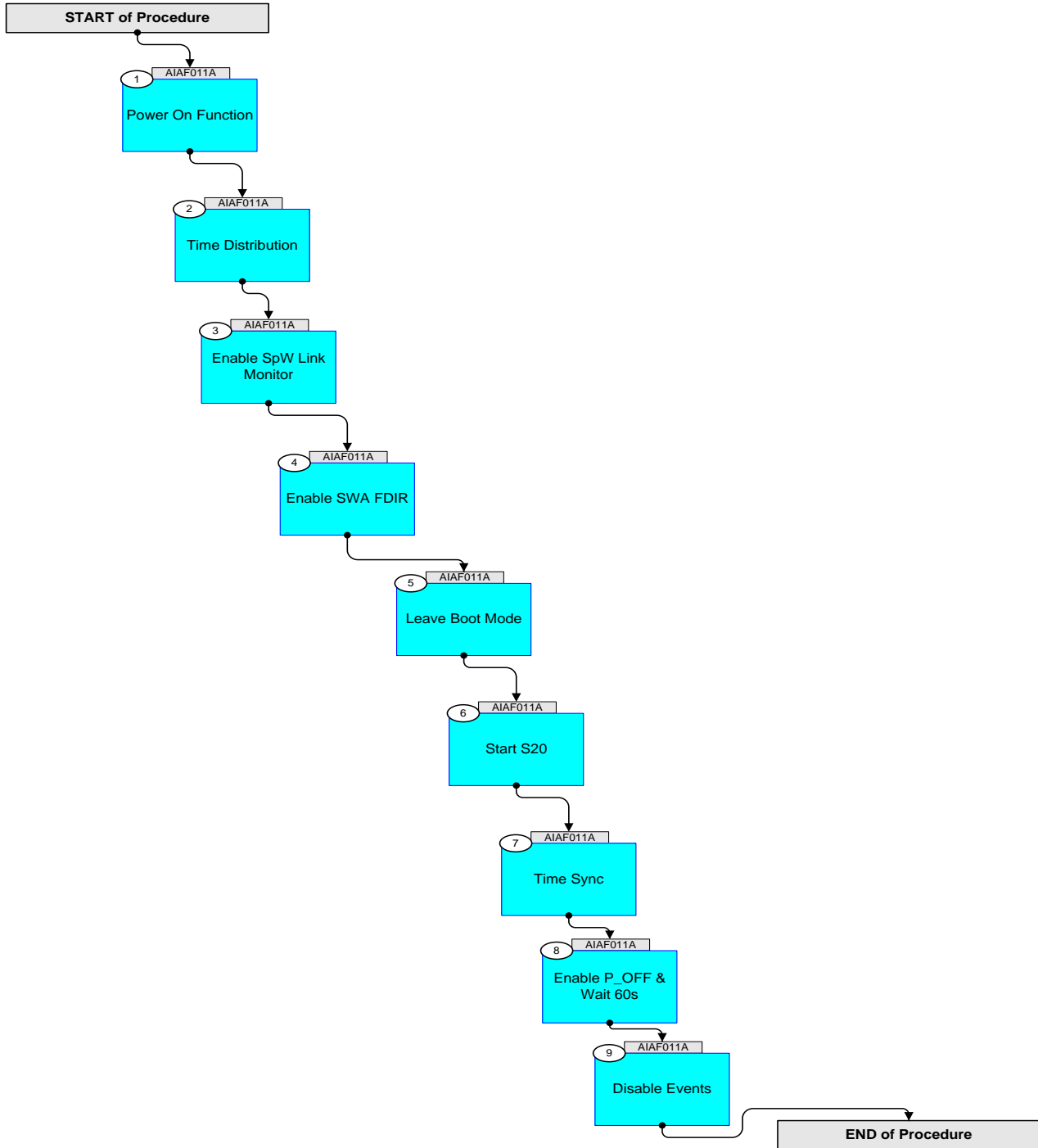
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04/07/2019	6	Moved FDIR enable to the end, due to AR SOL-280	dlakey	M7
16/08/2019	2			M7
14/01/2020	7	SOL_FCR-60 : Update SWA procedures for CSW 3.0.3 & latest FSW	dlakey	M7
20/01/2020	3			M7
20/02/2020	7.01	SOL_FCR-270 : Update SWA Enable Procedure to enable SWA8 and SWA9 (refresh only)	dlakey	M7

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Procedure Flowchart Overview



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Step	Label/Time	Activity/Remarks/Branch	CK	Display
Beginning of Procedure				
Beginning of Sequence				
	AIAF011A	SWA Power On SeqFlags [Crit/Plan/Stdalone/Sched] : NSYN Forced Subschedule : SWA (109) TimeTag type : B		
1		Power On Function Next step(s): -> 2		
		Enable Nominal SpW Link		
		Verify Telemetry NSMD0084 Payload 7 Link Status = Nom Red Disab		AND=DSMA0004
	+00.00.00	Execute Telecommand ZSM00298 SSMM Sel PL SpW IF OP mode TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PSM00302 SpW I/F E/D = Enabled <eng> PSM00303 SpW I/S = Nominal <eng> PSM00304 P/L ID = SWA <eng>		
		Verify Telemetry NSMD0084 Payload 7 Link Status = NomEnab RedDis		AND=DSMA0004
		Power on SWA		
	+00.00.01	Execute Telecommand ZCSD11D2 SWA PowerUp Function TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCSB0036 Unit to power up/down. = UNIT_A <eng>		
1.1		Verify Telemetry		
		Confirm SWA RSA Telemetry		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		(if RIU-A is in use)		
		Verify Telemetry NRUD2007 RSA_1_1_9 SWA A = On		AND=DPWA0402
		Verify Telemetry NRUD2067 RSA_2_1_9 SWA B = Off		AND=DPWA0402
		(if RIU-B is in use)		
		Verify Telemetry NRUT2007 RSA_1_1_9 SWA A (RIU B) = On		AND=DPWA0402
		Verify Telemetry NRUT2067 RSA_2_1_9 SWA B (RIU B) = Off		AND=DPWA0402
		Check SWA A and B LCL status		
		(if PCDU-A is in use)		
		Verify Telemetry NPWD0077 A_LCL4_16 SWA-A ST = ON		AND=DIAA0007
		Verify Telemetry NPWD0038 A_LCL2_17 SWA-B PWR ST = OFF		AND=DIAA0007
		(if PCDU-B is in use)		
		Verify Telemetry NPWT0077 B_LCL4_16 SWA-A ST = ON		AND=DPWA0400
		Verify Telemetry NPWT0038 B_LCL2_17 SWA-B PWR ST = OFF		AND=DPWA0400
		Check SCV Telemetry		
		Verify Telemetry NCSD3K72 SWA A SCV Status.scvPwr = ON		AND=DIAA0007

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		Verify Telemetry NCSD3K73 SWA A SCV Status.scvTm = ON		AND=DIAA0007
		Verify Telemetry NCSD3K82 SWA B SCV Status.scvPwr = OFF		AND=DIAA0007
		Verify Telemetry NCSD3K83 SWA B SCV Status.scvTm = OFF		AND=DIAA0007
2		Time Distribution Next step(s): -> 3		
	+00.00.21	Execute Telecommand ZCD00982 Start Time Synchronisation to User TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD09821 PID = SWA_0 <eng> PCD09822 Period of time = 0 <dec>		
3		Enable SpW Link Monitor Next step(s): -> 4		
		Enable the Platform monitoring of the SpW Link (Following DM-FCP-705) This contains 9 TCs at 1TC/s : duration = 9s		
	ET+=+00.00.01 UT+=+00.00.01	Execute Sequence ADMF705A Man HB Mon SWA A v05 Sequence Grouping = - Subsch ID : SWA (109)		

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4		<p>Enable SWA FDIR</p> <p><i>Next step(s):</i> -> 5</p>		
		Durations 8s		
	ET=+00.00.01 UT=+00.00.01	<p>Execute Sequence</p> <p>AIAF801A SWA Enable FDIR v04 Sequence Grouping = -</p> <p>Subsch ID : SWA (109)</p>		
5		<p>Leave Boot Mode</p> <p><i>Next step(s):</i> -> 6</p>		
		35 seconds after starting Time Sync, leave Boot Mode: 35 - <ADMF705A> - <AIHF801A> := time tag = 18s		
	+00.00.18	<p>Send SWA_TC_LEAVE_BOOT_MODE</p> <p>ZIA58735 SWA_TC_LEAVE_BOOT_MODE TC Control Flags: GBM IL DSE --Y NC ---</p>		
6		<p>Start S20</p> <p><i>Next step(s):</i> -> 7</p>		
		8 seconds later, enable S20 with a frequency of 8Hz		
	+00.00.08	<p>Execute Telecommand</p> <p>ZCD01401 Start Information Distribution for User TC Control Flags: GBM IL DSE --Y NC ---</p> <p>Command Parameters : PCD14011 Instrument Id = SWA_SPW_ADDR <eng> PCD14012 Distrib Period = 1 <dec></p>		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
7		<p>Time Sync</p> <p>Next step(s): -> 8</p>		
	+00.00.01	<p>Execute Telecommand</p> <p>ZCD0982 Start Time Synchronisation to User</p> <p>TC Control Flags: GBM IL DSE --Y NC ---</p> <p>Command Parameters : PCD09821 PID = SWA_0 <eng> PCD09822 Period of time = 0 <dec></p>		
8		<p>Enable P_OFF & Wait 60s</p> <p>Next step(s): -> 9</p>		
	ET=+00.00.01 UT=+00.00.01	<p>Execute Sequence</p> <p>AIAF801B SWA Enab P_OFF A v04</p> <p>Sequence Grouping = -</p> <p>Subsch ID : SWA (109)</p>		
		Wait at least 60s before powering off		
9		<p>Disable Events</p> <p>Next step(s): -> END</p>		
		Disable SWA_E_EXOS_OVR		
	ET=+00.00.30 UT=+00.00.30	<p>Execute Sequence</p> <p>AIAF251A SWA Disable Evt Rept v01</p> <p>Sequence Grouping = - Sequence Parameter(s): XF251A01 EVENT_ID = ExOSOvr</p> <p>Subsch ID : SWA (109)</p>		
		AIAF011A	End of Sequence	

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
End of Procedure				