

SWA B Spw A Power On (Stay in Boot)
File: IA-CRP-014.xls
Author: daniel lakey



Procedure Summary

Objectives

Redundant SWA Spw A Power On, staying in Boot

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

SWA Off

End of Procedure

SWA On (remaining in Boot mode)

Reference File(s)

Input Command Sequences

ADMF705B
AIAF801A
AIAF801C

Output Command Sequences

AIAC014A

Referenced Displays

ANDs	GRDs	SLDs
DSMA0004		
DPWA0402		
DIAA0007		
DPWA0400		

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
06/12/2019		1	SOL_FCR-23 : SWA stay-in-boot procedures for SWA-B and cross-straped	dlakey	M7
14/01/2020		2	SOL_FCR-60 : Update SWA procedures for CSW 3.0.3 & latest FSW	dlakey	M7
20/01/2020		3			M7
20/02/2020		2.01	SOL_FCR-270 : Update SWA Enable Procedure to enable SWA8 and SWA9 (refresh only)	dlakey	M7

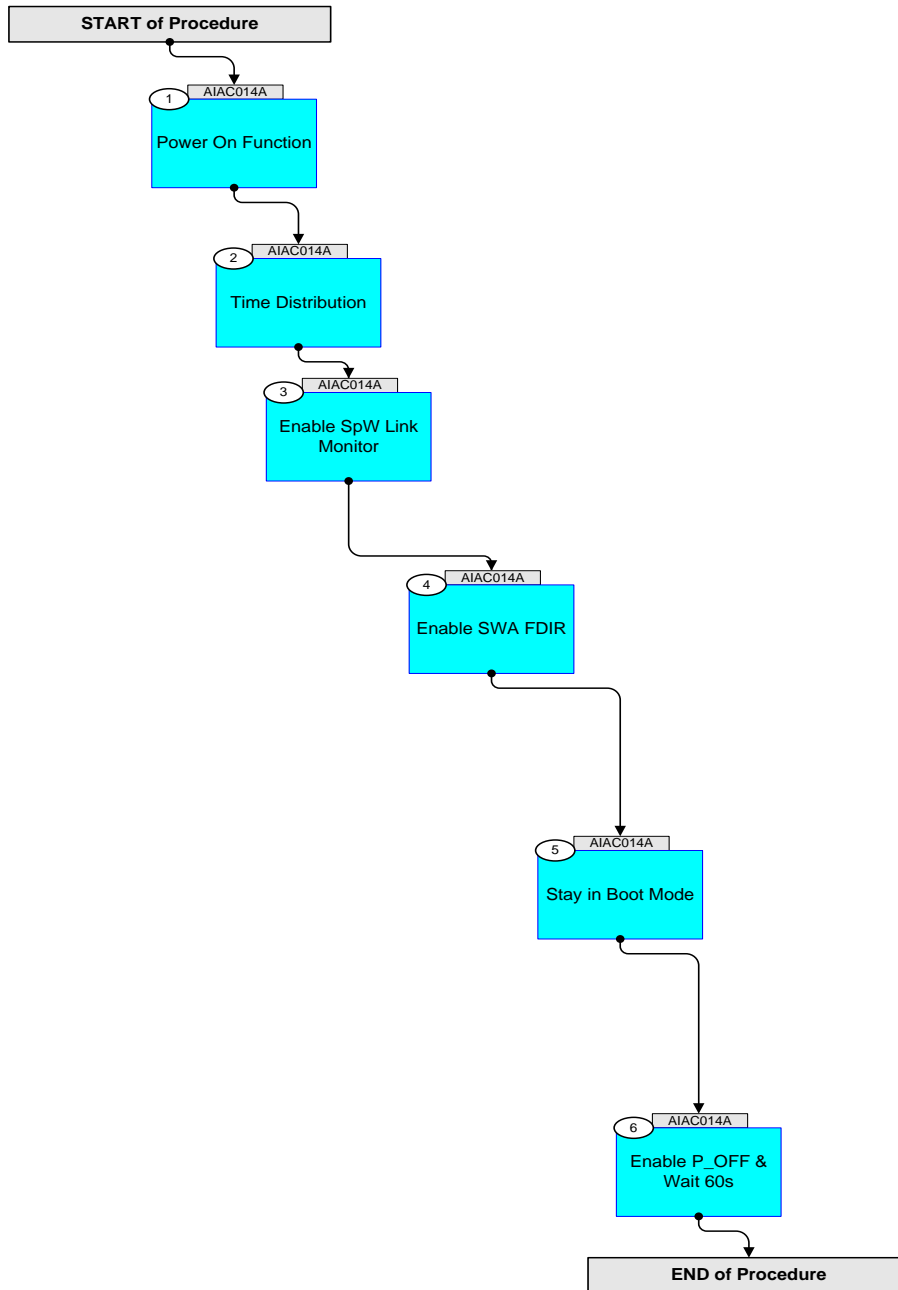
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solar orbiter



Procedure Flowchart Overview



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Step	Label/Time	Activity/Remarks/Branch	CK	Display
Beginning of Procedure				
Beginning of Sequence				
	AIAC014A	SWA B SpA On in Boot 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_B <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 = Off		AND=DPWA0402
		Verify Telemetry NRUD2067 RSA_2_1_9 SWA B = On		AND=DPWA0402
		(if RIU-B is in use)		
		Verify Telemetry NRUT2007 RSA_1_1_9 SWA A (RIU B) = Off		AND=DPWA0402
		Verify Telemetry NRUT2067 RSA_2_1_9 SWA B (RIU B) = On		AND=DPWA0402
		Check SWA A and B LCL status		
		(if PCDU-A is in use)		
		Verify Telemetry NPWD0077 A_LCL4_16 SWA-A ST = OFF		AND=DIAA0007
		Verify Telemetry NPWD0038 A_LCL2_17 SWA-B PWR ST = ON		AND=DIAA0007
		(if PCDU-B is in use)		
		Verify Telemetry NPWT0077 B_LCL4_16 SWA-A ST = OFF		AND=DPWA0400
		Verify Telemetry NPWT0038 B_LCL2_17 SWA-B PWR ST = ON		AND=DPWA0400
		Check SCV Telemetry		
		Verify Telemetry NCS3K72 SWA A SCV Status.scvPwr = OFF		AND=DIAA0007

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		Verify Telemetry NCSD3K73 SWA A SCV Status.scvTm = OFF		AND=DIAA0007
		Verify Telemetry NCSD3K82 SWA B SCV Status.scvPwr = ON		AND=DIAA0007
		Verify Telemetry NCSD3K83 SWA B SCV Status.scvTm = ON		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 ADMF705B Man HB Mon SWA B 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		
	<p>ET=+00.00.01 UT=+00.00.01</p>	<p>Execute Sequence AIAF801A SWA Enable FDIR d03 Sequence Grouping = -</p> <p>Subsch ID : SWA (109)</p>		
5		<p>Stay in Boot Mode</p> <p><i>Next step(s):</i> -> 6</p>		
		<p>35 seconds after starting Time Sync, stay in Boot Mode: 35 - <ADMF705A> - <AIAF801A> := time tag = 18s</p>		
	+00.00.18	<p>Execute Telecommand ZIA58734 SWA_TC_STAY_BOOT_MODE TC Control Flags: GBM IL DSE --Y NC ---</p>		
6		<p>Enable P_OFF & Wait 60s</p> <p><i>Next step(s):</i> -> END</p>		
	<p>ET=+00.00.01 UT=+00.00.01</p>	<p>Execute Sequence AIAF801C SWA Enab P_OFF B d03 Sequence Grouping = -</p> <p>Subsch ID : SWA (109)</p>		
		Wait at least 60s before powering off		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
	AIAC014A	End of Sequence		
End of Procedure				