

SWA B Power On (Stay in Boot)  
File: IA-CRP-012.xls  
Author: daniel lakey



**Procedure Summary**

**Objectives**

Redundant SWA 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**

AIAC012A

**Referenced Displays**

<b>ANDs</b>	<b>GRDs</b>	<b>SLDs</b>
DSMA0004		
DPWA0402		
DIAA0007		
DPWA0400		

**Configuration Control Information**

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
21/10/2019		1	Renamed	dlakey	M7
06/12/2019		2	SOL_FCR-23 : SWA stay-in-boot procedures for SWA-B and cross-strapped	dlakey	M7
14/01/2020		3	SOL_FCR-60 : Update SWA procedures for CSW 3.0.3 & latest FSW	dlakey	M7
20/01/2020		3			M7
20/02/2020		3.01	SOL_FCR-270 : Update SWA Enable Procedure to enable SWA8 and SWA9 (refresh only)	dlakey	M7

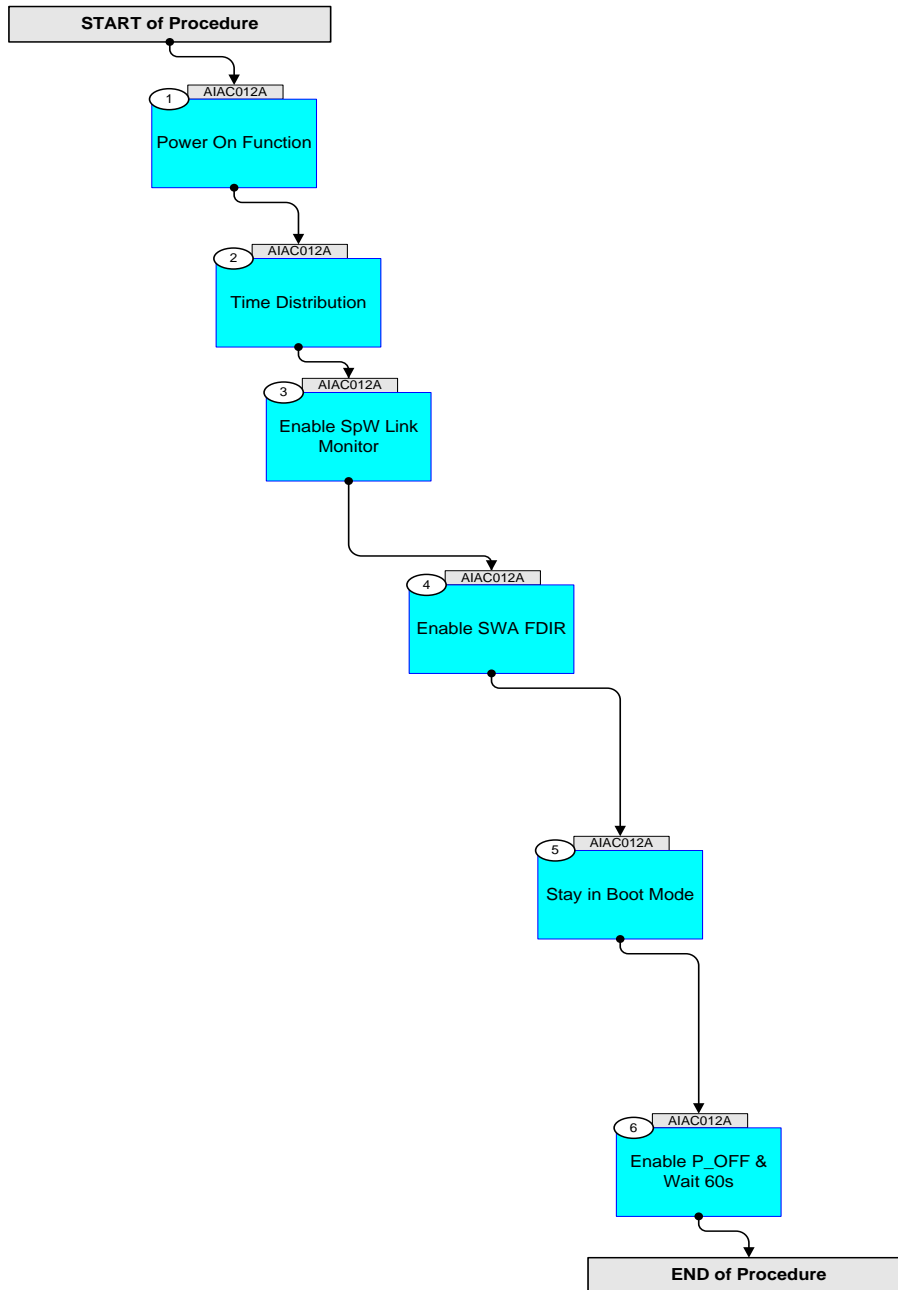
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### Procedure Flowchart Overview



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Step	Label/Time	Activity/Remarks/Branch	CK	Display
<b>Beginning of Procedure</b>				
Beginning of Sequence				
	<b>AIAC012A</b>	<b>SWA B On in Boot</b> SeqFlags [ Crit/Plan/Stdalone/Sched ] : NAYN Forced Subschedule : SWA (109) TimeTag type : B		
<b>1</b>		<b>Power On Function</b>  <b>Next step(s):</b> -> 2		
		Enable Redundant SpW Link		
		<b>Verify Telemetry</b> NSMD0084 Payload 7 Link Status = Nom Red Disab		AND=DSMA0004
	+00.00.00	<b>Execute Telecommand</b> 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 = Redundant <eng> PSM00304 P/L ID = SWA <eng>		
		<b>Verify Telemetry</b> NSMD0084 Payload 7 Link Status = NomDis RedEnab		AND=DSMA0004
		Power on SWA		
	+00.00.01	<b>Execute Telecommand</b> ZCSD11D2 SWA PowerUp Function TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCSB0036 Unit to power up/down. = UNIT_B <eng>		
<b>1.1</b>		<b>Verify Telemetry</b>		
		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
		<b>Verify Telemetry</b> NCSD3K73 SWA A SCV Status.scvTm = OFF		AND=DIAA0007
		<b>Verify Telemetry</b> NCSD3K82 SWA B SCV Status.scvPwr = ON		AND=DIAA0007
		<b>Verify Telemetry</b> NCSD3K83 SWA B SCV Status.scvTm = ON		AND=DIAA0007
2		<b>Time Distribution</b>  Next step(s): -> 3		
	+00.00.21	<b>Execute Telecommand</b> 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		<b>Enable SpW Link Monitor</b>  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	<b>Execute Sequence</b> ADMF705B Man HB Mon SWA B v05 Sequence Grouping = -  Subsch ID : SWA (109)		

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4		<p style="text-align: center;"><b>Enable SWA FDIR</b></p> <p><i>Next step(s):</i> -&gt; 5</p>		
		Durations 8s		
	ET=+00.00.01 UT=+00.00.01	<p><b>Execute Sequence</b></p> <p><b>AIAF801A SWA Enable FDIR d03</b>                      Sequence Grouping = -</p> <p>Subsch ID : SWA (109)</p>		
5		<p style="text-align: center;"><b>Stay in Boot Mode</b></p> <p><i>Next step(s):</i> -&gt; 6</p>		
		35 seconds after starting Time Sync, <b>stay</b> in Boot Mode:  35 - <ADMF705A> - <AIAF801A> := time tag = 18s		
	+00.00.18	<p><b>Execute Telecommand</b></p> <p><b>ZIA58734 SWA_TC_STAY_BOOT_MODE</b>                      TC Control Flags:                      GBM IL DSE                      --Y NC ---</p>		
6		<p style="text-align: center;"><b>Enable P_OFF &amp; Wait 60s</b></p> <p><i>Next step(s):</i> -&gt; END</p>		
	ET=+00.00.01 UT=+00.00.01	<p><b>Execute Sequence</b></p> <p><b>AIAF801C SWA Enab P_OFF B d03</b>                      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
	<b>AIAC012A</b>	End of Sequence		
<b>End of Procedure</b>				