

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



**Procedure Summary**

**Objectives**

Nominal 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**

ADMF705A  
 AIAF801A  
 AIAF801B

**Output Command Sequences**

AIAF012A

**Referenced Displays**

ANDs	GRDs	SLDs
DSMA0004		
DPWA0402		
DIAA0007		
DPWA0400		

**Configuration Control Information**

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
15/02/2019		1	Updated for PFM DB / use dedicated FDIR enable/disable sequences	dlakey	M7
01/03/2019		2	FDIR Enable moved earlier	dlakey	M7
18/03/2019		1			M7
04/07/2019		3	Moved FDIR enable to the end, due to AR SOL-280	dlakey	M7
04/07/2019		3.01	Refreshed seq descr	dlakey	M7
16/08/2019		2			M7
14/01/2020		4	SOL_FCR-60 : Update SWA procedures for CSW 3.0.3 & latest FSW	dlakey	M7
20/01/2020		3			M7
20/02/2020		4.01	SOL_FCR-270 : Update SWA Enable Procedure to enable SWA8 and SWA9 (refresh only)	dlakey	M7

Status : Version 4.01 - Updated  
 Last Checkin: 20/02/20

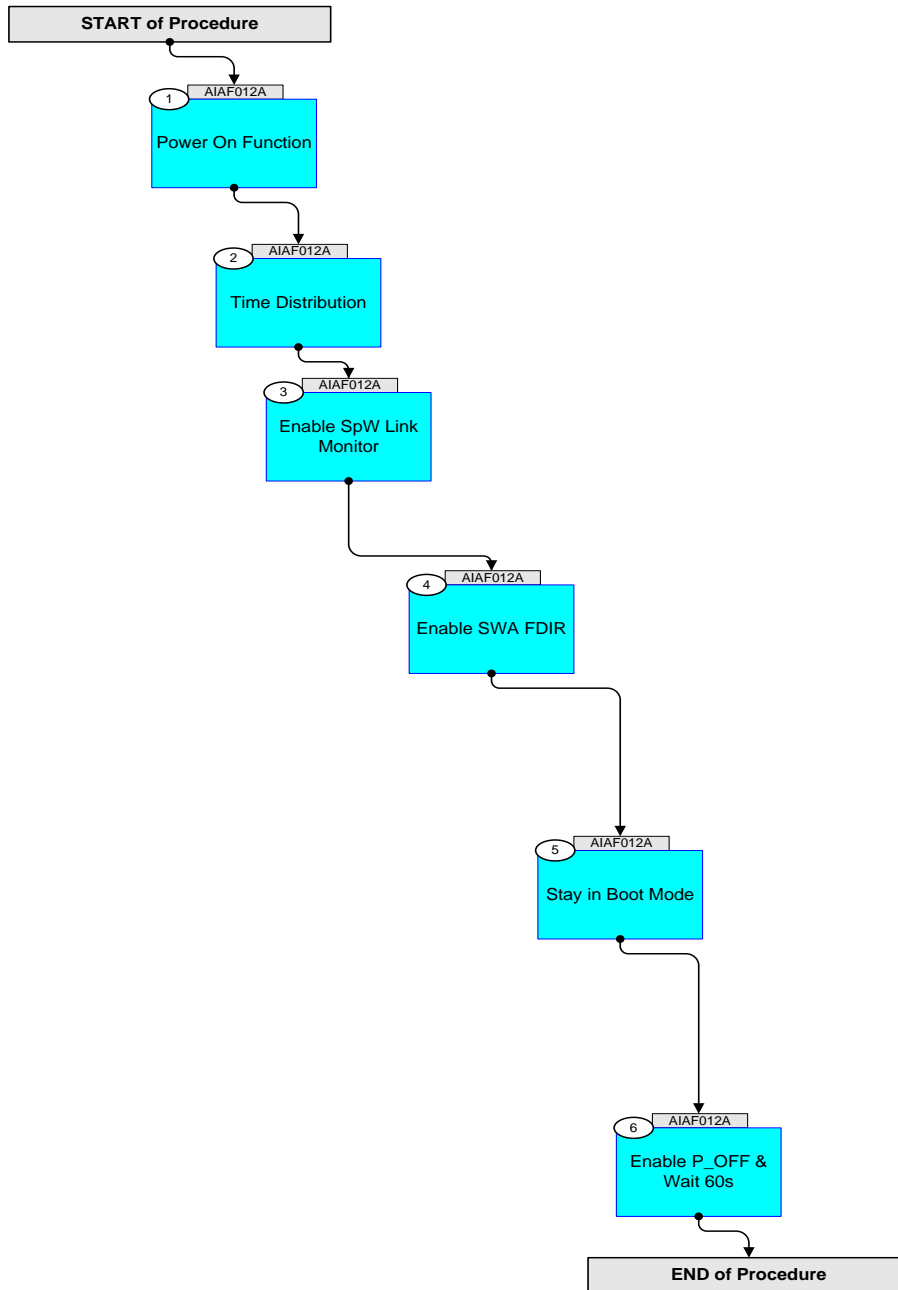
SWA Power On (Stay in Boot)  
File: IA-FCP-012.xls  
Author: daniel lakey



solar orbiter



## Procedure Flowchart Overview



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




Step	Label/Time	Activity/Remarks/Branch	CK	Display
<b>Beginning of Procedure</b>				
Beginning of Sequence				
	<b>AIAF012A</b>	<b>SWA Power On in Boot</b> SeqFlags [ Crit/Plan/Stdalone/Sched ] : NSYN Forced Subschedule : SWA (109) TimeTag type : B		
<b>1</b>		<b>Power On Function</b>  <b>Next step(s):</b> -> 2		
		Enable Nominal 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 = Nominal <eng> PSM00304 P/L ID = SWA <eng>		
		<b>Verify Telemetry</b> NSMD0084 Payload 7 Link Status = NomEnab RedDis		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_A <eng>		
<b>1.1</b>		<b>Verify Telemetry</b>		
		Confirm SWA RSA Telemetry		

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




Step	Label/Time	Activity/Remarks/Branch	CK	Display
		(if RIU-A is in use)		
		<b>Verify Telemetry</b> NRUD2007 RSA_1_1_9 SWA A = On		AND=DPWA0402
		<b>Verify Telemetry</b> NRUD2067 RSA_2_1_9 SWA B = Off		AND=DPWA0402
		(if RIU-B is in use)		
		<b>Verify Telemetry</b> NRUT2007 RSA_1_1_9 SWA A (RIU B) = On		AND=DPWA0402
		<b>Verify Telemetry</b> 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)		
		<b>Verify Telemetry</b> NPWD0077 A_LCL4_16 SWA-A ST = ON		AND=DIAA0007
		<b>Verify Telemetry</b> NPWD0038 A_LCL2_17 SWA-B PWR ST = OFF		AND=DIAA0007
		(if PCDU-B is in use)		
		<b>Verify Telemetry</b> NPWT0077 B_LCL4_16 SWA-A ST = ON		AND=DPWA0400
		<b>Verify Telemetry</b> NPWT0038 B_LCL2_17 SWA-B PWR ST = OFF		AND=DPWA0400
		Check SCV Telemetry		
		<b>Verify Telemetry</b> NCS3K72 SWA A SCV Status.scvPwr = ON		AND=DIAA0007

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




Step	Label/Time	Activity/Remarks/Branch	CK	Display
		<b>Verify Telemetry</b> NCSD3K73 SWA A SCV Status.scvTm = ON		AND=DIAA0007
		<b>Verify Telemetry</b> NCSD3K82 SWA B SCV Status.scvPwr = OFF		AND=DIAA0007
		<b>Verify Telemetry</b> NCSD3K83 SWA B SCV Status.scvTm = OFF		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> ADMF705A Man HB Mon SWA A v05 Sequence Grouping = -  Subsch ID : SWA (109)		

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




Step	Label/Time	Activity/Remarks/Branch	CK	Display
4		<p><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><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><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>AIAF801B SWA Enab P_OFF A d03</b>                      Sequence Grouping = -</p> <p>Subsch ID : SWA (109)</p>		
		Wait at least 60s before powering off		

SWA Power On (Stay in Boot) File: IA-FCP-012.xls Author: daniel lakey	 <b>solar orbiter</b>	 <b>esa</b>
---	---	--

Step	Label/Time	Activity/Remarks/Branch	CK	Display
	<b>AIAF012A</b>	End of Sequence		
<b>End of Procedure</b>				