SWA EAS2 Config
File: IA-FCP-050.xls
Author: daniel lakey

Procedure Summary

Objectives

SWA EAS2 Config

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

Type Pre-condition Here

End of Procedure

Type Post-condition Here

Reference File(s)

Input Command Sequences

Output Command Sequences

AIAF050A

Referenced Displays

ANDs **GRDs** **SLDs**

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
18/06/2018	0.3				M7
17/09/2018		2.01	Moved to PFM DB	dlakey	M7
18/03/2019	1				M7
16/08/2019	2				M7
20/01/2020	3				M7
08/05/2020		3	SOL_FCR-310 - SWA Procedure Overhaul	dlakey	M7
07/07/2020		4	SOL_FCR-397 - SWA Procedure Overhaul post-NECP	dlakey	M7

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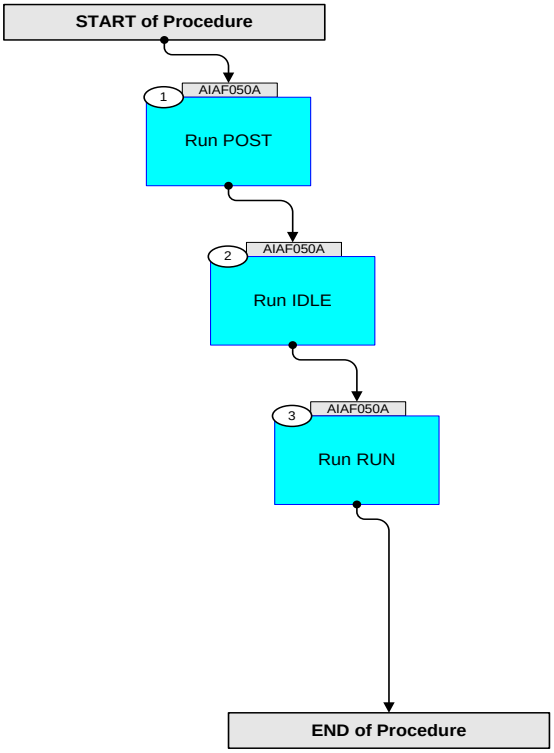
Procedure Flowchart Overview



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Step	Label/Time	Activity/Remarks/Branch	CK	Display
Beginning of Procedure				
		Beginning of Sequence		
	AIAF050A	**SWA EAS2 Config** SeqFlags [Crit/Plan/Stdalone/Sched] : NSYN Forced Subschedule : SWA (109) TimeTag type : B **Formal Parameter List** {FP} **XF050A01** *DefVal* = 00 (HT_0) <hex> {FP} **XF050A02** *DefVal* = 00 (HT_1) <hex> {FP} **XF050A03** *DefVal* = E8 (HT_2) <hex> {FP} **XF050A04** *DefVal* = 01 (AVO_0) <hex> {FP} **XF050A05** *DefVal* = E0 (AVO_1) <hex> {FP} **XF050A06** *DefVal* = 70 (AVO_2) <hex> {FP} **XF050A07** *DefVal* = 01 (AVO_3) <hex> {FP} **XF050A08** *DefVal* = A7 (AVO_4) <hex>		
		{FP} **XF050A09** *DefVal* = D0 (AVO_5) <hex> {FP} **XF050A10** *DefVal* = 01 (AVO_6) <hex> {FP} **XF050A11** *DefVal* = BD (AVO_7) <hex> {FP} **XF050A12** *DefVal* = 70 (AVO_8) <hex> {FP} **XF050A13** *DefVal* = 01 (AVO_9) <hex> {FP} **XF050A14** *DefVal* = B4 (AVO_10) <hex> {FP} **XF050A15** *DefVal* = 40 (AVO_11) <hex> {FP} **XF050A16** *DefVal* = DE (VR_0) <hex> {FP} **XF050A17** *DefVal* = B8 (VR_1) <hex> {FP} **XF050A18** *DefVal* = 51 (VR_2) <hex> {FP} **XF050A19** *DefVal* = 67 (HV_0) <hex> {FP} **XF050A20** *DefVal* = 18 (HV_1) <hex> {FP} **XF050A21** *DefVal* = A0 (HV_2) <hex> {FP} **XF050A22** *DefVal* = 4960 (CMD_DATA_TH1) <hex> {FP} **XF050A23** *DefVal* = 4961 (CMD_DATA_TH2) <hex>		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		{FP} **XF050A24** *DefVal* = 4962 (CMD_DATA_TH3) <hex>		
		{FP} **XF050A25** *DefVal* = 4963 (CMD_DATA_TH4) <hex>		
		{FP} **XF050A26** *DefVal* = 4964 (CMD_DATA_TH5) <hex>		
		{FP} **XF050A27** *DefVal* = 4965 (CMD_DATA_TH6) <hex>		
		{FP} **XF050A28** *DefVal* = 4966 (CMD_DATA_TH7) <hex>		
		{FP} **XF050A29** *DefVal* = 4967 (CMD_DATA_TH8) <hex>		
		{FP} **XF050A30** *DefVal* = 4968 (CMD_DATA_TH9) <hex>		
		{FP} **XF050A31** *DefVal* = 4969 (CMD_DATA_TH10) <hex>		
		{FP} **XF050A32** *DefVal* = 496A (CMD_DATA_TH11) <hex>		
		{FP} **XF050A33** *DefVal* = 496B (CMD_DATA_TH12) <hex>		
		{FP} **XF050A34** *DefVal* = 496C (CMD_DATA_TH13) <hex>		
		{FP} **XF050A35** *DefVal* = 496D (CMD_DATA_TH14) <hex>		
		{FP} **XF050A36** *DefVal* = 496E (CMD_DATA_TH15) <hex>		
		{FP} **XF050A37** *DefVal* = 496F (CMD_DATA_TH16) <hex>		
		{FP} **XF050A38** *DefVal* = 4960 (CMD_DATA_TH17) <hex>		

Step	Label/Time	Activity/Remarks/Branch	CK	Display
		{FP} **XF050A39** *DefVal* = 4961 (CMD_DATA_TH18) <hex> {FP} **XF050A40** *DefVal* = 4962 (CMD_DATA_TH19) <hex> {FP} **XF050A41** *DefVal* = 4963 (CMD_DATA_TH20) <hex> {FP} **XF050A42** *DefVal* = 4964 (CMD_DATA_TH21) <hex> {FP} **XF050A43** *DefVal* = 4965 (CMD_DATA_TH22) <hex> {FP} **XF050A44** *DefVal* = 4966 (CMD_DATA_TH23) <hex> {FP} **XF050A45** *DefVal* = 4967 (CMD_DATA_TH24) <hex> {FP} **XF050A46** *DefVal* = 4968 (CMD_DATA_TH25) <hex> {FP} **XF050A47** *DefVal* = 4969 (CMD_DATA_TH26) <hex> {FP} **XF050A48** *DefVal* = 496A (CMD_DATA_TH27) <hex> {FP} **XF050A49** *DefVal* = 496B (CMD_DATA_TH28) <hex> {FP} **XF050A50** *DefVal* = 496C (CMD_DATA_TH29) <hex> {FP} **XF050A51** *DefVal* = 496D (CMD_DATA_TH30) <hex> {FP} **XF050A52** *DefVal* = 496E (CMD_DATA_TH31) <hex> {FP} **XF050A53** *DefVal* = 496F (CMD_DATA_TH32) <hex>		
		{FP} **XF050A54** *DefVal* = A94 (NEW_VAL) <hex> {FP} **XF050A55** *DefVal* = 2003 (PAR_ID) <hex> {FP} **XF050A56** *DefVal* = DE (PAR_DESC) <hex> {FP} **XF050A57** *DefVal* = B8 (PAR_DESC) <hex> {FP} **XF050A58** *DefVal* = 51 (PAR_DESC) <hex> {FP} **XF050A59** *DefVal* = 67 (PAR_DESC) <hex> {FP} **XF050A60** *DefVal* = 18 (PAR_DESC) <hex> {FP} **XF050A61** *DefVal* = A0 (PAR_DESC) <hex>		
1		**Run POST** ***Next step(s):*** -> **2**		
		Run the EAS2 POST transition macro		
	+00.00.00	**Send SWA_TC_EAS2_START_SERVICE_MACRO** **ZIA58936 SWA_TC_EAS2_START_SERVICE_MACRO** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60740** EAS2_MACRO_ID **= POST**		

Step	Label/Time	Activity/Remarks/Branch	CK	Display
2		**Run IDLE** ***Next step(s):*** -> **3**		
		Run the EAS2 IDLE transition macro		
	+00.00.05	**Send SWA_TC_EAS2_IDLE_MODE** **ZIA58801 SWA_TC_EAS2_IDLE_MODE** TC Control Flags: GBM IL DSE **--Y NC ---**		
		Request an HK packet		
	+00.00.30	**Send SWA_TC_EAS2_HK_DATA_REQ** **ZIA58830 SWA_TC_EAS2_HK_DATA_REQ** TC Control Flags: GBM IL DSE **--Y NC ---**		
3		**Run RUN** ***Next step(s):*** -> **END**		
		Run the EAS2 RUN transition macro		
	+00.00.02	**Send SWA_TC_EAS2_RUN_MODE** **ZIA58806 SWA_TC_EAS2_RUN_MODE** TC Control Flags: GBM IL DSE **--Y NC ---**		
		Set the MCR to manual heater control		
	+00.00.30	**Send SWA_TC_EAS2_MASTER_REG_WRITE** **ZIA58824 SWA_TC_EAS2_MASTER_REG_WRITE** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60423** BYTE_0 **= 00 <hex>** **PIA60424** BYTE_1 **= 40 <hex>** **PIA60425** BYTE_2 **= 60 <hex>**		

Step	Label/Time	Activity/Remarks/Branch	CK	Display
		Set the EAS2 manual heater		
	+00.00.02	**Send SWA_TC_EAS2_MAN_HEATHER** **ZIA58805 SWA_TC_EAS2_MAN_HEATHER** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60773** HT_0 **= XF050A01** **PIA60774** HT_1 **= XF050A02** **PIA60775** HT_2 **= XF050A03**		
		Set voltage offsets		
	+00.00.02	**Send SWA_TC_EAS2_SET_ANAL_VOLT_OFFSET** **ZIA58817 SWA_TC_EAS2_SET_ANAL_VOLT_OFFSET** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60411** AVO_0 **= XF050A04** **PIA60412** AVO_1 **= XF050A05** **PIA60415** AVO_2 **= XF050A06** **PIA60416** AVO_3 **= XF050A07** **PIA60417** AVO_4 **= XF050A08** **PIA60418** AVO_5 **= XF050A09** **PIA60419** AVO_6 **= XF050A10** **PIA60420** AVO_7 **= XF050A11** **PIA60421** AVO_8 **= XF050A12**		
		PIA60422 AVO_9 **= XF050A13** **PIA60413** AVO_10 **= XF050A14** **PIA60414** AVO_11 **= XF050A15**		
		Set the hemisphere ratio		
	+00.00.02	**Send SWA_TC_EAS2_SET_HEM_VOLT_RATIO** **ZIA58814 SWA_TC_EAS2_SET_HEM_VOLT_RATIO** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60469** VR_0 **= XF050A16** **PIA60470** VR_1 **= XF050A17** **PIA60471** VR_2 **= XF050A18**		
		Set the hemisphere voltage		

Step	Label/Time	Activity/Remarks/Branch	CK	Display
	+00.00.02	**Send SWA_TC_EAS2_SET_HEM_HIGH_VOLT** **ZIA58815 SWA_TC_EAS2_SET_HEM_HIGH_VOLT** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60441** HV_0 **= XF050A19** **PIA60442** HV_1 **= XF050A20** **PIA60443** HV_2 **= XF050A21**		
		Rebuild the hemisphere table		
	+00.00.02	**Send SWA_TC_EAS2_MAIL_WR** **ZIA58819 SWA_TC_EAS2_MAIL_WR** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60031** MAILBOX_ID **= MBOX3** **PIA60446** MBV0 **= 0 <hex>** **PIA60447** MBV1 **= 0 <hex>** **PIA60448** MBV2 **= 1 <hex>**		
		Set the thresholds		
	+00.00.02	**Send SWA_TC_EAS2_SET_PREAMP_DATA** **ZIA58845 SWA_TC_EAS2_SET_PREAMP_DATA** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60174** CMD_DATA_TH1 **= XF050A22** **PIA60185** CMD_DATA_TH2 **= XF050A23** **PIA60196** CMD_DATA_TH3 **= XF050A24** **PIA60200** CMD_DATA_TH4 **= XF050A25** **PIA60201** CMD_DATA_TH5 **= XF050A26** **PIA60202** CMD_DATA_TH6 **= XF050A27** **PIA60203** CMD_DATA_TH7 **= XF050A28** **PIA60204** CMD_DATA_TH8 **= XF050A29** **PIA60205** CMD_DATA_TH9 **= XF050A30**		

Step	Label/Time	Activity/Remarks/Branch	CK	Display
		PIA60175 CMD_DATA_TH10 **= XF050A31** **PIA60176** CMD_DATA_TH11 **= XF050A32** **PIA60177** CMD_DATA_TH12 **= XF050A33** **PIA60178** CMD_DATA_TH13 **= XF050A34** **PIA60179** CMD_DATA_TH14 **= XF050A35** **PIA60180** CMD_DATA_TH15 **= XF050A36** **PIA60181** CMD_DATA_TH16 **= XF050A37** **PIA60182** CMD_DATA_TH17 **= XF050A38** **PIA60183** CMD_DATA_TH18 **= XF050A39** **PIA60184** CMD_DATA_TH19 **= XF050A40** **PIA60186** CMD_DATA_TH20 **= XF050A41** **PIA60187** CMD_DATA_TH21 **= XF050A42** **PIA60188** CMD_DATA_TH22 **= XF050A43** **PIA60189** CMD_DATA_TH23 **= XF050A44** **PIA60190** CMD_DATA_TH24 **= XF050A45**		
		PIA60191 CMD_DATA_TH25 **= XF050A46** **PIA60192** CMD_DATA_TH26 **= XF050A47** **PIA60193** CMD_DATA_TH27 **= XF050A48** **PIA60194** CMD_DATA_TH28 **= XF050A49** **PIA60195** CMD_DATA_TH29 **= XF050A50** **PIA60197** CMD_DATA_TH30 **= XF050A51** **PIA60198** CMD_DATA_TH31 **= XF050A52** **PIA60199** CMD_DATA_TH32 **= XF050A53**		
		Set the MCP level		
	+00.00.10	**Send SWA_TC_EAS2_SET_MCP_HV** **ZIA58832 SWA_TC_EAS2_SET_MCP_HV** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60218** NEW_VAL **= XF050A54**		
		Update the RAM		
	+00.00.30	**Send SWA_TC_DPU_MODIFY_CONF_PARS** **ZIA58706 SWA_TC_DPU_MODIFY_CONF_PARS** TC Control Flags: GBM IL DSE **--Y NC ---** Command Parameters : **PIA60133** NUM_OF_PARS **= 1 <dec>** **PIA60136** PAR_ID **= XF050A55** **PIA60135** PAR_DESC_SIZE **= 6 <hex>** **PIA60134** PAR_DESC **= XF050A56** **PIA60134** PAR_DESC **= XF050A57** **PIA60134** PAR_DESC **= XF050A58** **PIA60134** PAR_DESC **= XF050A59** **PIA60134** PAR_DESC **= XF050A60** **PIA60134** PAR_DESC **= XF050A61**		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		Accept the update		
	+00.00.02	**Send SWA_TC_DPU_ACCEPT_CONF_PARS** **ZIA58708 SWA_TC_DPU_ACCEPT_CONF_PARS** TC Control Flags: GBM IL DSE **--Y NC ---**		
	AIAF050A	End of Sequence		

End of Procedure