

SWA Enable FDIR File: IA-FCP-801.xls Author: daniel lakey	 
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Procedure Summary

Objectives

Enable SWA FDIR

Summary of Constraints

n/a

Spacecraft Configuration

Start of Procedure

SWA FDIR Disabled

End of Procedure

SWA FDIR Enabled

Reference File(s)

Input Command Sequences

Output Command Sequences

AIAF801A
 AIAF801B
 AIAF801C

Referenced Displays

ANDs **GRDs** **SLDs**
 (None)

Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
28/01/2019		1	First check-in	dlakey	M7
01/03/2019		2	Not enabling SMON_SWA8 and SMON_SWA9 at SWA's request, pending FSW update	dlakey	M7
18/03/2019		1			M7
16/08/2019		2			M7
17/12/2019		3	SOL_FCR-60 : Update SWA procedures for CSW 3.0.3 & latest FSW	dlakey	M7
20/01/2020		3			M7
20/02/2020		4	SOL_FCR-270 : Update SWA Enable Procedure to enable SWA8 and SWA9	dlakey	M7

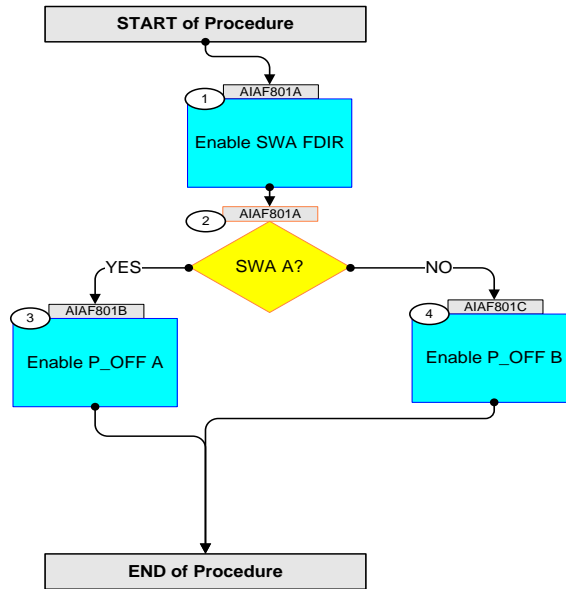
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solar orbiter



Procedure Flowchart Overview



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Step	Label/Time	Activity/Remarks/Branch	CK	Display
Beginning of Procedure				
Beginning of Sequence				
	AIAF801A	SWA Enable FDIR SeqFlags [Crit/Plan/Stdalone/Sched] : NNYN Forced Subschedule : SWA (109) TimeTag type : B		
1		Enable SWA FDIR Next step(s): -> 2		
		Confirm each FMON is Disabled and Protected		
	+00.00.00	Execute Telecommand ZCL08E0A Report Current FMON Status List TC Control Flags: GBM IL DSE --Y NC ---		
		Verify Packet Reception YCL08E0B Current Functional Monitoring Status List Report TM(142,11), APID 195 (12/3) PI1=0 PI2=0		
		FMON_SWA1		
		NCD8E093 OBCHP_S142_FMON ID = 21 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = DIS_UNCHECK		(None) PKT=YCL08E0B
		FMON_SWA2		
		NCD8E093 OBCHP_S142_FMON ID = 22 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = DIS_UNCHECK		(None) PKT=YCL08E0B

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		FMON_SWA3		
		NCD8E093 OBCHP_S142_FMON ID = 23 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = DIS_UNCHECK		(None) PKT=YCL08E0B
		FMON_SWA4		
		NCD8E093 OBCHP_S142_FMON ID = 24 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = DIS_UNCHECK		(None) PKT=YCL08E0B
		Confirm related SMON are Disabled		
	+00.00.01	Execute Telecommand ZCL00C08 Report Current Monitoring List TC Control Flags: GBM IL DSE --Y NC ---		
		Verify Packet Reception YCL00C09 Monitoring List Report TM(12,9), APID 195 (12/3) PI1=0 PI2=0		
		SMON_SWA1		
		NCD0C094 OBCHP_S12_Mon_ID = 21 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA2		
		NCD0C094 OBCHP_S12_Mon_ID = 22 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		SMON_SWA3		
		NCD0C094 OBCHP_S12_Mon_ID = 23 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA4		
		NCD0C094 OBCHP_S12_Mon_ID = 24 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA5		
		NCD0C094 OBCHP_S12_Mon_ID = 25 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA6		
		NCD0C094 OBCHP_S12_Mon_ID = 26 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA7		
		NCD0C094 OBCHP_S12_Mon_ID = 27 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA8		
		NCD0C094 OBCHP_S12_Mon_ID = 28 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA9		
		NCD0C094 OBCHP_S12_Mon_ID = 29 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		SMON_SWA10		
		NCD0C094 OBCHP_S12_Mon_ID = 30 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)

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Step	Label/Time	Activity/Remarks/Branch	CK	Display																																												
		Unprotect FMON																																														
	+00.00.01	Execute Telecommand ZCL08E0D Unprotect Func Mon Parameters TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD8E061 Nb FMONs to process = 4 <dec> PCD8E012 FMON Id to process = 21 <dec> PCD8E012 FMON Id to process = 22 <dec> PCD8E012 FMON Id to process = 23 <dec> PCD8E012 FMON Id to process = 24 <dec>																																														
		Enable SMON																																														
		<table border="1"> <thead> <tr> <th>PRID</th> <th>Mon ID</th> <th>Parameter</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>12</td><td>21</td><td>NCLT3LA0</td><td>SMON_SWA1</td></tr> <tr><td>12</td><td>22</td><td>NCLT3LA0</td><td>SMON_SWA2</td></tr> <tr><td>12</td><td>23</td><td>NCLT3LA0</td><td>SMON_SWA3</td></tr> <tr><td>12</td><td>24</td><td>NCLT3LA0</td><td>SMON_SWA4</td></tr> <tr><td>12</td><td>25</td><td>NCLT2CB0</td><td>SMON_SWA5</td></tr> <tr><td>12</td><td>26</td><td>NCLT2CC0</td><td>SMON_SWA6</td></tr> <tr><td>12</td><td>27</td><td>NCLT2CD0</td><td>SMON_SWA7</td></tr> <tr><td>12</td><td>28</td><td>NCLT2CE0</td><td>SMON_SWA8</td></tr> <tr><td>12</td><td>29</td><td>NCLT2CE0</td><td>SMON_SWA9</td></tr> <tr><td>12</td><td>30</td><td>NCLT2CF0</td><td>SMON_SWA10</td></tr> </tbody> </table>	PRID	Mon ID	Parameter	Description	12	21	NCLT3LA0	SMON_SWA1	12	22	NCLT3LA0	SMON_SWA2	12	23	NCLT3LA0	SMON_SWA3	12	24	NCLT3LA0	SMON_SWA4	12	25	NCLT2CB0	SMON_SWA5	12	26	NCLT2CC0	SMON_SWA6	12	27	NCLT2CD0	SMON_SWA7	12	28	NCLT2CE0	SMON_SWA8	12	29	NCLT2CE0	SMON_SWA9	12	30	NCLT2CF0	SMON_SWA10		
PRID	Mon ID	Parameter	Description																																													
12	21	NCLT3LA0	SMON_SWA1																																													
12	22	NCLT3LA0	SMON_SWA2																																													
12	23	NCLT3LA0	SMON_SWA3																																													
12	24	NCLT3LA0	SMON_SWA4																																													
12	25	NCLT2CB0	SMON_SWA5																																													
12	26	NCLT2CC0	SMON_SWA6																																													
12	27	NCLT2CD0	SMON_SWA7																																													
12	28	NCLT2CE0	SMON_SWA8																																													
12	29	NCLT2CE0	SMON_SWA9																																													
12	30	NCLT2CF0	SMON_SWA10																																													
	+00.00.01	Execute Telecommand ZCL00C01 Enable Monitoring of Parameters TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD0C011 Nb PMONs to process = 10 <dec> PCD0C012 PMON Id = 21 <dec> PCD0C012 PMON Id = 22 <dec> PCD0C012 PMON Id = 23 <dec> PCD0C012 PMON Id = 24 <dec> PCD0C012 PMON Id = 25 <dec> PCD0C012 PMON Id = 26 <dec> PCD0C012 PMON Id = 27 <dec> PCD0C012 PMON Id = 28 <dec> PCD0C012 PMON Id = 29 <dec> PCD0C012 PMON Id = 30 <dec>																																														
		Enable FMON																																														

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
	+00.00.01	Execute Telecommand ZCL08E01 Enable Functional Monitoring TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD8E011 Nb FMONs to process = 4 <dec> PCD8E012 FMON Id to process = 21 <dec> PCD8E012 FMON Id to process = 22 <dec> PCD8E012 FMON Id to process = 23 <dec> PCD8E012 FMON Id to process = 24 <dec>		
		Protect FMON		
	+00.00.01	Execute Telecommand ZCL08E0C Protect Func Mon Parameters TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD8E061 Nb FMONs to process = 4 <dec> PCD8E012 FMON Id to process = 21 <dec> PCD8E012 FMON Id to process = 22 <dec> PCD8E012 FMON Id to process = 23 <dec> PCD8E012 FMON Id to process = 24 <dec>		
		Confirm FMON is Enabled and Protected		
	+00.00.01	Execute Telecommand ZCL08E0A Report Current FMON Status List TC Control Flags: GBM IL DSE --Y NC ---		
		Verify Packet Reception YCL08E0B Current Functional Monitoring Status List Report TM(142,11), APID 195 (12/3) PI1=0 PI2=0		
		FMON_SWA1		
		NCD8E093 OBCHP_S142_FMON ID = 21 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = ENABLED_RUN		(None) PKT=YCL08E0B

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		FMON_SWA2		
		NCD8E093 OBCHP_S142_FMON ID = 22 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = ENABLED_RUN		(None) PKT=YCL08E0B
		FMON_SWA3		
		NCD8E093 OBCHP_S142_FMON ID = 23 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = ENABLED_RUN		(None) PKT=YCL08E0B
		FMON_SWA4		
		NCD8E093 OBCHP_S142_FMON ID = 24 <dec>		(None) PKT=YCL08E0B
		NCD8E094 OBCHP_S142_FMON protect = PROTECTED		(None) PKT=YCL08E0B
		NCD8E095 OBCHP_S142_FMON ID stat = ENABLED_RUN		(None) PKT=YCL08E0B
		Confirm related SMON are Enabled		
	+00.00.01	Execute Telecommand ZCL00C08 Report Current Monitoring List TC Control Flags: GBM IL DSE --Y NC ---		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		Verify Packet Reception YCL00C09 Monitoring List Report TM(12,9), APID 195 (12/3) PI1=0 PI2=0		
		SMON_SWA1		
		NCD0C094 OBCHP_S12_Mon_ID = 21 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA2		
		NCD0C094 OBCHP_S12_Mon_ID = 22 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA3		
		NCD0C094 OBCHP_S12_Mon_ID = 23 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA4		
		NCD0C094 OBCHP_S12_Mon_ID = 24 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA5		
		NCD0C094 OBCHP_S12_Mon_ID = 25 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA6		
		NCD0C094 OBCHP_S12_Mon_ID = 26 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA7		
		NCD0C094 OBCHP_S12_Mon_ID = 27 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA8		
		NCD0C094 OBCHP_S12_Mon_ID = 28 <dec>		(None)

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA9		
		NCD0C094 OBCHP_S12_Mon_ID = 29 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		SMON_SWA10		
		NCD0C094 OBCHP_S12_Mon_ID = 30 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
2		<p>SWA A?</p> <p>Next step(s): -> 3 YES -> 4 NO</p>		
		P_OFF SWA must be Enabled once payload FDIR is enabled!		
AIAF801A		End of Sequence		
AIAF801B		Beginning of Sequence SWA Enab P_OFF A SeqFlags [Crit/Plan/Stdalone/Sched] : NNYN Forced Subschedule : SWA (109) TimeTag type : B		
3		<p>Enable P_OFF A</p> <p>Next step(s): -> END</p>		
		Enable the P_OFF monitor ID SMON -----+----- 237 SWA_A_OFF S12 236 SWA_B_OFF S12		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
	+00.00.00	Execute Telecommand ZCS00C01 Enable Monitoring of Parameters TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD0C011 Nb PMONs to process = 1 <dec> PCD0C012 PMON Id = 237 <dec>		
	+00.00.01	Execute Telecommand ZCS00C08 Report Current Monitoring List TC Control Flags: GBM IL DSE --Y NC ---		
		Verify Packet Reception YCS00C09 Monitoring List Report TM(12,9), APID 227 (14/3) PI1=0 PI2=0		
		NCD0C094 OBCHP_S12_Mon_ID = 237 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
		NCD0C094 OBCHP_S12_Mon_ID = 236 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
AIAF801B		End of Sequence		
AIAF801C		Beginning of Sequence SWA Enab P_OFF B SeqFlags [Crit/Plan/Stdalone/Sched] : NNYN Forced Subschedule : SWA (109) TimeTag type : B		
4		Enable P_OFF B Next step(s): -> END		
		Enable the P_OFF monitor ID SMON -----+----- 237 SWA_A_OFF S12 236 SWA_B_OFF S12		

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Step	Label/Time	Activity/Remarks/Branch	CK	Display
	+00.00.00	Execute Telecommand ZCS00C01 Enable Monitoring of Parameters TC Control Flags: GBM IL DSE --Y NC --- Command Parameters : PCD0C011 Nb PMONs to process = 1 <dec> PCD0C012 PMON Id = 236 <dec>		
	+00.00.01	Execute Telecommand ZCS00C08 Report Current Monitoring List TC Control Flags: GBM IL DSE --Y NC ---		
		Verify Packet Reception YCS00C09 Monitoring List Report TM(12,9), APID 227 (14/3) PI1=0 PI2=0		
		NCD0C094 OBCHP_S12_Mon_ID = 237 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = DISABLED		(None)
		NCD0C094 OBCHP_S12_Mon_ID = 236 <dec>		(None)
		NCD0C099 OBCHP_S12_Mon_Status = ENABLED		(None)
AIAF801C		End of Sequence		
End of Procedure				