Table of Contents

LASP: 1

UCLA: 4

IWF (DFG): 6

LPP: 7

U of Iowa: 9

IWF (EDI): 9

KTH/IRFU/Oulu: 10

UNH: 13

UNH Subassemblies Delivered to Partners: 13

UNH CEB: 16

UNH SDP: 18

UNH EDI GDU: 20

UNH FIELDS 21

FIELDS Components on MMS Observatories 24

# LASP:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **DSP** |   |   |   |  |
| Serial Number | DSPA: SN01 | DSPB: SN03 | DSPA: SN08 | DSPB: SN09 | DSPA: SN05 | DSPB:SN11 | DSPA: SN12 | DSPB: SN13 |
| Final Assembly | complete | complete | complete | complete | rework | complete | complete | complete |
| Bench Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| Thermal Testing | complete | complete | complete | complete | complete | complete |  complete | complete  |
| Delivery to UNH | complete | complete | 23 May 2012 | 23 May 2012  | 09 Oct 2012 |  04 Oct 2012 | 07 Feb 2013 | 07 Feb 2013 |
|   |   |   |   |   |   |   |   |   |
| **ADP Boom** |   |   |   |  |
| Serial Number | SN01 | SN02 | SN03 | SN04 | SN05 | SN06 | SN07 | SN08 |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Engineering Test | complete | complete | complete | complete | complete | complete | complete | complete |
| PER | 05 Apr 2011 | 05 Apr 2011 | 23 Sep 2011 | 23 Sep 2011 | 09 Nov 2011 | 09 Nov 2011 | 30 Nov 2011 | 30 Nov 2011 |
| Vibration Test | complete | complete | complete | complete | complete | complete | complete | complete |
| Thermal Deployment Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| Deployed Performance Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| PSR/EIDP (ATK) | 4/6/2012 | 4/6/2012 | complete | complete | complete | complete | complete | complete |
| Shipment to LASP | 4/11/2012 | 4/11/2012 | 4/11/2012 | 4/11/2012 | 5/9/2012 | 5/9/2012  | 5/9/2012  | 5/9/2012  |
| PSR | 23 May 2012 | 23 May 2012 | 10 Sep 2012 | 10 Sep 2012 | 18 Jan 2013 | 18 Jan 2013 | 19 Apr 2013 | 19 Apr 2013 |
| Bake out and Certif  | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to GSFC | 04 Jan 2013 | 04 Jan 2013 | 04 Jan 2013 | 04 Jan 2013 | 08 May 2013 | 08 May 2013 |  |  |
|   |   |   |   |   |   |   |   |   |
| **ADP RE** |   |   |   |   |   |
| Serial Number | SN03 | SN04 | SN05 | SN06 | SN01 | SN02 | SN07 | SN08 |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Initial Functional Test | complete | complete | complete | complete | complete | complete | complete[[1]](#footnote-1) | complete |
| PER | 23 Jan 2012 | 23 Jan 2012 | 30 Apr 2012 | 30 Apr 2012 | 07 Sep 2012 | 07 Sep 2012 | 26 Oct 2012 | 26 Oct 2012 |
| Vibration Test | complete | complete | complete | complete | complete | complete | complete | complete |
| Thermal Vacuum Test | complete | complete | complete | complete | complete | complete | complete | complete |
| Calibration with AEB | complete | complete | complete | complete | complete | complete | complete | complete |
| PSR/EIDP | 23 May 2012 | 23 May 2012 |  10 Sep 2012 | 10 Sep 2012  |  18 Jan 2013 | 18 Jan 2013  |  19 Apr 2013 | 19 Apr 2013  |
| Delivery to GSFC | 04 Jan 2013 | 04 Jan 2013 | 04 Jan 2013 | 04 Jan 2013 |  |  |  |  |
|  |   |   |   |   |   |   |   |   |
| **AEB** |   |   |   |   |   |
| Serial Number | SN01 | SN02 | SN03 | SN04 |
| Receipt from UNH | complete | complete | complete | complete  |
| Final Mechanical Assembly | complete | complete  | complete  | complete   |
| PER | 31 Jan 2012 | 30 Apr 2012 | 07 Sep 2012 | 14 Nov 2012 |
| Vibration Test | complete | complete  | complete | complete  |
| Thermal Vacuum Test | complete |  complete  | complete  |  complete  |
| Calibration with RE | complete | complete  | complete  | complete  |
| Test Reports | in process |  complete  | complete   | complete   |
| Delivery to UNH | complete |  complete  | 23 Oct 201209 Apr 2013rework required |  complete   |
| **SDP Preamp / Cable Assemblies** |   |   |   |   |   |
| Serial Number | 1, 2, 3, 4 | 5, 6 | 7, 8 | 9/ 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18 |
| Cable received from UNH | complete | complete | complete | complete | complete | complete | complete | complete |
| Cleaning and Bake Out | complete | complete | complete | complete | complete | complete | complete | complete |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Initial Functional Test | complete | complete | complete | complete | complete | complete | complete | complete |
| EIDP | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to UNH | complete | complete | complete | complete | complete | 21 Sep 2012 | 21 Sep 2012 | 21 Sep 2012 |
| **SDP Doors** |   |   |   |   |   |
| Serial Number | 1, 2, 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18[[2]](#footnote-2) |
| Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Initial Functional Test | complete | complete | complete | complete | complete | complete | complete | complete |
| EIDP | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to UNH | complete | complete | complete | 23 May 2012 | 23 May 2012 | 23 May 2012 | 23 May 2012 | 21 Sep 2012 |

# UCLA:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **FM AFG/DFG Sensors** |  |   |   |   |   |
| Serial Number | AFG: 05 | DFG: 04 | AFG: 06 | DFG: 08 | AFG: 09 | DFG: 07 | AFG: 11 | DFG: 10 |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Bench Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| PER | 20 Oct 2010 | 20 Oct 2010 | 09 Sep 2011 | 09 Sep 2011 | 09 Jan 2012 | 09 Jan 2012 | 26 Jun 2012 | 26 Jun 2012 |
| Environmental Testing and bake-out | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to tuning and calibration | complete | complete | complete | complete | complete | complete | complete | complete |
| **Spare AFG/DFG Sensors** | **Spare** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | AFG | DFG |  |  |  |  |  |  |
| Serial Number | N/A | DFG 13 |  |  |  |  |  |  |
| Final Assembly | N/A | complete |  |  |  |  |  |  |
| Bench Testing | N/A | complete |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **AFG Electronics** |  |  |  |  |  |
| Serial Number | 01 | 02 | 03 | 04 |
| Final Assembly | complete | complete | complete | complete |
| Bench Test | complete | complete | complete | complete |
| Delivery to tuning/matching and calibration | complete | complete | complete | complete |
| **AFG Tuning and Calibration** |  |  |  |  |  |
| Sensor/Electronics Tuning/Matching, Thermal Test  | complete | complete | complete | complete |
| Calibration at TU-BS | complete | complete | NO CALIB | NO CALIB |
| Final Test and EIDP | complete | complete | complete | complete |
| Delivery to UNH | complete | complete | complete | 12 Dec 2012 |
| **AFG/DFG Harness** |  |  |  |  |  |
| Serial Numbers | AFG Deck: 1DFG Deck: 1 | Boom: 1, 2 | AFG Deck: 2DFG Deck: 2 | Boom: 3, 4 | AFG Deck: 3DFG Deck: 3 | Boom: 5, 6 | AFG Deck: 4DFG Deck: 4 | Boom: 7, 8 |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Test | complete | complete | complete | complete | complete | complete | complete | complete |
| Bake Out | complete | complete | complete | complete | complete | complete | complete | complete |
| Shipment to UNH | complete | complete | complete | complete | complete | complete | complete | complete |

# IWF (DFG):

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4**  | **Spare** |
| **DFG Sensor** |  |   |   |   |   |
| Serial Number | 04 | 08 | 07 | 10 | 13 |
| Received from UCLA | complete | complete | complete | complete |  |
| **DFG Electronics** |  |   |   |   |   |
| Serial Number | DFG1 | DFG2 | DFG5 | DFG4 | DFG3 |
| Receipt from UNH | complete | complete | complete | complete | complete |
| Functional, Thermal and Tuning Test | complete | complete | complete | complete | complete |
| Ready for Sensor/Electronics Calibration | complete | complete | complete | complete | complete |
| **DFG Tuning and Calibration** |  |  |  |  |  |
| Calibration at TU-BS | complete | complete | complete | complete |  |
| Final Test, EIDP | complete | complete | complete | complete |  |
| Delivery to UNH | complete | complete | 24 Jul 2012 | 12 Dec 2012 |  |

# LPP:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** | **Spare** |
| **SCM Sensor** |  |   |   |   |   |
| Serial Number | FM1 | FM2 | FMS | FM3 | FM4 |
| Assembly | complete | complete | complete | complete | complete |
| Functional and Thermal Test | complete | complete | complete | complete | complete |
| PER | 20 May 2011 | 09 Jan 2012 | 09 Jan 2012 | 17 Sep 2012 | 04 Apr 2013 |
| Vibration and Post-Vibe Thermal Test | complete | complete | 01 Jun 2012 | complete | complete |
| TV Test | complete | complete | 11 Jun 2012 | complete |  |
| Delivery to Tuning and Calibration | complete | complete | complete | complete |  |
|  |  |  |  |  |  |
| **SCM Preamp** |  |   |   |   |   |
| Serial Number | FM1 | FM2 | FM4 | FMS | FM3 |
| Assembly | complete | complete | complete | complete | complete |
| Functional ant Thermal test | complete | complete | complete | complete | complete[[3]](#footnote-3) |
| PER | 08 Aug 2011 | 09 Jan 2012 | 09 Jan 2012 | 17 Sep 2012 | 23 Oct 2012 |
| Vibration Test | complete | complete | complete | 17 Jul 2012[[4]](#footnote-4) | complete |
| TV Test | complete | complete | complete | complete | complete |
| Delivery to Tuning and Calibration | complete | complete | complete | complete |  |
| **SCM Harness** |  |   |   |   |   |
| Serial Number | 01 | 02 | 03 | 04 | S |
| Assembly and Test | complete | complete | complete | complete | complete |
| Bake Out & Certification | 22 May 2012[[5]](#footnote-5) | complete | complete (done at UNH) | Complete (cert. waived) |  |
| Delivery to UNH | complete | complete | complete | 27 Feb 2013 |  |
| **SCM Test and Calibration** |  |  |  |  |  |
| Sensor/Electronics Test  | complete | complete | complete | complete |  |
| Calibration | complete | complete | complete | complete |  |
| Final Test and EIDP | complete | complete | complete | complete |  |
| Delivery to UNH | complete | 25 Jul 2012 | 25 Jul 2012 (Sensor and Preamp)5 Nov 2912 (Harness) | 27 Feb 2013 |  |

# U of Iowa:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **EDI Optics** |  |   |   |   |   |
| Serial Number | 01 | 02 | 03 | 04 | 05 | 06 |  |  |
| Final Assembly | complete | complete | complete | complete | complete | complete |  |  |
| Testing | complete | complete | complete | complete | complete | complete |  |  |
| Delivery to UNH | complete | complete | complete | complete | complete |  |  |  |
|   |  |  |  |  |  |  |  |  |
| Serial Number | 09 |  |  |  |  |  |  |  |
| Final Assembly |  |  |  |  |  |  |  |  |
| Testing |  |  |  |  |  |  |  |  |
| Delivery to UNH |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

# IWF (EDI):

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **Gun** |  |   |   |   |   |
| Serial Number | 01 | 02 | 03 | 04 | 05 | 06 |  |  |
| Final Assembly | complete | complete | complete | complete | complete |  |  |  |
| Bench Testing | complete | complete | complete | complete | complete |  |  |  |
| Thermal Testing | complete | complete | complete | complete | complete |  |  |  |
| Deliver to Gun/GDE Test and Calibration | complete | complete | complete | problem | complete |  |  |  |
|   |  |  |  |  |  |  |  |  |
| **GDE** |  |  |  |  |  |
| Serial Number | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Environmental Tests | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to IWF | complete | complete | complete | complete | complete | complete | complete | complete |
| IWF Acceptance Test | complete | complete | complete | complete | complete | complete | complete | complete |
| Deliver to Gun/GDE Test and Calibration | complete | complete | complete | complete | complete |  |  |  |
| **GDE** |  |  |  |  |  |
| Serial Number | 09 |  |  |  |  |  |  |  |
| Final Assembly | complete |  |  |  |  |  |  |  |
| Environmental Tests | complete |  |  |  |  |  |  |  |
| Delivery to IWF | complete |  |  |  |  |  |  |  |
| IWF Acceptance Test | complete |  |  |  |  |  |  |  |
| Deliver to Gun/GDE Test and Calibration |  |  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |  |  |
| **Gun/GDE Test and Calibration** |  |  |  |  |  |
| Initial Functional Test | complete | complete | complete | complete | complete |  |  |  |
| Calibration | complete | complete | complete | problem | complete |  |  |  |
| Final Test and EIDP | complete | complete | complete |  | complete |  |  |  |
| Deliver to UNH | complete | complete | 01 Nov 2012 |  | 12 Mar 2013 |  |  |  |

# KTH/IRFU/Oulu:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **LVPS** |  |  |  |  |  |
| Serial Number | PS1 | PS2 | PS3 | PS4 (& PS5-spare) |
| Receipt from UNH | complete | complete | complete | complete |
| Bench Test (KTH) | complete | complete | complete | complete |
| Acceptance Test (IRFU) | complete | complete | complete | complete |
| Parylene Coating | complete | complete | complete | complete |
| Final Test and EIDP | complete | complete | complete | complete |
| Deliver to UNH | complete | complete | complete | complete |
|  |  |  |  |  |
| **AEB** |  |   |   |   |   |
| Serial Number | 001 | 002 | 003 | 004, 005 |
| Receipt from UNH | complete | complete | complete | complete |
| Bench Test (KTH) | complete | complete | complete | complete |
| Acceptance Test (IRFU) | complete | complete | complete | complete |
| Parylene Coating | complete | complete | complete | complete |
| Final Test and EIDP | complete | complete | complete | complete |
| Deliver to UNH | complete | complete | complete | 18 Oct 2012 |
|  |  |  |  |  |
| **S-BEBs** |  |  |  |  |  |
| Serial Numbers | 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18 |
| Receipt from UNH | complete | complete | complete | complete | complete | complete | complete | complete |
| Bench Test (KTH) | complete | complete | complete | complete | complete | complete | complete |  |
| Acceptance Test (IRFU) | complete | complete | complete | complete | complete | complete | complete |  |
| Ready for Probe-to-BEB) Test and Calibration | complete | complete | complete | complete | complete | complete | complete |  |
| Parylene Coating | complete | complete | complete | complete | complete | complete | complete |  |
| Final Test and EIDP | complete | complete | complete | complete | complete | complete | complete |  |
|   |  |  |  |  |  |  |  |  |
| **Probe/Yo-Yo** |  |  |  |  |  |
| Serial Numbers | A1, A2To be replaced with B1, B2 | B3, B4 | D1, D2 | D3, D4 | C1, C2 | A3, A4 | E2, E3 |  |
| Assembly | complete | complete | complete | complete | complete | complete |  |  |
| Functional Test (Oulu) | complete | complete | complete | complete | complete | complete |  |  |
| Delivery to KTH | complete | complete | complete | complete | complete | complete |  |  |
| Ready for Probe-to-BEB) Test and Calibration | complete | complete | complete | complete | complete | complete |  |  |
| Thermal Vacuum Test | complete | complete | complete | complete | complete | complete |  |  |
| Final Test and EIDP | complete | complete | complete | complete | complete | complete |  |  |
| Return to UNH (reworked probes) |  |  |  |  |  |  |  |  |
| **Preamp/Cable** |  |  |  |  |  |
| Serial Numbers | 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18 |
| Receipt from UNH | complete | complete | complete | complete | complete | complete | complete |  |
| Ready for Probe-to-BEB) Test and Calibration | complete | complete | complete | complete | complete | complete | complete |  |
|  |  |  |  |  |  |  |  |  |
| **Probe-to-BEB Test and Calibration** |  |  |  |  |  |
| Probe-to-BEB Test and Calibration | complete | complete | complete | complete | complete | complete | complete |  |
| EIDP | complete | complete | complete | complete | complete | complete |  |  |
| Deliver to UNH | complete | complete | complete | complete | complete | complete |  |  |
|  |  |  |  |  |  |  |  |  |

# UNH:

## UNH Subassemblies Delivered to Partners:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **A-BEBs** |  |   |   |  |
| Housing Serial Number | 001 | 002 | 003 | 004  | 005 (spare) |
| Board Serial Numbers | ADP5: ACP1, AAM1ADP6: ACP2, AAM2 | ADP5: ACP3, AAM3ADP6: ACP4, AAM4 | ADP5: ACP5, AAM5ADP6: ACP6, AAM6 | ADP5: ACP7, AAM7ADP6: ACP8, AAM8 | ADP5: ACP9, AAM9ADP6: ACP10, AAM10 |
| Board Assembly | complete | complete | complete | complete | complete |
| AEB Assembly | complete | complete | 18 May 2012 | 26 Jul 2012 | 26 Jul 2012 |
| Delivery to KTH | complete | complete | 12 Jun 2012  | 13 Aug 2012 | 13 Aug 2012 |
| Received from KTH | complete | complete | 20 Aug 2012 | 18 Oct 2012 | 18 Oct 2012 |
| Delivery to LASP | complete | complete | 22 Aug 2012 | 23 Oct 2012 | Stays at UNH |
| Received from LASP | complete | 20 Jun 2012 | 23 Oct 2012 | 8 Mar 2013 | Stays at UNH |
| **S-BEBs** |  |   |   |  |
| Housing Serial Number | 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18 |
| Board Serial Numbers | SCP3, SCP4SAM3, SAM4GT3, GT4 | SCP5, SCP6SAM5, SAM6GT5, GT6 | SCP7, SCP8SAM7, SAM8GT7, GT8 | SCP9, SCP10SAM9, SAM10GT9, GT10 | SCP11, SCP12SAM11, SAM12GT11, GT12 | SCP13, SCP14SAM13, SAM14GT13, GT14 | SCP15, SCP16SAM15, SAM16GT15, GT16 | SCP17, SCP18SAM17, SAM18GT17, GT18 |
| Board Kitting, Parts Forming and Tinning | complete | complete | complete | complete | complete | complete | complete | complete |
| Board Assembly (Syntech) | complete | complete | complete | 31 May 2012 | 31 May 2012 | complete | complete | complete |
| S-BEB Assembly (UNH) | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to KTH | complete | complete | complete | complete | complete | complete | complete | complete |
| Received from KTH | complete | complete | complete | complete | complete | complete |  |  |
| **SDP Peamp/Cable** |  |   |   |  |
| Serial Numbers | 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18 |
| Received from LASP | complete | complete | complete | complete | complete | complete | complete | complete |
| Survival TV Test | complete | complete | complete | 05 Jun 2012 | 05 Jun 2012 | complete | complete | complete |
| Delivery to KTH | complete | complete | complete | complete | complete | complete | complete | complete |
| Received from KTH | complete | complete | complete | complete | complete |  |  |  |
| Ready for SDP I&T | complete | complete | complete | complete | complete |  |  |  |
| **EDI BGS** |  |   |   |  |
| Serial Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 (9, 10 spares) |
| Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| Delivery to IWF (Gun) | complete | complete | complete | complete | complete | complete |  |  |
|   |  |  |  |  |  |  |  |  |
| **EDI HV & Fil. Board** |  |   |   |   |   |
| Serial Number | FIL1 | FIL2 | FIL3 | FIL4 | FIL5 | FIL6 |  |  |
| Assembly | complete | complete | complete | complete | complete | complete |  |  |
| Testing | complete | complete | complete | complete | complete | complete |  |  |
| Delivery to IWF (Gun) | complete | complete | complete | complete | complete | complete |  |  |
|   |  |  |  |  |  |  |  |  |
| **LVPS** |  |  |  |  |  |
| Serial Number | PS1 | PS2 | PS3 | PS4 | PS5 (spare)  |
| Assembly | complete | complete | complete | complete | complete |
| Deliver to KTH | complete | complete | complete | complete | complete |
| Received from KTH  | complete | complete | complete | complete | complete |
| Receiving test | complete | complete | complete | complete |  |
| Ready for CEB | complete | complete | complete | complete |  |
|  |  |  |  |  |
| **DFG Board** |  |  |  |  |  |
| Serial Number | DFG1 | DFG2 | DFG5 | DFG4  | DFG3 (spare) |
| Assembly | complete | complete | complete | complete | complete |
| Deliver to IWF | complete | complete | complete | complete | complete |
| Received from IWF  | complete | complete | complete | complete |  |
| Receiving test | complete | complete | complete | complete |  |
| Ready for CEB | complete | complete | complete | complete |  |

## UNH CEB:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **BPM** |  |  |  |  |  |
| Serial Number | BP1 | BP2 | BP3 | BP4 |
| Final Assembly | complete | complete | complete | complete |
| Bench Testing | complete | complete | complete | complete |
| Coating  | complete | complete | complete | complete |
| Ready for CEB | complete | complete | complete | complete |
| **CDPU** |  |   |   |  |
| Serial Number | A: CPUA2 | B: CPUB2 | A: CPUA1 | B: CPUB1 | A: CDPUA3 | B: CDPUB3 | A: CDPUA4 | B: CDPUB4 |
| Final Assembly | complete | complete | complete | complete | complete | complete | complete | complete |
| Bench Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| Thermal Testing | complete | complete | complete | complete | complete | complete | complete | complete |
| Coating and SE’s Test | complete | complete | complete | complete | complete | complete | complete | complete |
| Ready for CEB | complete | complete | 26 Apr 2012 | 26 Apr 2012 | complete | complete | complete | complete |
| **EDI Controller** |  |  |  |  |  |
| Serial Number | CNTL1 | CNTL2 | CNTL3 | CNTL4 |
| Final Assembly | complete | complete | complete | complete |
| Bench Testing | complete | complete | complete | complete |
| Thermal Testing | complete | complete | complete | complete |
| Coating and SE’s Acceptance Test | complete | complete | complete | complete |
| Ready for CEB | complete | 03 May 2012 | complete | 06 Mar 2013 |
|  |  |  |  |  |
| **CEB** |  |  |  |  |
| Housing Serial Number | FM1 | FM2 | FM3 | FM4 |
| Board Serial Numbers as Integrated | BPM: BP1LVPS: PS1CDPU-A: CPUA2CDPU-B: CPUB2EDI Controller: CNTL1AFG: 01DFG: DFG1DSP-A: SN01DSP-B: SN03 | BPM: BP2LVPS: PS2CDPU-A: CPUA1CDPU-B: CPUB1EDI Controller: CNTL2AFG: 02DFG: DFG2DSP-A: SN08DSP-B: SN09 | BPM: BP3LVPS:PS3CDPU-A: CDPUA3CDPU-B: CDPUB3EDI Controller: CNTL3AFG: 03DFG: DFG5DSP-A: 11DSP-B: 05 | BPM: BP4LVPS: PS4CDPU-A: CDPU-B: EDI Controller: AFG: DFG: DFG4DSP-A: DSP-B:  |
| Housing Assembly | complete | complete | complete | complete |
| Final Assembly | complete | complete | complete | complete |
| FFT | complete | 26 Jun 2012 | 25 Oct 2012 | 18 Mar 2013 |
| PER | 18 Jan 2012 | 11 Jul 2012 | 29 Oct 2012 | 20 Mar 2013 |
| EMI/EMC Test | complete | complete | complete |  |
| Vibration Test | complete | 18 Jul 2012 | 02 Nov 2012 | complete |
| TV Test | complete | complete | complete | complete |
| Ready for FIELDS I&T | complete | complete | complete | complete |

## UNH SDP:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **S-BEBs** |  |   |   |  |
| Serial Number | 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 |  |  |
| Received from KTH | complete | complete | complete | complete | complete | complete |  |  |
| Final Assembly and Torque Monitor Calib. | complete | complete | complete | complete | complete |  |  |  |
| Ready for SDP I&T | complete | complete | complete | complete | complete |  |  |  |
| **Preamp/Cable** |  |   |   |  |
| Serial Numbers | 03, 04 | 05, 06 | 07, 08 | 09, 10 | 11, 12 | 13, 14 |  |  |
| Received from KTH | complete | complete | complete | complete | complete | complete |  |  |
| Ready for SDP I&T | complete | complete | complete | complete | complete |  |  |  |
| **Door Assembly** |  |   |   |  |
| Serial Numbers | 3, 4 | 5, 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 | 15, 16 | 17, 18 |
| Received from LASP incl. fit check | complete | complete | complete | 23 May 2012 | 23 May 2012 | 23 May 2012 | 23 May 2012 | 19 Sep 2012 |
| Ready for SDP I&T | complete | complete | complete | complete | complete | complete | complete | complete |
| **Sphere/Yo-Yo** |  |   |   |  |
| Serial Numbers | A1, A2To be replaced  | B3, B4 | D1, D2 | D3, D4 | C1, C2 | A3, A4 |  |  |
| Received from KTH | complete | complete | complete | complete | complete | complete |  |  |
| Ready for SDP I&T | complete | complete | complete | complete | complete | complete |  |  |
| **S/C Bracket** |  |   |   |  |
| Thermal Hardware | 3, 4 | 5. 6 | 7, 8 | 9, 10 | 11, 12 | 13, 14 |  |  |
| Motor Harness | complete | complete | complete | complete | complete |  |  |  |
| Ready for SDP I&T | complete | complete | complete | complete | complete |  |  |  |
| **Sphere/Yo-Yo to Preamp Integration** |  |   |   | complete |
| Serial Numbers | Sphere: A1, A2To be replacedPreamp: 03, 04 | Sphere: B3, B4Preamp: 05, 06 | Sphere: D1, D2Preamp: 07, 08 | Sphere: D3, D4Preamp: 09, 10 | Sphere: C1, C2Preamp: 11, 12 |  |  |  |
| Assembly complete | complete | complete | complete | complete | complete |  |  |  |
| Ready for SDP I&T | complete | complete | complete | complete | complete |  |  |  |
| **SDP** |  |   |   |  |
| Serial Numbers | FM3, FM4 | FM5, FM6 | FM7, FM8 | FM9, FM10 | FM11, FM12 |  |  | (Spare: FM2) |
| Final Assembly | complete | complete | complete | complete | complete |  |  |  |
| FFT | complete | complete | complete | complete | complete |  |  |  |
| PER | 11 Jun 2012 | 7 Aug 2012 | 16 Oct 2012 | 11 Jan 2013 | 03 Apr 2013 |  |  |  |
| EMI/EMC Test | complete | complete | complete | complete | complete |  |  |  |
| Vibration Test | complete | complete | complete | complete | complete |  |  |  |
| TV Test | complete | complete | complete | complete | complete |  |  |  |
| Ready for FIELDS I&T | complete | complete | complete | complete | complete |  |  |  |
| PSR | 04 Oct 2012 | 04 Oct 2012 | 12 Feb 2013 | 12 Feb 2013 |  |  |  |  |
| Delivery to IS | 12 Aug 2012[[6]](#footnote-6) | 27 Oct 2012 | 17 Dec 2012 | 22 Apr 2013 |  |  |  |  |
| Fine wire crimp rework |  | complete | N/A | N/A |  |  |  |  |
| Return to GSFC |  |  | N/A | N/A |  |  |  |  |

## UNH EDI GDU:

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **Sensor** |  |   |   |  |
| Serial Number | 1 | 3 | 4 | 5 | 6 |  |  |  |
| Preamp Trimming | complete | complete | complete | complete | complete |  |  |  |
| Preamp Delay Test | complete | complete | complete | complete | complete |  |  |  |
| Thermal Test (w/o MCP) | complete | complete | complete | complete | complete |  |  |  |
| Parylene | complete | complete | complete | complete | complete |  |  |  |
| Final Assembly | complete | complete | complete | complete |  |  |  |  |
| Electrical Test | complete | complete | complete | complete |  |  |  |  |
| Vacuum Test (Characterization) | complete | complete | complete | complete |  |  |  |  |
| Ready for GDU I&T | complete | complete | complete | complete |  |  |  |  |
| **Optics** |  |   |  |  |
| Serial Number | 1 | 3 | 4 | 5 |  |  |  |  |
| Received from U. Iowa | complete | complete | complete | complete |  |  |  |  |
| Ready for GDU I&T | complete | complete | complete | complete |  |  |  |  |
| **Gun** |  |   |   |  |
| Serial Number | 1 | 3 | 4 | 5 |  |  |  |  |
| Received from IWF | 11 Sep 2012 | 31 Oct 2012 |  | 12 Mar 2013 |  |  |  |  |
| Ready for GDU I&T | complete | complete |  | complete |  |  |  |  |
| **GDE** |  |   |   |  |
| Serial Number | 1 | 3 | 4 | 5 |  |  |  |  |
| Received from IWF | 11 Sep 2012 | 01 Nov 2012 |  | 12 Mar 2013 |  |  |  |  |
| Ready for GDU I&T | complete | complete |  | complete |  |  |  |  |
| **GDU** |  |   |   |  |
| Serial Number | FM1 | FM3 |  | FM5 |  |  |  |  |
| Final Assembly | complete | complete |  | complete |  |  |  |  |
| Bench Test | complete | complete |  | complete |  |  |  |  |
| FFT and Characterization in Vacuum | complete | complete |  | CompleteConverter shut down |  |  |  |  |
| PER | 28 Sep 2012 | 20 Nov 2012 |  | 26 Mar 2013 |  |  |  |  |
| EMI Test | 03 Oct 2012 | complete |  | complete |  |  |  |  |
| Vibration Test | complete | 28 Nov 2012 |  | 28 Mar 2013 |  |  |  |  |
| TV Test | complete | Completeproblems |  | complete |  |  |  |  |
| Ready for FIELDS | complete |  |  | complete |  |  |  |  |
| FIELDS level testing | complete |  |  | complete |  |  |  |  |
| PSR | 17 Jan 2013 |  |  |  |  |  |  |  |
| Delivery to IS | 14 Nov 2012 |  |  |  |  |  |  |  |

## UNH FIELDS

|  |  |
| --- | --- |
| **Subsystem & Status** | **Ship Set** |
| **SS#1** | **SS#2** | **SS#3** | **SS#4** |
| **FIELDS** |  |  |  |  |
| Component Serial Numbers | CEB: FM1AEB: 001SCM Sensor: FM1SCM Preamp: FM1SCM Harness: 01AFG Sensor: 05Boom Harnesses: 1, 2Deck Harnesses: 1, 1DFG Sensor: 04EDI Pair: 1, 3SDP Pair-1: 3, 4SDP Pair-2: 5, 6ADP Booms: 01, 02ADP REs: 03, 04 | CEB: FM2AEB: 002SCM Sensor: FM2SCM Preamp: FM2SCM Harness: 02AFG Sensor: 06Boom Harnesses: 3, 4Deck Harnesses: 2, 2DFG Sensor: 08EDI Pair: SDP Pair-1: 7. 8SDP Pair-2: 9, 10ADP Booms: 03, 04ADP REs: 05, 06 | CEB: FM3AEB: 003SCM Sensor: FMSSCM Preamp: FM4SCM Harness: 03AFG Sensor: 09Boom Harnesses: 5, 6Deck Harnesses: 3, 3DFG Sensor: 07EDI Pair: SDP Pair-1: SDP Pair-2: ADP Booms: 05, 06ADP REs: 01, 02 | CEB: FM4AEB: 004SCM Sensor: FM3SCM Preamp: FM5SCM Harness: 04AFG Sensor: 11Boom Harnesses: 7, 8Deck Harnesses: 4, 4DFG Sensor: 10EDI Pair: SDP Pair-1: SDP Pair-2: ADP Booms: 07, 08ADP REs: 07, 08 |
| FIELDS CPT | complete | complete | complete | complete |
| FIT Test | complete | complete | complete | complete |
| EIDP | complete  | complete | complete |  |
| PSR | 23 May 2012[[7]](#footnote-7) | 10 Sep 2012 | 18 Jan 2013 | 19 Apr 2013 |
| UNH Delivery to IS | 30 May 2012 | 17 Sep 2012 | 22 Jan 2013 | 22 Apr 2013 |
| LASP ADP Boom and RE Delivery to S/C | 04 Jan 2013 | 04 Jan 2013 | 08 May 2013 |  |

## FIELDS Components on MMS Observatories

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Obs / Component**(SN) | **CEB** | **AEB** | **AFG** | **DFG** | **SCM** | **SCM****PA** | **SDP1** | **SDP2** | **SDP3** | **SDP4** | **ADP Boom1** | **RE1** | **ADP Boom2** | **RE2** | **EDI GDU1** | **EDI GDU2** |
| **Obs-1** | FM1 | 001 | 05 | 04 | FM1 | FM1 | FM3 | FM4 | FM5 | FM6 | 1 | 03 | 2 | 04 |  |  |
| **Obs-2** | FM2 | 002 | 06 | 08 | FM2 | FM2 | FM7 | FM8 | FM9 | FM10 | 3 | 05 | 4 | 06 | FM1 |  |
| **Obs-3** | FM4 | 004 | 11 | 10 | FM3 | FM5 | EM | EQM |  |  |  |  |  |  |  |  |
| **Obs-4** | FM3 | 003 | 09 | 07 | FMS | FM4 |  |  |  |  |  |  |  |  |  | FM2 |

1. Anomaly. NCR in process. [↑](#footnote-ref-1)
2. Spare doors. At least one will be needed given that SDP S/N FM1 is no longer a flight unit. [↑](#footnote-ref-2)
3. Preamp compliant with the sensitivity requirements, except at 10 Hz where the noise is slightly above the requirement. NCR, waiver requested. [↑](#footnote-ref-3)
4. Vibration test was performed before the PER. [↑](#footnote-ref-4)
5. Rework with new over-shield, bake-out and certification done at UNH [↑](#footnote-ref-5)
6. Delivered prior to PSR. 04 Oct 2012 PSR covered four units: SNs 3, 4, 5, 6. [↑](#footnote-ref-6)
7. All except EDI GDU and SDP [↑](#footnote-ref-7)