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| Investigation: FIELDS | | | | |
| Progress accomplished this period: | | | | August 2013 Reporting Period |
| 1. | Project Management and Product Assurance | | | |
|  | a. | Project Management   * Supported review of cost change proposal submitted to SwRI 31 July. * Supported the following Acceptance Reviews or PSRs   + None * Supported the following PERs:   + SDP SNs 15&16 * Supported the following TRRs:   + SDP SNs 15&16 vibration and TV tests * Supported the following FRBs   + SDP SN18 Door safe-to-mate anomaly * Received delivery of the following flight hardware items at UNH   + S-BEBs & Preamp/Cable assemblies SNs 17&18 (from KTH)   + SN4 EDI Gun/GDE (from IWF) * Delivery of the following flight hardware items from UNH to FIELDS partners   + None * Delivery of the following flight hardware items from UNH or LASP to the IS and Observatories   + SDP SNs 13&14 * CDRL and contract deliverable submissions this month:   + None * Prioritized and coordinated the efforts of the UNH team, subcontractors, foreign partners, outside vendors and in-house workshops to optimize schedule performance. | | |
|  | b. | Product Assurance | | |
|  |  | Turco / Salwen   * HVOC cleaning and tinning * SDP Fm15/16 TV test support * SDP FM15/16 TQCM measurement * FM18 CP PWA rework of J2S connector * SDP FM13/14 cleaning and bagging * SDP 13-14 cleaning * SDP 15-16 FFT and TVAC support * SDP 17-18 assembly and test support | | |
| 2. | Systems Engineering and FIELDS I&T | | | |
|  |  | Rau / Dors   * Supported Observatory TV test planning and submitted yellow and red temperature limits for FIELDS * Completed Confined Space Training Course in preparation for TV test support * Supported SDP 15/16 PER * Supported SDP commissioning plan development and MRT-8 planning * Continued FIELDS verification entry into DOORS | | |
| 3. | Post-Delivery Support | | | |
|  |  | * Supported OBS-1 Magnetics Swing Test * Supported OBS-1 Vibration testing * Supported OBS-1 post Vibe ADP RE functional * Supported OBS-1 post Vibe ADP –Z RE LL release and RE removal * Supported OBS-2 Acoustics Test * Delivered and mechanically integrated SDP SN13/14 onto OBS-4 * Supported OBS-4 ADP +Z RE install and functional testing * Supported OBS-4 mag booms 2nd and 3rd motion and magnetometer functional * Submitted ADP Observatory Test procedure to MIS and dry ran it on OBS-4 * Supported DFG SN10 integration onto OBS-3 boom * Supported and reviewed WOA and procedure development at IS/OBS levels * Reviewed test data | | |
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| 4. | Science activities | | | |
|  |  | SWT and SWG   * Supported science activities as needed * Began preparation FIELDS Instrumentation paper   Science data processing activities   * First Draft of all FIELDS Science Data Products have been submitted * Supported SDC SIT 5A | | |
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| 5. | Magnetometers | | | |
|  | a. | DFG |  | |
|  |  |  | * Remote support of DFG functional testing at Goddard * Tuning and calibration tests at IWF with FM3 (spare) electronics and spare sensor finished. Calibration at TU-BS is planned when IWF support is available (Nov). | |
|  | b. | AFG |  | |
|  |  |  | * Continued data reduction/software development activities * Submitted CDs of the remaining End Item Data Packages to UNH, and posted copies of all the EIPDs on SiteScape | |
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|  | c. | SCM | * SCM FM1 – 4 are delivered * SCM FM Spare => SENSOR S/N FM4 + PREAMP S/N FM3   + - All environmental tests and calibration activities are complete. Awaiting repair of vacuum bake-out chamber. Bake out is planned for Sep 2013. | |
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| 6. | EDI | | | |
|  |  | Ship Set 4 - GDU SN 4   * Started GDU Assembly * Prepared/tested procedures and scripts for Observatory TB/TV   Sensor   * Ship set 3 - SN 8 * Performed thermal test   Gun - UNH efforts   * Board level test of HV-FIL board SN 9 * Refurbished and tested beam generation system SN 5 (spare) * Ship set 3 - SN 8 and ship set 1 - SN 9   + Populated LV sides of DEFL1, DEFL2 and OPT\_DEFL boards   Gun - IWF efforts   * Ship set 4 - Gun SN 4   + Calibrated Gun; delivered to UNH for GDU integration   Optics   * Continued work on ship set 4 and Flight Spare   Software   * Continued implementation and testing of electric field mode   HVOCs (UNH)   * Shipped and installed the fist group of HVOCs in Gun #7. * Completed build of the 2nd batch of 45 HVOC devices.   + Conducted PD testing; all devices passed. * Preparing for screening testing of the next 45 devices (2nd batch). * Prepared kits for 3rd batch 45 HVOC's. * Fabricated housings for the 4th and last planned batch of 45 HVOCs. | | |
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| 7. | SDP/BEB/LVPS | | | |

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|  | a. | SDP/BEB/LVPS (KTH/IRFU/Oulu)  KTH/IRFU SDP BEB’s:   * Units FM17-18, delivered, handed carried back to UNH.   KTH/IRFU ADP BEB’s:   * Done.   KTH/IRFU SDP Preamp/Boom Cable Assembly:   * Units FM17-18, delivered, handed carried back to UNH.   KTH/Oulu/IRFU Sphere / Yo-Yo Mechanism:   * No new developments, testing of last two Probes to be done.   KTH/IRFU/Oulu Management:   * Continue to work all issues related to testing, documentation, hardware, shipping and QA/PA and shipping needs.   KTH Product Assurance (OHB Sweden):   * Submitted the inspection report of the repaired AEB FM3 BEB5 * Submitted the inspection report of SDP HW FM17-18 + delta activity sheet * Submitted the Final inspection report for SDP FM13-16 * Prepared the Acceptance data package summary for all delivered hardware |
|  | b. | SDP/BEB/LVPS (UNH)  LVPS:   * No activity   A-BEB’s:   * Coating of LM124 on FM3 completed   S-BEB’s:   * Parylene found in interconnector on FM17 was taken to SCS for Parylene removal, returned to UNH to replace J2S connector, tested and re-coated and released for assembly of FM17 deployer. * ‘Nulled’ GT, FM 17-18 boards for torque monitors. * FM17 & FM18 have the Booms loaded and the Pre-amps pinned out. * Boom harnessing processed, as well as both motors are fully harnessed. * Crimping and load testing is complete. * Vib-rac work is on completed.   SDP MGSE and EGSE:   * Stable. No new developments.   SDP Preamp:   * Crimped Probe E3 and E4 to 17-002-46 and 18-003-47 preamp respectively.   SDP Mechanical / Electrical:   * Completed Integration of FM's 17 & 18 * Conducted PER for FM 15, 16… FFT, PER, VIBE, Post Vibe FFT and in the middle on TVAC testing. * Completed integrated of FM17 & 18. * Conducted FM 17, 18… FFT.   + Preparing for FM 17 & 18… PER, VIBE, Post Vibe FFT and TVAC. * Sent out RWC parts for plating at PFE for flight spare FM2 SDP, parts complete and in house.   SDP Thermal:   * Conducting TVac testing for FM 15, 16 and then FM 17, 18   SDP EMC:   * Completed CE01/03, chassis leakage and magnetic testing for FM 15, 16.   FM SDP   * Final assembly of SNs 15 and 16. * FM13 & FM14 have successfully completed Cho-foiling, cleaning, final UV inspection and bagging and have been shipped to GSFC.   SDP QA:   * Monitored the assembly and test activities for the flight units   AEB (UNH)   * FM3 coated, reassembled and placed in storage. |
|  | c. | SDP (LASP)   * Supported FRB for stuck SDP door plunger (SN18). Provided build and receiving/inspection document to UNH. |

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| 8. | ADP | | |
|  | a. | ADP I&T Activities at Goddard   * Obs #1   + Supported Obs #1 vibration test as needed by the project. Reviewed RE vibration response data and provided feedback to MMS structural team between levels and axes.   + Performed post-vibration release test of –Z ADP Launch Latches   + Removed –Z ADP RE (SN04) so that ODS could be removed for prop tank drain and the “wiggle” test. RE is stored in an RE shipping container for reinstallation in October. * Obs #2   + Reviewed and approved Obs#2 ADP WOA as-run paperwork * Obs #3 – No activity * Obs #4   + Installed +Z ADP RE (SN01) on Obs #4. A PR was issued against the installation due to discoloration on the gold plated inner guard surface.   + Performed +Z ADP RE STM and LPT.   + Performed +Z ADP RE deployment and functional tests * Reviewed and approved the revised FIELDS ADP Functional Test procedure. * Drafted an ADP RE removal procedure and released this procedure in MIS. * Investigated ADP inner guard gold discoloration issue for ADP RE SN01 (+Z Obs #4). Attempted to recreate the discoloration with solvent (IPA). This attempt was partially successful. PR remains open.   Axial Electronics Box (AEB)   * No activity | |
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| 9. | DSP, Thermal, Systems Engineering, Product Assurance and Management (LASP) | | |
|  |  | DSP - No activities this month.  Thermal – No activities this month.  Systems Engineering and Program Management   * Provided red and yellow temperature limits for ADP temperature sensors in MMS observatory bake out and TVAC.   Quality Assurance, Parts, and Materials Engineering   * Supported program as needed. | |
| 10. | CEB | | |
|  | a. | Hardware | |
|  |  |  | CEB (Rau, Dors, Bodet, Nolin)   * No activity. CEB hardware activities are complete. |
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|  | b. | CDPU Software, Support for Operations, I&T and Post-Delivery activities (Needell) | |
|  |  |  | * Participated in MRT8 planning and Dry runs * Supported other Post Delivery Activities as needed. * Supported Commissioning Planning telecons |
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| 11. | GSE (Mello, Chutter, Bodet) | | |
|  |  | GSE Hardware   * Returned two CIDP Simulators to SwRI as requested. These were no longer needed at UNH.   FIELDS Simulator   * No activity   GSEOS & GSE Software   * Support OBS/FIELDS testing * Support OBS/IS TC testing efforts * Telemetry screen improvements * SOC testing * Keep repository up to date | |
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| 12. Problems encountered (some resolved) and updates this period | | | |

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|  |  | AEB   * [CLOSED] Out of Family Noise on Bias Voltage DAC (AEB FM3, ADP5 Side, TV cold) (PFR-10160.53-94-CL)   + - CLOSURE: DPA on the failed part received, no conclusion drawn.     - SN3 AEB, reworked and retested, is now the designated flight spare.   SDP   * [CLOSED] Open circuit measured on HOPS during pre-FFT Safe to Mate (SDP FM18) (PFR-10160.53-112-CL)   + On deployer FM18, initial S2M fail HOP resistive measurement. Problem found to be plating of door by LASP, This plating issue prevented the travel of the plugged to engage the cut off micro-switches. Action was to replace LASP Door FM18 with Door from deployer FM2.   EDI   * Failure of HV supply (Gun SN6) (PFR-10160.53-113-OP)   + During final integration test of the FM6 gun electronics, in two cases a failure of the HV supply has been observed. The high voltage output of the stack reaches only 60% of the nominal value.   + As of 9 Sep 2013:     - IWF has not yet determined the cause of this failure. SN6 Gun has been set aside to allow SNs 4 and 7 to proceed. The problem investigation with SN6 will proceed when time permits. * Board-level test failure SN6 Gun Beam Board - damaged LVDS chip (PFR-10160.53-110-OP)   + The LVDS driver chip was damaged during board-level test on the SN6 Beam board due to a missing ground between the EGSE and the +/-5.2V power supply of the test board.   + Proposed Actions/Corrections:     - Replace the part and inspect. DONE.     - Correct the test setup and confirm. DONE.     - Resume board level testing of the Beam Board. DONE.     - Provide analysis assessing risk, if any, to other components on the board.   + UPDATE:     - SN6 Gun has been placed back in cleanroom environment. Testing will resume when time is available.     - Awaiting NCR details and analysis from IWF. * EDI GDU SN2 open work (PFR-10160.53-101-IP)   + GDU SN2 exhibited problems during the Gun calibration and component level TV test. See PFR-10160.53-56 [Thermal Vacuum Com Locks and Fold-Backs (EDI GDU SN2)] and PFR-10160.53-47 [GDE fold-back during SN2 Gun Calibration]. The unit was delivered to GSFC to participate in I&T, but needs to be returned to UNH and IWF for rework.   + Rework plan:     - -Install new UNH-built optocouplers on DEFL1 and DEFL2 board and in any other gun HV amplifiers that have exhibited LED current trends.     - -Remove 27 Ohm resistor from GUN25V supply line in GDE/Gun harness     - -Install 20 Ohm resistor on HV-FIL board in Gun   + Retest plan:     - -Gun calibration at IWF     - Sensor stand-alone vacuum testing at UNH     - GDU integration and environmental testing * EDI GDU SN3 open work (PFR-10160.53-103-IP)   + GDU SN3 exhibited problems during the component level TV and vacuum tests. See PFR-10160.53-81 [GDE Converter Fold Back and Comm Locks observed during TV test (GDU SN FM3)] and PFR-10160.53-83 [Sensor FPGA reset (EDI GDU FM3)]. The unit was delivered to GSFC to participate in I&T, but needs to be returned to UNH and IWF for rework.   + Rework plan: Install new UNH-built optocouplers on DEFL1 and DEFL2 board and in any other gun HV amplifiers that have exhibited LED current trends.   + Retest plan:     - Gun calibration at IWF     - Sensor stand-alone vacuum testing at UNH     - GDU integration and environmental testing * EDI GDU SN5 open work (PFR-10160.53-106-IP)   + GDU SN5 exhibited problems during the component level TV and vacuum tests. PFR-10160.53-105 [Red Limit Violations on GDU SN5] and PFR-10160.53-96 [Converter Foldbacks (GDU FM5)]. The unit was delivered to GSFC to participate in I&T, but needs to be returned to UNH and IWF for rework.   + Rework plan: Install new UNH-built optocouplers on DEFL1 and DEFL2 board and in any other gun HV amplifiers that have exibited LED current trends.   + Retest plan:     - Gun calibration at IWF     - Sensor stand-alone vacuum testing at UNH     - GDU integration and environmental testing * UPDATE: Anomalously low LED current of channel D5 in Gun FM4 (PFR-10160.53-104-IP)   + At IWF: performed test of assembled Gun; deflection channel 5 (DEFL2 board) exhibited a failure: HV output does not work below 1500V. The electronics board stack was disassembled and the following tests were performed   + The DEFL2 board was tested on the bench with no problems.   + Nothing was found during a visual inspection of the board under a microscope.   + During a test in a thermal chamber between -30C and +70C (four cycles), one out of approximately 65 tests (near 50C) showed the problem   + Further testing in the temperature range 50C to 60C (approximately 190 tests) did not show the problem   + The board stack was reassembled   + The problem re-occurred when testing the assembled board stack. Putting a small amount of pressure on the board made the problem disappear. Removing that pressure made it re-appear.   + Proposed actions and correctios     - Dismantle the GUN and perform another board level test of DEFL2 PWA to investigate the problem further. DONE.     - The board stack will be disassembled again, and the DEFL2 board will be once again inspected, with a focus on the electronics in front of the op-amp inputs of channel 5. DONE.     - Regarding the contact problem of the HV resistor in channel D5, actions suggested by IWF were to either reflow the two solder joints of the HV resistor or to replaced the entire HV resistor. UNH and IWF agreed on reflowing the solder joints, as it was felt this presented lower risk to the board overall.. DONE.     - The next step will be reassembly of the gun and test at assembled level. DONE AT GUN LEVEL.     - As of 3 Sep 2013:       * SN4 Gun and GDE are now in calibration. The initial energy level of 1keV has been successfully completed with no adverse trending observed.       * Continue to observe performance during GDU level testing (GDU SN4), including TV. * [UPDATE] Negative Current spikes seen on Plate 7 Optocoupler during calibration (GUN SN4) (PFR-10160.53-85-AP)   + HK data analysis done at IWF indicates problems with several optocouplers. OC7 shows the isolated downward spikes. Manfred (IWF) is confident that replacing the positive side optocoupler will solve the issue. For OC6 the case is not as clear as we do not understand the behavior, so we may have to replace both optocouplers and maybe also the drive circuit for the LEDs.   + An FRB, conducted 4 Jan 2013, defined additional diagnostic steps. Another FRB will be conducted to review the diagnostic results prior to any disassembly   + Screening of optocouplers: all optocouplers in Gun FM4 were screened. It is pretty obvious that our screening process is not helping us to identify bad parts. Lack of being able to use elevated temperatures may be the most likely factor.   + Further activity with SN4 Gun awaits tiger team recommendation.   + 1 Apr 2013: UNH has identified screened IWF HVOCs to use for the rework of this Gun and has provided them to IWF.   + Replacement parts have been integrated at IWF, board level testing was successful.   + UPDATE:     - SN4 Gun and GDE are now in calibration. The initial energy level of 1keV has been successfully completed with no adverse trending observed.     - The gun calibration was repeated in the time frame Aug 1 - 21, 2013. The overview timeline plot of LED currents (see attached file EDI-IWF-REP-0495 FM4 Overview of Calibration V2.pdf) did not show any negative spikes in the LED currents.     - Open work       * Steller: Provide a statement of analysis assessing stress on parts other than those replaced.       * Proceed with GDU I&T; monitor performance in GDU level testing       * Assess residual risk. * [UPDATE] Failure to set the Wehnelt voltage (EDI Gun SN4, Q4 on HV-FIL board SN4) (PFR-10160.53-78-IP)   + During inital tests in vacuum preparing for the calibration of Gun S/N 4 a failure to set the wehnelt voltage occurred (at IWF).   + The failure mode could be explained by a damaged transistor on the HV-FIL board.   + The HV-FIL board was replaced in SN4 Gun. The suspect board was returned to UNH for test and DPA of the suspected part, Q4.   + 8 May 2013     - The DPA revealed electrical overstress (excessive voltage) applied to the Emitter.     - Q4 was replaced in HV&Fil board SN4 and the board retest was successful.     - Since the exact location of HV discharge is unknown it is hard to know if other parts may have been stressed.     - Clarify the configuration at the time the problem was noticed. Determine what other boards and components might have been overstressed.   + UPDATE: 3 Sep 2013     - Proposed action       * Replace Q4 and run board level test (HV-FIL SN4). Repeat of the board level test was successful following rework - replacement of transistor Q4.DONE.         + STATUS (3 Sep 2013): HV-FIL SN4 is repaired and returned to IWF, but, given uncertainty on further stress, we do not intend to use this board for flight.       * 8 May 2013: Clarify the configuration at the time the problem was noticed. Determine what other boards and components might have been overstressed.         + CONFIGURATION WAS THE FULLY ASSEMBLED GUN BOARD STACK. THE ARC PATH CANNOT BE DETERMINED. AS SUCH, A RISK RECORD WILL BE INITIATED FOR GUN SN4.       * Reintegrate Gun SN4 using HV-FIL SN5 board. Conduct Gun tests and Gun/GDE calibration at IWF. DONE.       * Proceed with GDU SN4 I&T using Gun SN4.       * Assess risk; initiate risk record and report. |

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| 13. Issues and concerns | | |
|  |  | From FIELDS PM   * The progress of Gun/GDE activity is much too slow. This is the critical path for GDU and FIELDS. UNH will continue to coordinate with IWF to provide support of testing and assembly activities on site at IWF as needed. UNH delivered UNH-built HVOCs and provided assembly support at IWF in August.   From LASP (ADP   * GSFC spacecraft mechanical has indicated that the 50 to 100 Hz sine vibration environment could be a problem even with analytical notches.   + August update: GSFC mechanical has reviewed the Obs #1 low sine survey data and determine that RE latch responses higher than 13 G’s are still predicted. GSFC mechanical will request narrow band notches from ULA. |

NCR Summary: Provided separately (Excel file)

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| Activities planned for next reporting period | | | |
|  |  | Management | |
|  |  |  | * Begin discussion of science data algorithm topics as part of the weekly FIELDS team meetings. * Continue to support SwRI review of the FIELDS cost change proposal submitted 31 July. * Continue to push open NCRs to closure * Continue to prioritize and coordinate the work of the UNH team and its FIELDS partners. Similarly, prioritize and schedule work in the UNH electronics and machine shops and with outside vendors. * Closely monitor status and schedule performance of team members. Identify schedule risks and provide assistance for mitigation if warranted. Work to minimize schedule slippage. * Coordinate problem investigations and associated resolution. * Support FRBs; * Support/staff T/V testing as needed * Update the Gun and GDE schedule. * Receive delivery of the following items at UNH   + None * Delivery of the following flight hardware items from UNH to FIELDS partners   + SDP door assemblies SNs 1 & 18 to LASP for rework   + BGS SN11 and HV&Fil SN11 to IWF * Prepare and conduct the following PERs and associated TRRs   + SDP SNs 17 &18 (done 3 Sep)   + GDU SN4 * Prepare and conduct the following PSRs or Acceptance Reviews.   + None * Make or coordinate delivery of the following to GSFC IS or S/C teams   + None * CDRL and contract deliverable submissions:   + None planned * Support/staff T/V testing as needed * Update the Gun and GDE schedule |
|  |  | Product Assurance, Configuration Management, Parts, Materials, Facilities | |
|  |  |  | Turco/Salwen   * SDP TV test support * EDI TV test support * Staking and coating of EDI Sensor FM9 PWAs   Software Product Assurance (Heirtzler)   * Continue support for EDI and/or CDPU software testing as needed |
|  |  | Systems Engineering & FIELDS I&T | |
|  |  |  | Rau / Dors   * Support SDP 17/18 PER * Perform SDP 15-18 In-Rush and EMI testing * Perform SDP SN15-18 FIELDS testing (Magnetics) * Support EDI GDU SN4 PER * Perform EDI GDU SN4 EMI and FIELDS testing (FIT) * Continue submitting FIELDS verification material for closure |
|  |  | Post-Delivery Support | |
|  |  |  | IS and Observatory Support (FIELDS)   * Support OBS-1 Post Vibe functional * Support OBS-2 Pre TV mag boom deploy and magnetometer functional * Support OBS-2 TV test preparation including personnel scheduling * Electrically integrate SDP 13/14 on OBS-4 and perform SDP 11-14 functional * Support OBS-4 CPT/Functional * Support AFG and SCM magnetometer integration onto OBS-3 boom * Update ADP Observatory Test procedure and submit S2M procedure to MIS * Continue submitting FIELDS verification material for closure |
|  |  | Science | |
|  |  |  | SWT and SWG   * Support science telecons as needed * Prepare for SWT ad SWG meetings in early October * Continue preparation FIELDS Instrumentation paper   Science data processing activities   * Start creating initial flight CDF skeleton files * Start writing initial flight Level 0 data to Level 1A software |
|  |  | AFG | |
|  |  |  | * Follow up on LM6142 concerns * Continue data reduction/software development activities, including support of Science Operations and Data Analysis Working Group (SODAWG) and related telecons. Prepare material for presentation at the upcoming Science Working Team meeting |
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|  |  | DFG | |
|  |  |  | * Support of in-flight calibration prearrangements at UCLA and Goddard * Remote support of DFG functional testing at Goddard * Participation in MAG team meeting at APL |
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|  |  | SCM | |
|  |  |  | * Conduct the FMS overall bake-out. |
|  |  | EDI | |
|  |  |  | Ship Set 4 - GDU SN 4   * Complete GDU Assembly * Baseline FFT in Vacuum * PER * EMC Test * Vibration   Sensor   * Ship set 3 - SN 8   + Send boards out for parylening * Ship set 1 - SN 9   + MCP Supply Board BLT   + DC Beta Test of HV Capacitor and Preamplifier Board   Gun - UNH efforts   * Deliver HV-FIL board SN 9 to IWF   Gun - IWF efforts   * Ship set 3 - SN 7   + Board level tests * Ship set 4 - SN 6   + Diagnose problem with insufficient HV stack output * Ship set 3 - SN 8 and ship set 1 - SN 9   + Populate LV side of BEAM boards   Optics   * Continue work on ship set 4 and Flight Spare   Software   * Continue implementation and testing of electric field mode   HVOCs (UNH)   * Conduct the screening tests on the 2nd batch of 45 HVOCs. * Begin assembly of the 3rd batch of 45 HVOCs |
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|  |  | SDP/LVPS/BEBs/Preamp/Probe (KTH/ Oulu/IRFU) | |
|  |  |  | SDP:   * Participate in PSR and other reviews for FM 15-18.   S-BEB’s & Preamp & Probe:   * Prepare the test reports for the all shipped units.   A-BEBs and LVPS:   * Done   KTH Management and Product Assurance:   * Finalize the Acceptance data package summary for all delivered hardware |
|  |  | SDP/LVPS/BEBs/Preamp/Probe (UNH) | |
|  |  |  | UNH SDP:   * Environmental testing of FM 15-18.   + FFT, PER, TRR, vibration test for SNs FM15 & FM16 * Spare FM2 kit is largely complete with the Outer Cylinder final drilling and tapping now complete, QA will follow later this week. Only outstanding hardware is surface treatment of spare RWC hardware, the quote is in process   LVPS and BEBs   * Do final test of FM5 LVPS before placing in storage |

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|  |  | ADP/SDP/DSP (LASP) | |
|  |  |  | QA/Parts/Materials   * Support the project as necessary.   DSP – No activity planned  ADP   * Support I&T at Goddard as needed * Complete guard gold plating discoloration investigation. A use as-is disposition will likely be recommended.   AEB – No activity planned  SDP   * Receive 2 SDP door assemblies from UNH. * Door reassembly and testing will occur in early October.   Thermal – No activity planned  Systems and Program Management   * Focus on EIDP and verification tasks * Support any UNH requests for cost justification with the FIELDS proposal to SwRI |
|  |  | CEB Hardware | |
|  |  |  | FM4 and FS CEB   * Flight spare kits are complete. No further activity is planned. |
|  |  | CDPU Software, Support for Operations, I&T and Post-Delivery activities (Needell) | |
|  |  |  | * Support OBS1 Functional Test * Continue MRT8 planning and Dry runs * Continue Commissioning Planning * Support OBS4 CPT * Support OBS2 TVac * Continue Supporting Post Delivery Activities as needed |
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|  |  | GSE (Mello, Chutter, Bodet) | |
|  |  |  | GSE hardware   * No planned activity   GSEOS & GSE Software   * Support OBS/FIELDS testing, esp TV * Support OBS/IS TC testing efforts, esp TV * Telemetry screen improvements * Space craft screen improvements * Space craft & TV GSE decoding * SOC testing * Keep repository up to date   FIELDS Simulator (FS)   * No planned activity |
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