

IMU 24 = -201 106
 22 - 231 } 104
 14 - 231

ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS																																																	
<p>INERTIAL MEASUREMENT UNIT (IMU)</p> <p>Qualification Item: Block II Level Vibration, 2018601-071, S/N 3</p> <p>All other Block II Environments, 2018601-051, S/N 3</p> <p>Flight Item: ECP Incorporation -051 -071 -191 -201 -211 -221 -231</p> <table border="0"> <tr><td>306</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td></tr> <tr><td>500</td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>587</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>605</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>653</td><td></td><td></td><td>X</td><td>X</td><td></td><td>X</td></tr> <tr><td>678</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>688</td><td></td><td></td><td></td><td></td><td>X</td><td>X</td></tr> </table>	306	X	X	X	X	X		500		X	X	X	X	X	587			X	X	X	X	605			X	X	X	X	653			X	X		X	678			X	X	X	X	688					X	X	<p><u>ECP 306</u> - Addition of harness cable clamp to IMU cover.</p> <p><u>ECP 500</u> - Replacement of capacitor, P/N 1010317-001, with P/N 1008848 in PIP preamplifier application, which becomes P/N 2007060-021 as a consequence. Also provides for epoxy resin conformal coating on all solder terminals.</p> <p><u>ECP 587</u> - Advancement of 25 IRIG from 2021500-051 to -071 configuration. Change incorporates new end cap - aluminum base, turret terminals, longer connector mounting screws.</p> <p><u>ECP 605</u> - Removal of insulating blankets, P/N's 2018805 and 2018806, from IMU.</p> <p><u>ECP 653</u> - Change of stable member harness wiring to reduce IRIG preamplifier oscillations.</p> <p><u>ECP 678</u> - Lockwashers and C-7 adhesive added to IRIG connector mounting hardware.</p> <p><u>ECP 688</u> - Addition of capacitor P/N 1006777 across signal microsyn output terminals. IRIG's advanced to -111 configuration.</p>	<p><u>ECP 306</u> - Qualified by test.</p> <p><u>ECP 500</u> - Capacitor P/N 1008848 qualified at part level. AP-M-14177-N426.</p> <p><u>ECP 587</u> - Qualified by test at IRIG level.</p> <p><u>ECP 605</u> - Analytical thermal analysis indicated test not required. AP-M-17974-N1596.</p> <p><u>ECP 653</u> - Qualified by similarity.</p> <p><u>ECP 678</u> - Qualified by similarity.</p> <p><u>ECP 688</u> - Capacitor, P/N 1006777, qualified at part level. AP-M-13039-N186.</p> <p>IMU coolant hoses qualified as part of IMU qualification.</p> <p>Flight item qualified by test and by similarity to qualification item.</p>
306	X	X	X	X	X																																														
500		X	X	X	X	X																																													
587			X	X	X	X																																													
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678			X	X	X	X																																													
688					X	X																																													
<p>ELECTRONIC DATA COUPLING UNIT (ECDU)</p> <p>Qualification Item: Block II Vibration only, 2007222-121</p> <p>Other Environments, 2007222-081, S/N 19</p> <p>Flight Item: ECP Incorporation -081 -121 -181 -191 -221 -231</p> <table border="0"> <tr><td>499</td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>515</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>564</td><td></td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td>603</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>609</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> </table>	499		X	X	X	X	X	515			X	X	X	X	564						X	603			X	X	X	X	609			X	X	X	X	<p><u>ECP 499</u> - Incorporation of module vibration damper plate between trays S and X.</p> <p><u>ECP 515</u> - Provides for individual selection of optimum resistance value in circuit position R-73, system coarse module; module part number advanced from 2007236-011 to -031.</p> <p><u>ECP 564</u> - Implementation of flight processing specifications, ND 1002359A and ND 1002358B, for logic integrated circuits.</p> <p><u>ECP 603</u> - Replacement of P/N 1010317-004 capacitors with P/N 1008900-24 counterpart in MSA and Quad Reject Module.</p> <p><u>ECP 609</u> - Circuit redesign of MSA and Quad Reject Module.</p> <ol style="list-style-type: none"> Diodes, CR 10, 11; P/N 1010385 removed. Resistor, R 140; P/N 1006750-12 added. Diode CR 13, P/N 1008815, replaced by P/N 1010372. Value of Resistor R-76, P/N 1006750, changed. <p><u>ECP 714</u> - Reduction of ECDU noise susceptibility by rerouting 1x resolver winding, read counter logic interconnect, and CDU reset lead in headers.</p>	<p><u>ECP 499</u> - Qualified by test. AP-M-16622-N1120.</p> <p><u>ECP 515</u> - Qualified by similarity.</p> <p><u>ECP 564</u> - Qualified by part test.</p> <p><u>ECP 603</u> - Capacitor, P/N 1008900, qualified at part level, based on results of evaluation test, 20-P-400.</p> <p><u>ECP 609</u> - Qualified by part test.</p> <p><u>ECP 714</u> - Qualified by similarity.</p> <p>Flight item qualified by test and by similarity to qualification item.</p>														
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<p>GUIDANCE COMPUTER (CGC)</p> <p>Qualification Item: 2003200-021, S/N RAY 16 (C1)</p> <p>Flight Item: ECP Incorporation 2003200 2003993 -021 -011 -021 -031 -041 -051 -061</p> <p>452 X X X X X X X</p> <p>474 X X X X X X X</p> <p>483</p> <p>485 X X X X X X X</p> <p>501/505 X X X X X X X</p> <p>511 X X X X X X X</p> <p>518 X X X X X X</p> <p>564 X X</p> <p>604 X X</p> <p>719 X X</p>	<p><u>ECP 452</u> — Replacement of Tray A Assembly, P/N 2003092-011, with -031 configuration. Wiring changes to permit operation with Auxiliary Computer Memory (ACM) and reduce noise signals.</p> <p><u>ECP 474</u> — Replacement of Test Connector Cover, P/N 2004115, with 2003099-011. New connector eliminates noise problems when GSE is not connected to the AGC.</p> <p><u>ECP 483</u> — Replacement of R36 with a P/N 1008815 Zener diode to preclude induced breakdown of sense amplifier devices. P/N 2003981 and 2003982-021 changed to -031.</p> <p><u>ECP 485</u> — Replacement of Power Supply Module, P/N 2008953-011, with P/N 2003887-011 configuration. Modified screening characteristics to better assure suitability of P/N 1006310 transistors for certain tight applications; eliminated of DSKY 28 V Regulator, and reduced value of R 43 from 5.1 K to 2.2 K ohms.</p> <p><u>ECP's 501 and 505</u> — Change of several modules via implementation of Flight Processing Specification ND 1002313 for transistors, P/N 1006323 (ECP 501), and ND 1002314 for diodes, and new diode P/N 1006399 (ECP 505). ECP 505 also includes replacement of P/N 1006751 diodes with P/N 1006399 because of channeling and surface instabilities.</p> <p><u>ECP 511</u> — Replacement of Tray B Assembly, P/N 2003093-011 with -021 configuration. Wiring changes to reduce cross coupling between Rope Inhibit wires and logic signal SCAFAL.</p> <p><u>ECP 518</u> — Tied 28 V ground to Power Supply Module header to reduce noise on 28 V COM line. Added circuit elements R48, R49, R50, C25, Q17 to Standby circuitry to obtain signal delays. Changed Power Supply Module P/N from 2003887 to 2003892-011.</p> <p><u>ECP 564</u> — Implementation of flight processing specifications — ND 1002358B — for logic integrated circuits, 1006321, 1006394. Only partially incorporated per waiver C-1089.</p> <p><u>ECP 604</u> — Incorporation of vibration damping paid in area of erasable memory module.</p> <p><u>ECP 719</u> — Changed the alarm module V-Fail level from 28 Vdc to 20 Vdc through nominal selection of resistor R3, P/N 1006750.</p>	<p><u>ECP 452</u> — Qualified by similarity.</p> <p><u>ECP 474</u> — Qualified by evaluation test.</p> <p><u>ECP 483</u> — Diode, P/N 1008815 qualified at part level by evaluation test.</p> <p><u>ECP 485</u> — Qualified by similarity.</p> <p><u>ECP 501/505</u> — Qualified by part test.</p> <p><u>ECP 511</u> — Qualified by evaluation test.</p> <p><u>ECP 518</u> — Qualified by evaluation test.</p> <p><u>ECP 564</u> — Qualified by part test.</p> <p><u>ECP 604</u> — Qualified by test, AP-M-20010-N3323.</p> <p><u>ECP 719</u> — Qualified by similarity. Flight item qualified by test and by similarity to qualification item.</p>
<p>ASTROSEXTANT PASSIVE THERMAL PROTECTION SYSTEM (APTPS)</p> <p>Qualification Item: P/N 1021373-051</p> <p>Flight Item: P/N 1021373-051</p>	<p>There are no configuration differences between qualification item and flight item.</p> <p>External dust covers qualified as part of the APTPS.</p>	<p>AP-M-17481-N1444. Flight item qualified by test.</p>

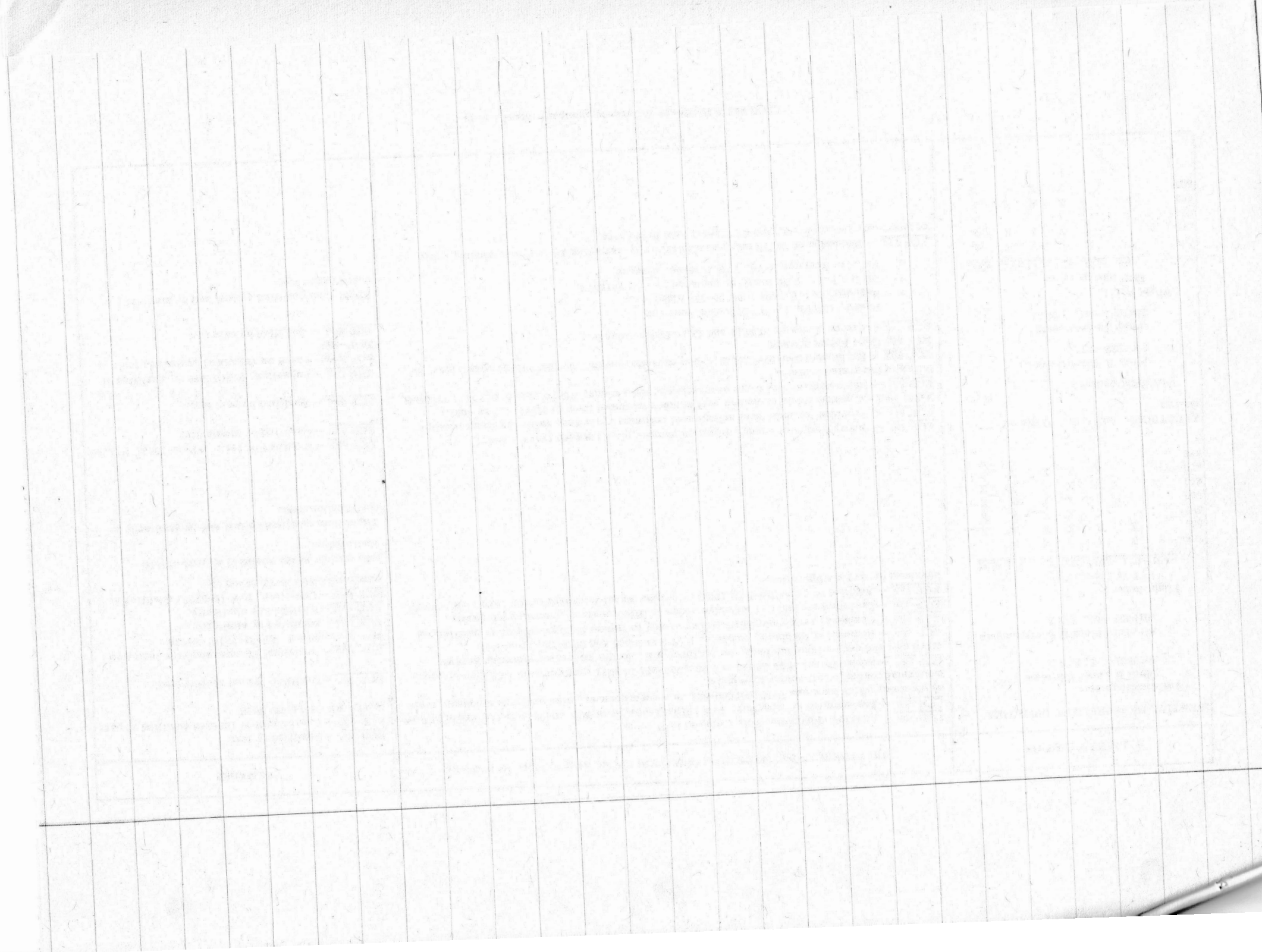
ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS
DISPLAY AND KEYBOARD (DSKY)	<u>ECP 419 and 493</u> - Replacement of IDM modules, P/N 2003950-021, with -031 configuration, which incorporates P/N 1005001-2 and P/N 1005003-2 Filters Relays, and change of resistors R13 and R17.	<u>ECP 419</u> - Qualified by test. Change was incorporated in Qualification Item via Raytheon Waiver C-888.
Qualification Item:		
2003950-011, S/N 30	<u>ECP 476</u> - Change Alarm Indicator Module, P/N 1006387-001 to -002, application of light diffusing paint to alarm indicator face to prevent outgassing.	<u>ECP 476</u> - Qualified by evaluation test.
Flight Items:		
ECP Incorporation	<u>ECP 479</u> - Application of polytetrafluoroethylene coating to shaft of DSKY Pushbutton Switch Assembly.	<u>ECP 479</u> - Qualified by evaluation test.
2003950	<u>ECP 494</u> - Replacement of Front Housing Assembly, P/N 2003885-011, with P/N 2003949-021, product improvement change for ease of manufacturing.	<u>ECP 494</u> - Qualified by similarity.
2003994	<u>ECP's 501 and 505</u> - Change of several modules via implementation of Flight Processing Specification ND 1002313 for transistors, P/N 1006323 (ECP 501), and ND 1002314 for diodes, and new diode P/N 1006399 (ECP 505). ECP 505 also includes replacement of P/N 1006751 diodes with P/N 1006399 because of channeling and surface instabilities.	<u>ECP 501/505</u> - Qualified by part test.
-011		
-011		
-021		
-031		
-041		
-051		
419	X X X X X	
476	X X X X X	
479	X X X X X	
493	X X X X X	
494	X X X X X	
501	X X X X X	<u>ECP 504</u> - Implementation of FPS ND 1002341 for P/N's 1005001 and 1005003 relays.
504	X X X X X	<u>ECP 641</u> - Incorporation of aluminum pushbutton caps, glass overlays of Indicator Alarm Face (Fire Fix).
505	X X X X X	<u>ECP 641</u> - Qualified by test. AP-M-19631-N3162.
641	X X X X X	<u>ECP 673</u> - Incorporation of redesigned leaf spring in pushbutton cap housings.
673	X X X X X	<u>ECP 735</u> - Incorporates safety glass over I/L and E/L panels.
735	X X X X X	<u>ECP 739</u> - Incorporates additional legends in I/L panel.
739	X X X X X	<u>ECP 768</u> - Incorporates design change to increase safety margin of E/L displays.
768	X X X X X	Flight item is qualified by test and by similarity to qualification item.

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<p>PIPA ELECTRONICS ASSEMBLY (PEA)</p> <p>Qualification Item: 2007201-021, S/N 3</p> <p>Flight Item: ECP Incorporation</p> <table border="0"> <tr> <td></td> <td><u>-021</u></td> <td><u>-031</u></td> <td></td> </tr> <tr> <td>620</td> <td></td> <td></td> <td>X</td> </tr> </table>		<u>-021</u>	<u>-031</u>		620			X	<p><u>ECP 620</u> — Application of foil over exposed connector surfaces.</p>	<p><u>ECP 620</u> — Flammability test. AP-M-18508. Flight item qualified by test.</p>																											
	<u>-021</u>	<u>-031</u>																																			
620			X																																		
<p>POWER AND SERVO ASSEMBLY (PSA)</p> <p>Qualification Item: Humidity, 2007200-111, S/N 3 EMI, 2007200-081</p> <p>All other environments, 2007200-061, S/N 3</p> <p>Flight Item: ECP incorporation</p> <table border="0"> <tr> <td></td> <td><u>-061</u></td> <td><u>-081</u></td> <td><u>-111</u></td> <td><u>-151</u></td> </tr> <tr> <td>248</td> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>461</td> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>529</td> <td></td> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>572</td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>590</td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>621</td> <td></td> <td></td> <td></td> <td>X</td> </tr> </table>		<u>-061</u>	<u>-081</u>	<u>-111</u>	<u>-151</u>	248		X	X	X	461		X	X	X	529			X	X	572				X	590				X	621				X	<p><u>ECP 248</u> — Replacement of Pulse Torque Power Amplifier, P/N 2007106, with redesigned P/N 2007166.</p> <p><u>ECP 461</u> — Modification of module 2007114 to -021 configuration; two P/N 1010392 diodes replaced by two P/N 1010370 devices.</p> <p><u>ECP 529</u> — Application of RTV 102 or RTV 109 about periphery of connector plates. Application of DC-4 grease about periphery and on top surface of connector arrays. Holes filled with RTV-11 moisture proofing.</p> <p><u>ECP 572</u> — Redesign of connector gaskets for enhanced sealing capability.</p> <p><u>ECP 590</u> — Removal of anticreep module, 2007124.</p> <p><u>ECP 621</u> — Application of foil over exposed connector encapsulant surfaces.</p>	<p><u>ECP 248</u> — Qualified by test. AP-M-16443-N1072, AP-M-17524-N1457.</p> <p><u>ECP 461</u> — Diode P/N 1010370 qualified at part level. AP-M-10815.</p> <p><u>ECP 529</u> — Qualified by test. AP-M-16443-N1072.</p> <p><u>ECP 572</u> — Qualified by similarity.</p> <p><u>ECP 590</u> — Qualified by similarity.</p> <p><u>ECP 621</u> — Qualified by Flammability test. AP-M-18508. Flight item qualified by test and by similarity to qualification item.</p>
	<u>-061</u>	<u>-081</u>	<u>-111</u>	<u>-151</u>																																	
248		X	X	X																																	
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<p>GUIDANCE AND NAVIGATION INDICATOR CONTROL (GNIC)</p> <p>Qualification Item: Vibration, EMI, ELS, 2014578-021, S/N 4</p> <p>All other environments, 2014578-011, S/N 4</p> <p>Flight Item: ECP Incorporation 20144578 2021290</p> <table border="1" data-bbox="241 609 638 820"> <thead> <tr> <th></th> <th>-011</th> <th>-021</th> <th>-031</th> <th>-011</th> <th>-021</th> <th>-031</th> <th>-041</th> </tr> </thead> <tbody> <tr> <td>457</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>538</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>569 (a)</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>569 (b)</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>569 R 1</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>725</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>746</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>754</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		-011	-021	-031	-011	-021	-031	-041	457	X	X	X	X	X	X	X	538		X	X	X	X	X	X	569 (a)			X	X	X	X	X	569 (b)					X	X		569 R 1				X	X	X		725							X	746								754								<p><u>ECP 457</u> — Addition of protective coverings for panel switches to exclude foreign particles from switch mechanisms.</p> <p><u>ECP 538</u> — Replacement of reticle brightness potentiometer, P/N 1010916, with counterpart 1008932-1.</p> <p><u>ECP 569</u> —</p> <ol style="list-style-type: none"> 1. Panel redesign — flammability changes, EL lamps, and so on. 2. Star tracking circuitry. 3. R1, panel engraving filled in. <p><u>ECP 725</u> — Addition of Placards containing verb/noun and star data information.</p> <p><u>ECP 746</u> — Replacement of antirattle springs in Master Alarm Switch.</p> <p><u>ECP 754</u> — Provides for addition of interchangeable Verb/Noun lists.</p>	<p><u>ECP 457</u> — Qualified by test. AP-M-18626-N1841.</p> <p><u>ECP 538</u> — Qualified by test. AP-M-18626-N1841.</p> <p><u>ECP 569</u> — Qualified by test. Report EP8101.</p> <p><u>ECP 725</u> — Qualified by similarity.</p> <p><u>ECP 746</u> — Qualified by similarity.</p> <p><u>ECP 754</u> — Qualified by evaluation test.</p> <p>Flight item qualified by test and by similarity to qualification item.</p>
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<p>SIGNAL CONDITIONER ASSEMBLY (SCA)</p> <p>Qualification Item: 2007235-011, S/N 1</p> <p>Flight Item: ECP incorporation 2007234 or 2007235</p> <table border="1" data-bbox="241 1015 515 1063"> <thead> <tr> <th></th> <th>-011</th> <th>-021</th> </tr> </thead> <tbody> <tr> <td>623</td> <td></td> <td>X</td> </tr> </tbody> </table>		-011	-021	623		X	<p>Operational Signal Conditioner P/N 2007234-011, differs from flight qualification configuration, P/N 2007235-011, only in PIPA supply module, P/N 2007244-011, which differs from its flight qualification counterpart (P/N 2007241-011) in that transformer, P/N 1010324, has replaced P/N 1010274 in one circuit position. The operational PIPA supply module eliminates IRIG temperature telemetry circuitry.</p> <p><u>ECP 623</u> — Incorporates wrapping of harness wires with aluminum tape.</p>	<p><u>ECP 623</u> — Flammability test. AP-M-18508.</p> <p>Flight item qualified by test and by similarity to qualification item.</p>																																																																		
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<p>OPTICAL UNIT ASSEMBLY (OUA)</p> <p>Qualification Item: Thermal Vacuum, 2011000-061, S/N 23 Vibration Shock, 2011000-011, S/N 6 All other environments, 2011000-031, S/N 14</p> <p>Flight Item: ECP incorporation</p> <table border="1" data-bbox="241 633 571 803"> <thead> <tr> <th></th> <th>-011</th> <th>-031</th> <th>-061</th> <th>-071</th> <th>-081</th> </tr> </thead> <tbody> <tr> <td>318</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>453</td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>475</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>507</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>590</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>724</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> </tbody> </table>		-011	-031	-061	-071	-081	318			X	X	X	453	X		X	X	X	475			X	X	X	507			X	X	X	590				X	X	724					X	<p><u>ECP 318</u> - Provision of corrosion protection. <u>ECP 453</u> - Incorporation of two beryllium wedges in optical unit subassembly, P/N 2012736, to preclude SXT head shift. <u>ECP 475</u> - Provides lead-in chamfer for panel, P/N 2012728, and new spring and spacer, P/N's 2012759 and 2012752 respectively, to minimize particle creation and accumulation. <u>ECP 507</u> - Provides for utilization of P/N 1012156 - four motor tachometers in shaft and trunnion drive applications. <u>ECP 590</u> - Provides a trunnion hesitation spring. <u>ECP 724</u> - Contains improved trunnion gear box with selected parts in stop mechanism.</p>	<p><u>ECP's 318, 453, 475, 507</u> - Qualified by test. AP-M-15854-N902.</p> <p><u>ECP 590</u> - Qualified by evaluation test. <u>ECP 724</u> - Qualified by evaluation test. Flight item is qualified by test.</p>
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<p>NAVIGATION BASE ASSEMBLY</p> <p>Qualification Item: 2899982-021, S/N 2</p> <p>Flight Item: ECP incorporation</p> <table border="1" data-bbox="241 982 504 1031"> <thead> <tr> <th></th> <th>-021</th> <th>-031</th> <th>-041</th> </tr> </thead> <tbody> <tr> <td>630</td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>		-021	-031	-041	630	X	X		<p><u>ECP 630</u> - Application of metallic sealing discs over mold material in inlets.</p>	<p><u>ECP 630</u> - Qualified by similarity. Flight item is qualified by similarity to qualification item.</p>																																		
	-021	-031	-041																																									
630	X	X																																										
<p>INTERCONNECT HARNESS GROUP (ICH)</p> <p>Qualification Item: 2014567-031, S/N 3</p> <p>Flight Item: ECP incorporation</p> <table border="1" data-bbox="241 1185 504 1307"> <thead> <tr> <th></th> <th>-031</th> <th>-061</th> <th>-071</th> </tr> </thead> <tbody> <tr> <td>529</td> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>551</td> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>627</td> <td>X</td> <td></td> <td>X</td> </tr> <tr> <td>667</td> <td></td> <td></td> <td>X</td> </tr> </tbody> </table>		-031	-061	-071	529		X	X	551		X	X	627	X		X	667			X	<p><u>ECP 529</u> - Provides for replacement of jacking screws on National connectors. <u>ECP 551</u> - Provides for replacement of Nylon lacing tape. <u>ECP 627</u> - Wrapping with aluminum tape; lacing with Bentley Harris tape STFE-40B (fire-proofing). <u>ECP 667</u> - Addition of VHF ranging signals.</p>	<p><u>ECP 529</u> - Qualified by test. AP-M-16443-N1072. <u>ECP 551</u> - Qualified by similarity. <u>ECP 627</u> - Qualified by test. AP-M-18508.</p> <p><u>ECP 667</u> - Qualified by similarity. Flight item qualified by test and by similarity to qualification item.</p>																						
	-031	-061	-071																																									
529		X	X																																									
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627	X		X																																									
667			X																																									

ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS
<p>OPTICS SHROUD ASSEMBLY</p> <p>Qualification Item: P/N 2021394-011</p> <p>Flight Item: P/N 2021394-011</p>	<p>There are no configuration differences between qualification item and flight item.</p>	<p>Flight item qualified by test. AP-M-18321-N1713.</p>
<p>RANGEFINDER</p> <p>Qualification Item: P/N 2013250, S/N 2</p> <p>Flight Item: P/N 2013250</p>	<p><u>ECP 764</u> — Provides for addition of a Rangefinder to Apollo G & N System. There are no configuration differences between qualification item and flight item.</p>	<p>Flight item qualified by test.</p>
<p>EYEPIECE STORAGE UNIT (ESU)</p> <p>Qualification Item: P/N 2021382-021, S/N AC-3</p> <p>Flight Item: P/N 2021382-021</p>	<p>There are no differences between qualification item and flight item. Eyepieces qualified as part of ESU with exception of <u>ECP 753</u> — Addition of steel inserts to SXT Mirror Housing.</p> <p>Eyepiece dust covers qualified by test, in conjunction with the ESU/eyepiece qualification test. Report TR-1521.</p>	<p>Flight item qualified by test. AP-M-19332-N3039. Flight items qualified by test and by similarity to qualification item. AP-M-19332-N3039</p>
<p>COMPUTER FIXED MEMORY MODULE</p> <p>Qualification Item: P/N 2003960, S/N 30, 37 P/N 186962, S/N's 1, 5, 6, 7</p> <p>Flight Item: P/N 2003972</p>	<p>Difference between 2003960 and 2003972 is type of software program. Difference between 186962 and 2003972 is type of software program, plus 186962 configuration does not contain Silastic protection around diodes. <u>ECP 766</u> — Provides a vacuum screen for all flight ropes.</p>	<p>Flight item qualified by test. AP-M-17235-N1361.</p>



ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS																																																	
<p>INERTIAL MEASUREMENT UNIT (IMU)</p> <p>Qualification Item: Block II Level Vibration, 2018601-071, S/N 3</p> <p>All other Block II Environments, 2018601-051, S/N 3</p> <p>Flight Item: ECP Incorporation <u>-051 -071 -191 -201 -211 -221 -231</u></p> <table border="0"> <tr><td>306</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td></tr> <tr><td>500</td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>587</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>605</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>653</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>678</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>688</td><td></td><td></td><td></td><td></td><td>X</td><td>X</td></tr> </table>	306	X	X	X	X	X		500		X	X	X	X	X	587			X	X	X	X	605			X	X	X	X	653			X	X	X	X	678			X	X	X	X	688					X	X	<p><u>ECP 306</u> — Addition of harness cable clamp to IMU cover.</p> <p><u>ECP 500</u> — Replacement of capacitor, P/N 1010317-001, with P/N 1008848 in PIP preamplifier application, which becomes P/N 2007060-021 as a consequence. Also provides for epoxy resin conformal coating on all solder terminals.</p> <p><u>ECP 587</u> — Advancement of 25 IRIG from 2021500-051 to -071 configuration. Change incorporates new end cap — aluminum base, turret terminals, longer connector mounting screws.</p> <p><u>ECP 605</u> — Removal of insulating blankets, P/N's 2018805 and 2018806, from IMU.</p> <p><u>ECP 653</u> — Change of stable member harness wiring to reduce IRIG preamplifier oscillations.</p> <p><u>ECP 678</u> — Lockwashers and C-7 adhesive added to IRIG connector mounting hardware.</p> <p><u>ECP 688</u> — Addition of capacitor P/N 1006777 across signal microsyn output terminals. IRIG's advanced to -111 configuration.</p>	<p><u>ECP 306</u> — Qualified by test.</p> <p><u>ECP 500</u> — Capacitor P/N 1008848 qualified at part level. AP-M-14177-N426.</p> <p><u>ECP 587</u> — Qualified by test at IRIG level.</p> <p><u>ECP 605</u> — Analytical thermal analysis indicated test not required. AP-M-17974-N1596.</p> <p><u>ECP 653</u> — Qualified by similarity.</p> <p><u>ECP 678</u> — Qualified by similarity.</p> <p><u>ECP 688</u> — Capacitor, P/N 1006777, qualified at part level. AP-M-13039-N186.</p> <p>IMU coolant hoses qualified as part of IMU qualification.</p> <p>Flight item qualified by test and by similarity to qualification item.</p>
306	X	X	X	X	X																																														
500		X	X	X	X	X																																													
587			X	X	X	X																																													
605			X	X	X	X																																													
653			X	X	X	X																																													
678			X	X	X	X																																													
688					X	X																																													
<p>ELECTRONIC DATA COUPLING UNIT (ECDU)</p> <p>Qualification Item: Block II Vibration only, 2007222-121</p> <p>Other Environments, 2007222-081, S/N 19</p> <p>Flight Item: ECP Incorporation <u>-081 -121 -181 -191 -221 -231</u></p> <table border="0"> <tr><td>499</td><td></td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>515</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>564</td><td></td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td>603</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>609</td><td></td><td></td><td>X</td><td>X</td><td>X</td><td>X</td></tr> </table>	499		X	X	X	X	X	515			X	X	X	X	564						X	603			X	X	X	X	609			X	X	X	X	<p><u>ECP 499</u> — Incorporation of module vibration damper plate between trays S and X.</p> <p><u>ECP 515</u> — Provides for individual selection of optimum resistance value in circuit position R-73, system coarse module; module part number advanced from 2007236-011 to -031.</p> <p><u>ECP 564</u> — Implementation of flight processing specifications, ND 1002359A and ND 1002358B, for logic integrated circuits.</p> <p><u>ECP 603</u> — Replacement of P/N 1010317-004 capacitors with P/N 1008900-24 counterpart in MSA and Quad Reject Module.</p> <p><u>ECP 609</u> — Circuit redesign of MSA and Quad Reject Module.</p> <ol style="list-style-type: none"> Diodes, CR 10, 11; P/N 1010385 removed. Resistor, R 140; P/N 1006750-12 added. Diode CR 13, P/N 1008815, replaced by P/N 1010372. Value of Resistor R-76, P/N 1006750, changed. <p><u>ECP 714</u> — Reduction of ECDU noise susceptibility by rerouting 1× resolver winding, read counter logic interconnect, and CDU reset lead in headers.</p>	<p><u>ECP 499</u> — Qualified by test. AP-M-16622-N1120.</p> <p><u>ECP 515</u> — Qualified by similarity.</p> <p><u>ECP 564</u> — Qualified by part test.</p> <p><u>ECP 603</u> — Capacitor, P/N 1008900, qualified at part level, based on results of evaluation test, 20-P-400.</p> <p><u>ECP 609</u> — Qualified by part test.</p> <p>Flight item qualified by test and by similarity to qualification item.</p>														
499		X	X	X	X	X																																													
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ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS
<p>GUIDANCE COMPUTER (LGC)</p> <p>Qualification Item: 2003200-021, S/N RAY 16 (C1)</p> <p>Flight Item: ECP Incorporation 2003200 2003993 -021 -011 -021 -031 -041 -051 -061</p> <p>452 X X X X X X 474 X X X X X X 483 485 X X X X X X 501/505 X X X X X X 511 X X X X X X 518 X X X X X X 564 X X 604 X X X X 719 X X</p>	<p><u>ECP 452</u> - Replacement of Tray A Assembly, P/N 2003092-011, with -031 configuration. Wiring changes to permit operation with Auxiliary Computer Memory (ACM) and reduce noise signals.</p> <p><u>ECP 474</u> - Replacement of Test Connector Cover, P/N 2004115, with 2003099-011. New connector eliminates noise problems when GSE is not connected to the AGC.</p> <p><u>ECP 483</u> - Replacement of R36 with a P/N 1008815 Zener diode to preclude induced breakdown of sense amplifier devices. P/N 2003981 and 2003992-021 changed to -031.</p> <p><u>ECP 485</u> - Replacement of Power Supply Module, P/N 2008953-011, with P/N 2003887-011 configuration. Modified screening characteristics to better assure suitability of P/N 1006310 transistors for certain tight applications; eliminated of DSKY 28 V Regulator, and reduced value of R 43 from 5.1 K to 2.2 K ohms.</p> <p><u>ECP's 501 and 505</u> - Change of several modules via implementation of Flight Processing Specification ND 1002313 for transistors, P/N 1006323 (ECP 501), and ND 1002314 for diodes, and new diode P/N 1006399 (ECP 505). ECP 505 also includes replacement of P/N 1006751 diodes with P/N 1006399 because of channeling and surface instabilities.</p> <p><u>ECP 511</u> - Replacement of Tray B Assembly, P/N 2003093-011 with -021 configuration. Wiring changes to reduce cross coupling between Rope Inhibit wires and logic signal SCAFAL.</p> <p><u>ECP 518</u> - Tied 28 V ground to Power Supply Module header to reduce noise on 28 V COM line. Added circuit elements R48, R49, R50, C25, Q17 to Standby circuitry to obtain signal delays. Changed Power Supply Module P/N from 2003887 to 2003892-011.</p> <p><u>ECP 564</u> - Implementation of flight processing specifications - ND 1002358B - for logic integrated circuits, 1006321, 1006394. Only partially incorporated per waiver C-1089.</p> <p><u>ECP 604</u> - Incorporation of vibration damping paid in area of erasable memory module.</p> <p><u>ECP 719</u> - Changed the alarm module V-Fail level from 28 Vdc to 20 Vdc through nominal selection of resistor R3, P/N 1006750.</p>	<p><u>ECP 452</u> - Qualified by similarity.</p> <p><u>ECP 474</u> - Qualified by evaluation test.</p> <p><u>ECP 483</u> - Diode, P/N 1008815 qualified at part level by evaluation test.</p> <p><u>ECP 485</u> - Qualified by similarity.</p> <p><u>ECP 501/505</u> - Qualified by part test.</p> <p><u>ECP 511</u> - Qualified by evaluation test.</p> <p><u>ECP 518</u> - Qualified by evaluation test.</p> <p><u>ECP 564</u> - Qualified by part test.</p> <p><u>ECP 604</u> - Qualified by test. AP-M-20010-N3323.</p> <p><u>ECP 719</u> - Qualified by similarity. Flight item qualified by test and by similarity to qualification item.</p>

ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS
<p>DISPLAY AND KEYBOARD (DSKY)</p> <p>Qualification Item: 2003950-011, S/N 30</p> <p>Flight Items: ECP Incorporation 2003950 2003994 -011 -011 -021 -031 -041 -051</p> <p>419 X X X X 476 X X X X 479 X X X X 493 X X X X 494 X X X X 501 X X X X 504 X X X X 505 X X X X 641 X X 673 X X 735 X X 739 768</p>	<p><u>ECP 419 and 493</u> - Replacement of IDM modules, P/N 2003950-021, with -031 configuration, which incorporates P/N 1005001-2 and P/N 1005003-2 Filters Relays, and change of resistors R13 and R17.</p> <p><u>ECP 476</u> - Change Alarm Indicator Module, P/N 1006387-001 to -002, application of light diffusing paint to alarm indicator face to prevent outgassing.</p> <p><u>ECP 479</u> - Application of polytetrafluoroethylene coating to shaft of DSKY Pushbutton Switch Assembly.</p> <p><u>ECP 494</u> - Replacement of Front Housing Assembly, P/N 2003885-011, with P/N 2003949-021, product improvement change for ease of manufacturing.</p> <p><u>ECP's 501 and 505</u> - Change of several modules via implementation of Flight Processing Specification ND 1002313 for transistors, P/N 1006323 (ECP 501), and ND 1002314 for diodes, and new diode P/N 1006399 (ECP 505). ECP 505 also includes replacement of P/N 1006751 diodes with P/N 1006399 because of channeling and surface instabilities.</p> <p><u>ECP 504</u> - Implementation of FPS ND 1002341 for P/N's 1005001 and 1005003 relays.</p> <p><u>ECP 641</u> - Incorporation of aluminum pushbutton caps, glass overlays of Indicator Alarm Face (Fire Fix).</p> <p><u>ECP 673</u> - Incorporation of redesigned leaf spring in pushbutton cap housings.</p> <p><u>ECP 735</u> - Incorporates safety glass over I/L and E/L panels.</p> <p><u>ECP 739</u> - Incorporates additional legends in I/L panel.</p> <p><u>ECP 768</u> - Incorporates design change to increase safety margin of E/L displays.</p>	<p><u>ECP 491</u> - Qualified by test. Change was incorporated in Qualification Item via Raytheon Waiver C-888.</p> <p><u>ECP 476</u> - Qualified by evaluation test.</p> <p><u>ECP 479</u> - Qualified by evaluation test.</p> <p><u>ECP 494</u> - Qualified by similarity.</p> <p><u>ECP 501/505</u> - Qualified by part test.</p> <p><u>ECP 504</u> - Qualified by similarity.</p> <p><u>ECP 641</u> - Qualified by test. AP-M-19631-N3162.</p> <p><u>ECP 673</u> - Qualified by test. AP-M-19631-N3162.</p> <p><u>ECP 735</u> - Qualified by test. AP-M-19631-N3162.</p> <p><u>ECP 739</u> - Qualified by similarity.</p> <p><u>ECP 768</u> - Qualified by test.</p> <p>Flight item is qualified by test and by similarity to qualification item.</p>
<p>2003994 (Cont)</p> <p>-061 -071 -081 -091 -111 -121</p> <p>419 X X X X X X 476 X X X X X X 479 X X X X X X 493 X X X X X X 494 X X X X X X 501 X X X X X X 504 X X X X X X 505 X X X X X X 641 X X X 673 X X X 735 X X X X X X 739 X X X X X X 768 X X X X</p>		

ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS															
<p>POWER AND SERVO ASSEMBLY (PSA)</p> <p>Qualification Item: P/N 6007200-041, S/N 4</p> <p>Flight Item: ECP incorporation</p> <table border="0"> <tr> <td></td> <td><u>-041</u></td> <td><u>-081</u></td> </tr> <tr> <td>461</td> <td></td> <td>X</td> </tr> <tr> <td>622</td> <td></td> <td>X</td> </tr> <tr> <td>757</td> <td></td> <td>X</td> </tr> </table>		<u>-041</u>	<u>-081</u>	461		X	622		X	757		X	<p><u>ECP 461</u> - Replacement of gimbal servo out-of-limits and lock warning module, P/N 2007114-011, with -021 configuration, which contains two P/N 1010370 diodes in place of two P/N 1010392 diodes.</p> <p><u>ECP 622</u> - Application of aluminum foil to exposed encapsulant surfaces.</p> <p><u>ECP 757</u> - Incorporated circuit change to provide for translunar bus isolation.</p>	<p><u>ECP 461</u> - Diode P/N 1010370 qualified at part level. AP-M-10815.</p> <p><u>ECP 622</u> - Flammability test. AP-M-18508.</p> <p><u>ECP 757</u> - Qualified by evaluation test. Flight item qualified by test.</p>			
	<u>-041</u>	<u>-081</u>															
461		X															
622		X															
757		X															
<p>COMPUTER CONTROL AND RETICLE DIMMER (CCRD)</p> <p>Qualification Item: P/N 6014512-011, S/N 6</p> <p>Flight Item: ECP incorporation</p> <table border="0"> <tr> <td></td> <td><u>-011</u></td> <td><u>-081</u></td> </tr> <tr> <td>422</td> <td></td> <td>X</td> </tr> <tr> <td>538</td> <td></td> <td>X</td> </tr> <tr> <td>594</td> <td></td> <td>X</td> </tr> <tr> <td>594R1</td> <td></td> <td>X</td> </tr> </table>		<u>-011</u>	<u>-081</u>	422		X	538		X	594		X	594R1		X	<p><u>ECP 422</u> - CCRD mounting changed from AOT assembly to AOT guard assembly, heater pad modified, and wiring added.</p> <p><u>ECP 538</u> - Replacement of reticle brightness potentiometer, P/N 1010916-1 with P/N 1008932-1.</p> <p><u>ECP 594</u> - Replaced plastic overlays of E/L's to aluminum, P/N 1008943/44, replaced existing harness lacing tape with P/N 1008936, and added aluminum tape, P/N 1008937, over exposed polyurethane potting material.</p> <p><u>ECP 594R1</u> - Readout characters on illuminated panels are filled in for better legibility.</p>	<p><u>ECP 422</u> - Qualification test completed with CCRD mounted in a more severe orientation.</p> <p><u>ECP 538</u> - Qualified by Evaluation test. 26-P-391</p> <p><u>ECP 594</u> - Flammability test. AP-M-18508.</p> <p><u>ECP 594R1</u> - Qualified by similarity. Flight item qualified by test and by similarity to qualification item.</p>
	<u>-011</u>	<u>-081</u>															
422		X															
538		X															
594		X															
594R1		X															
<p>SIGNAL CONDITIONER ASSEMBLY (SCA)</p> <p>Qualification Item: P/N 6007010-011, S/N 2</p> <p>Flight Item: ECP incorporation 6007010 or 6007013</p> <table border="0"> <tr> <td></td> <td><u>-011</u></td> <td><u>-021</u></td> </tr> <tr> <td>624</td> <td></td> <td>X</td> </tr> </table>		<u>-011</u>	<u>-021</u>	624		X	<p><u>ECP 624</u> - Application of aluminum foil tape on three sides of header heatsink interface. Operational Signal Conditioner, P/N 6007013, differs from flight qualification configuration, P/N 6007010, in that the IRIG temperature telemetry circuitry is eliminated in P/N 6007013.</p>	<p><u>ECP 624</u> - Flammability test. AP-M-18508. Flight item qualified by test and by similarity qualification item.</p>									
	<u>-011</u>	<u>-021</u>															
624		X															

ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS																																																
<p>ALIGNMENT OPTICAL TELESCOPE (AOT)</p> <p>Qualification Item: P/N 6011000-031, S/N 10</p> <p>Requalification Item for ECP's 421, 539, 540, 542, and 543: P/N 6011000-032, S/N 10</p> <p>Flight Item: ECP Incorporation</p> <table border="1" data-bbox="293 574 562 760"> <thead> <tr> <th></th> <th>-031/032</th> <th>-074</th> <th>-111</th> </tr> </thead> <tbody> <tr><td>410</td><td></td><td>X</td><td>X</td></tr> <tr><td>422</td><td></td><td>X</td><td>X</td></tr> <tr><td>473</td><td></td><td>X</td><td>X</td></tr> <tr><td>487</td><td></td><td>X</td><td>X</td></tr> <tr><td>633</td><td>X</td><td></td><td>X</td></tr> <tr><td>657</td><td></td><td>X</td><td>X</td></tr> <tr><td>697</td><td></td><td>X</td><td>X</td></tr> </tbody> </table>		-031/032	-074	-111	410		X	X	422		X	X	473		X	X	487		X	X	633	X		X	657		X	X	697		X	X	<p><u>ECP 410</u> - Repositioning of eyepiece locking lever to shift arc of operation 180 degrees. <u>ECP 422</u> - Change of CCRD mounting from AOT Assembly to AOT Guard Assembly. <u>ECP 473</u> - Addition of shield to prism head end to eliminate light scatter from radar mount. <u>ECP 487</u> - Incorporation of air focus test requirements into AOT procurement specification. <u>ECP 633</u> - Spacecraft seal protection. Removed polyurethane foam heater insulators and replaced with metallic cover, replaced existing lacing tape with P/N 1008936 lacing tape, and added aluminum foil tape over exposed potting harness connectors. <u>ECP 657</u> - Incorporation of conical sunshade and radar shield assembly. <u>ECP 697</u> - Addition of AOT harness protective shield.</p> <p>AOT High Density Filter Assembly, P/N 6011856, qualified by similarity to SXT Filter, P/N 1011931, which was qualified as part of the Eyepiece Storage Unit.</p>	<p><u>ECP 410</u> - Qualified by similarity. <u>ECP 422</u> - Qualification test completed with CCRD mounted in a more severe orientation. <u>ECP 473</u> - Qualified by similarity. <u>ECP 487</u> - Qualified by similarity. <u>ECP 633</u> - Qualified by test. AP-M-17879-N1568. <u>ECP 657</u> - Qualified by test. AP-M-19614-N3156. <u>ECP 697</u> - Qualified by similarity. Flight item qualified by test and by similarity to qualification item.</p>																
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657		X	X																																															
697		X	X																																															
<p>INTERCONNECT HARNESS GROUP</p> <p>Qualification Item: P/N 6014515-021, S/N3 Harness Group P/N 6010659, S/N 3 A-Harness P/N 6010660, S/N 3 B-Harness</p> <p>Flight Item: ECP incorporation</p> <table border="1" data-bbox="248 997 683 1138"> <thead> <tr> <th></th> <th>-021</th> <th>-031</th> <th>-041</th> <th>-051</th> <th>-061</th> <th>-071</th> <th>-081</th> </tr> </thead> <tbody> <tr><td>533</td><td></td><td>X</td><td></td><td>X</td><td>X</td><td></td><td></td></tr> <tr><td>551</td><td></td><td></td><td></td><td></td><td>X</td><td>X</td><td></td></tr> <tr><td>562</td><td></td><td></td><td>X</td><td></td><td></td><td></td><td></td></tr> <tr><td>582</td><td></td><td></td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td>626</td><td></td><td></td><td>X</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		-021	-031	-041	-051	-061	-071	-081	533		X		X	X			551					X	X		562			X					582							X	626			X					<p><u>ECP 533</u> - Incorporates Uplink wiring. <u>ECP 551</u> - Provides for replacement of nylon lacing tape, G & N 607 A-Harness P/N 6010674; B-Harness P/N 6010675, G & N 605-606 A-Harness P/N 6010676; B-Harness P/N 6010675 <u>ECP 562</u> - Provides for replacement of nylon lacing tape, G & N 603 A-Harness P/N 6010672; B-Harness P/N 6010673 <u>ECP 582</u> - Provides for incorporation of flammability fixes in G & N 602 A-Harness P/N 6010677; B-Harness P/N 6010675 <u>ECP 626</u> - Flammability Protection. Replaced existing harness lacing tape with P/N 1008936 Betaglass tape and covered all exposed potting with aluminum tape.</p>	<p><u>ECP 533</u> - Qualified by similarity. <u>ECP 551</u> - Qualified by Flammability test. AP-M-18508. <u>ECP 562</u> - Qualified by Flammability test. AP-M-18508. <u>ECP 582</u> - Qualified by Flammability test. AP-M-18508. <u>ECP 626</u> - Qualified by Flammability test. AP-M-18508. Flight item qualified by test and by similarity to qualification items.</p>
	-021	-031	-041	-051	-061	-071	-081																																											
533		X		X	X																																													
551					X	X																																												
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582							X																																											
626			X																																															

ITEM DESCRIPTION	DIFFERENCES BETWEEN QUALIFICATION ITEMS AND FLIGHT HARDWARE	REMARKS
<p>PULSE TORQUE ASSEMBLY</p> <p>Qualification Item: Acceleration, P/N 6007000-021, S/N 4</p> <p>All other environments, P/N 6007000-041, S/N 4</p> <p>Flight Item: P/N 6007000-041</p>	<p>There are no differences between qualification item and flight item.</p>	<p>Flight item is qualified by test. AP-M-15053-N666 AP-M-15852-N901 AP-M-16461-N1082 AP-M-21686-N3606 NOTE: LM/CM docking shock successfully completed on 1/10/69 per ECP 761.</p>
<p>NAVIGATION BASE</p> <p>Qualification Item: P/N 6899980-011</p> <p>Flight Item: ECP incorporation <u>-011 -021</u></p> <p>359 X 462 X</p>	<p><u>ECP 359</u> - Provides for replacement of IMU mounting bolts. <u>ECP 462</u> - Provides for addition of a ground strap.</p>	<p><u>ECP 359</u> - Qualified by similarity. <u>ECP 462</u> - Qualified by similarity. Flight items qualified by similarity to qualification item.</p>