

## Mission Control Flight Engineer Switch Checklist

Version S2.15

COM	TIME	PROCEDURE	Notes
1	Launch Hold	<p><b>Cryogenic Oxygen System Check</b></p> <ul style="list-style-type: none"> <li>• REACTION VALVE 1 to OPEN</li> <li>• REACTION VALVE 2 to OPEN</li> <li>• REACTION VALVE 3 to OPEN</li> </ul> <p><b>Cryogenic Hydrogen System Check</b></p> <ul style="list-style-type: none"> <li>• REACTION VALVE 1 to OPEN</li> <li>• REACTION VALVE 2 to OPEN</li> <li>• REACTION VALVE 3 to OPEN</li> </ul>	Mission Control works with Flight Engineer to set switches in launch configuration.
2	Launch Hold	<p><b>General Purpose Computer System Check</b></p> <ul style="list-style-type: none"> <li>• GPC 1 to ON</li> <li>• GPC 2 to ON</li> <li>• GPC 3 to ON</li> <li>• GPC 4 to ON</li> <li>• GPC 5 to ON</li> </ul>	
3	Launch Hold	<p><b>AC Power Distribution System Check</b></p> <ul style="list-style-type: none"> <li>• <i>Confirm</i> AC/DC TRANSFER SWITCH to GPC</li> <li>• AC/DC TRANSFER SWITCH to AC</li>   <li>• DISTRIBUTION ASSEMBLY 1 to OPEN</li> <li>• DISTRIBUTION ASSEMBLY 2 to OPEN</li> <li>• DISTRIBUTION ASSEMBLY 3 to CLOSE</li> <li>• POWER CONTROL ASSEMBLY 1 to OPEN</li> <li>• POWER CONTROL ASSEMBLY 2 to OPEN</li> <li>• POWER CONTROL ASSEMBLY 3 to CLOSE</li>   <li>• AC/DC TRANSFER SWITCH to GPC</li> </ul> <p><b>Electrical AC BUS Check</b></p> <ul style="list-style-type: none"> <li>• AC BUS 1 to OPEN</li> <li>• AC BUS 2 to OPEN</li> <li>• AC BUS 3 to CLOSE</li> </ul>	

## Mission Control Flight Engineer Switch Checklist

Version S2.15

4	Launch Hold	<p><b>DC Power Distribution System Check</b></p> <ul style="list-style-type: none"> <li>• <i>Confirm</i> AC/DC TRANSFER SWITCH to GPC</li> <li>• AC/DC TRANSFER SWITCH to DC</li>   <li>• <i>Confirm</i> DISTRIBUTION ASSEMBLY 1 to OPEN</li> <li>• <i>Confirm</i> DISTRIBUTION ASSEMBLY 2 to OPEN</li> <li>• <i>Confirm</i> DISTRIBUTION ASSEMBLY 3 to CLOSE</li> <li>• <i>Confirm</i> POWER CONTROL ASSEMBLY 1 to OPEN</li> <li>• <i>Confirm</i> POWER CONTROL ASSEMBLY 2 to OPEN</li> <li>• <i>Confirm</i> POWER CONTROL ASSEMBLY 3 to CLOSE</li>   <li>• AC/DC TRANSFER SWITCH to GPC</li> </ul> <p><b>Electrical DC BUS Check</b></p> <ul style="list-style-type: none"> <li>• DC BUS 1 to OPEN</li> <li>• DC BUS 2 to OPEN</li> <li>• DC BUS 3 to CLOSE</li> </ul>	<p>Mission Control <u>confirms</u> with Flight Engineer that these switches are properly configured.</p>
5	Launch Hold	<p><b>Reaction Control System</b></p> <p><b>Reaction Control System Isolation Valves – Helium Tank</b></p> <ul style="list-style-type: none"> <li>• PRIMARY REGULATOR A to OPEN</li> <li>• SECONDARY REGULATOR A to OPEN</li> <li>• PRIMARY REGULATOR B to OPEN</li> <li>• SECONDARY REGULATOR B to OPEN</li> </ul> <p><b>Reaction Control System Isolation Valves – Oxygen Tank</b></p> <ul style="list-style-type: none"> <li>• OXYGEN OUTPUT TERMINAL to OPEN</li> <li>• ISOLATION VALVE for LEGS 1 and 2 to OPEN</li> <li>• ISOLATION VALVE for LEGS 3,4 and 5 to OPEN</li> <li>• ISOLATION VALVE for MANIFOLD 1 to OPEN</li> <li>• ISOLATION VALVE for MANIFOLD 2 to OPEN</li> <li>• ISOLATION VALVE for MANIFOLD 3 to OPEN</li> <li>• ISOLATION VALVE for MANIFOLD 4 to OPEN</li> <li>• ISOLATION VALVE for MANIFOLD 5 to OPEN</li> </ul>	

**Mission Control**  
**Flight Engineer Switch Checklist**

Version S2.15

6	Launch Hold	<p><b>Orbital Maneuvering System</b></p> <p><b>Oxidizer System Check</b></p> <ul style="list-style-type: none"><li>• OXIDIZER VAPOR ISOLATION VALVE 1 to OPEN</li><li>• OXIDIZER VAPOR ISOLATION VALVE 2 to OPEN</li><li>• OXIDIZER TANK ISOLATION VALVE A to OPEN</li><li>• OXIDIZER TANK ISOLATION VALVE B to OPEN</li><li>• OXIDIZER CROSSFEED VALVE A to OPEN</li><li>• OXIDIZER CROSSFEED VALVE B to OPEN</li></ul> <p><b>Fuel System Check</b></p> <ul style="list-style-type: none"><li>• FUEL TANK ISOLATION VALVE A to OPEN</li><li>• FUEL TANK ISOLATION VALVE B to OPEN</li><li>• FUEL CROSSFEED VALVE A to OPEN</li><li>• FUEL CROSSFEED VALVE B to OPEN</li></ul> <p><b>Gaseous Nitrogen System Check</b></p> <ul style="list-style-type: none"><li>• CONTROL VALVE 1 to OPEN</li><li>• CONTROL VALVE 2 to OPEN</li></ul>	
7	Launch Hold	<p><b>All flight engineer switch panel settings are confirmed.</b></p> <p><b>Enterprise, you are go to initiate the pre-launch checklist</b></p>	<p>Flight Engineer begins "Pre-Launch Checklist"</p>