## PROCUREMENT
### DATA REQUIREMENT DESCRIPTION

<table>
<thead>
<tr>
<th>TITLE</th>
<th>NUMBER</th>
<th>DATE</th>
<th>REVISION</th>
</tr>
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<tbody>
<tr>
<td>PARTS, MATERIALS, AND PROCESSES MANAGEMENT PLAN (PMPMP)</td>
<td>SDRL 106</td>
<td>1/14/09</td>
<td>NEW</td>
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<tr>
<th>SUBMITTAL SCHEDULE</th>
<th>APPROVAL TYPE</th>
<th>REFERENCE DOCUMENTS</th>
</tr>
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<tbody>
<tr>
<td>Initial submittal per contract, updates as required</td>
<td><em>X</em> Product Lead ____ QE Approval: <em>X</em></td>
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<td>Review: ____________</td>
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## DESCRIPTION / PURPOSE

The supplier shall create and deploy a Parts, Materials, and Processes Management Plan (PMPMP). The purpose of the plan is to ensure that the selection and use of parts, devices, materials, and processes meet specified performance requirements, including: quality, reliability, safety, supportability, and configuration management requirements throughout the life cycle of the component or system.

## SCOPE/PREPARATION INSTRUCTIONS

**CONTENT:**

Contractor format acceptable. Electronic submission required.

Document shall be delivered to the Orbital Procurement Agent. Approval shall be in the form of a Contracts Letter from the Orbital Procurement Agent. Verbal approval is inadmissible.

The PMP management plan shall provide specific direction for control, monitoring, and maintenance of parts and materials. The scope of the PMPMP shall include life cycle, part quality, obsolescence, substitute and interchangeable parts/materials issues, and lot screening controls. Included in the PMPMP shall be any program specific prohibited or limited parts and materials. Reference to the supplier’s internal command media documents is acceptable.

The PMPMP shall establish an Electrical, Electronic, and Electromechanical (EEE) parts program to ensure parts are properly selected and derated to address reliability levels, part quality, ESD classification, and moisture sensitivity (as applicable). EEE parts include items such as capacitors, connectors, crystal oscillators, diodes and transistors, fiber optics, filters, fuses, hybrid microcircuits, monolithic microcircuits, magnetics, relays, resistors, thermistors, and wire and cable.
The PMP shall establish guidelines for material selection and use. Specific areas that must be addressed include:

- Out-gassing properties of non-metallic materials (where applicable). This is covered by MSFC HDBK 1676 or 527.
- Basis of material design allowables
- Shelf life limited material controls or limited life materials utilization
- Classification of materials by resistance to Stress Corrosion Cracking per MSFC STD 30029 or MSFC 522 – all Table II and Table III materials require waivers. Use of any precipitation hardenable steel tempers less than H1000 is prohibited.
- General corrosion – steps taken to prevent/minimize corrosion
- Galvanic corrosion – any unprotected dissimilar metal junctions (as defined in Mil-Std-889) require waiver
- Commercial grade materials with no manufacturing traceability are not acceptable for flight hardware.

Any waiver conditions shall be documented and justified. An engineering analysis and request for waiver shall be submitted to Orbital for approval prior to use in qualification hardware.