<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>ROLES/TASKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flight Operations - S/C Engineering, Operations Control, &amp; Scheduling</td>
<td></td>
</tr>
</tbody>
</table>
| **S/C Controllers (New LOCF)** | - Real-time Command and Control of S/C Operations.  
- Generate pass plans based on scheduled activities.  
- Real-time scheduling in form of pass plan changes & schedule additions (affecting a 24 hour period)  
- Constant monitoring of the health and welfare (H&W) of all S/C subsystems and payload sensors.  
- H&W data special processing.  
- Maintain command & control on all GSN interfaces.  
- Maintain an activity log and mission statistics.  
- Establish and maintain data connectivity for data routing from external agencies to the SOC.  
- Generation, checkout and transfer of command loads to the S/C and or Ground Stations for upload.  
- Maintain and distribute a full & detailed status of the S/C configuration on a daily basis.  
- Coordinate transfer of State Vectors to users.  
- Support of Launch and Early Orbit.  
- Interface with all Ground Stations. |
| **S/C Engineering** | - Analyze and maintain the H&W of all S/C subsystems.  
- Maintain configuration control of all S/C subsystems & interfaces.  
- Track & control s/c assets & consumables  
- Maintain Command Management - oversee pass plans, s/c memory uploads, perform files  
- Develop trend analysis tools for the S/C.  
- Coordinate with Orbit/Trajectory Analysis Group on orbit/trajectory changes for Mission reqs, S/C H&W or communications requirements  
- Oversee S/C anomaly resolution activities.  
- Generate and coordinate contingency procedures for use with S/C anomalous conditions.  
- Develop, implement, and update S/C Operational Procedures and Contingency Plans.  
- Generate & modify telemetry limits for all subsystems.  
- Develop & Test Spacecraft Control scenarios on Operational Test Bed (OTB)  
- Develop the Satellite Description Document.  
- Assist in the training of operations personnel. |
| **S/C Planning & Scheduling** | - Coordinate activities with TAMP (Mission Planners & Orbit/Trajectories), S/C Engineering & Operations, Ground Systems, and other external agencies and incorporate into published schedule.  
- Coordinate with DSN & AFSCN Scheduling Offices (e.g. DSN requires 7 days of "keyword files")  
- Develop and distribute weekly a schedule covering at least a two week time period.  
- Schedule & deconflict all external resources (NRL GSN, NASA DSN, AFSCN, etc)  
- Develop and maintain configuration control of Pass Plans.  
- Generate Ground Station visibility in conjunction with the Orbit/Trajectory Analysis Group for planning.  
- Schedule miscellaneous activities including GSN maintenance as it affects mission schedule & software update. |