KSC ISS Logistics Support

Joe Tellado/NASA-KSC Logistics
Multilateral L&MCP
May 13-16, 2014
KSC ISS Logistics Tasks

- Logistics Host Role services for ISS Missions
  - Support HTV/ATV/Russian mission processing for manifested items
  - Commercial Re-Supply Services (CRS) Launches
    - SpaceX (KSC)
    - Orbital Sciences (Wallops Va)
  - Utilization & Life Sciences

- Maintain and manage the ISS inventory per Program requirements.

- Continue to support OEM Closeout on as-directed basis, based on extension of OEMs due to ISS Life Extension.

- Continue the disposition of hardware that is not needed for the ISS Program or any follow on programs

- Continue to provide Depot support to ISS Program as required
KSC ISS IP Logistics Activities

- Late Stow manifesting on Space X 3 mission. (JAXA cable)

- Hosted Wet ACY Hardware TIM with Russian Space Agency to determine KSC host role services & to ultimately transition servicing operations

- Coordinating return & shipment of 2 Life Science Glove Box Racks from Tsukuba, Japan to U.S.
Pressurized ORU/Hardware ConOps Flow

Visiting Vehicles
- HTV
- ATV
- Soyuz
- SpaceX
- Orbital

KSC role:
- Warehouse (stores)
- Shipping to CMC
- Receive hardware from Customer
- Servicing (if required)
- Oversight
- Problem Solving

Space X Late Stow: KSC Receives Customer H/W

KSC receives ORU/HW from stores to 10K for HRFF

10K performs HRFF

ORU requires fluid servicing?

Yes

KSC Performs Servicing

KSC Ships ORU to CMC in Houston

CMC packs ORU/HW, ships directly to Launch Site

Launch Vehicle provider installs bags into vehicle

End

* KSC POC Late Stow:
  Skip Swaney (321-867-6076)
  Katie Zajdel (321) 861-6459
KSC Logistics Operations

- KSC/ISS Logistics Operations will continue to provide Payload and ORU Processing support to the ISS Program and IP Partners.

- KSC/ISS Logistics Interfaces
  - Bart Pannullo, UB Project Office Logistics Project Manager, 321-861-4298
  - Luis Moctezuma, GP-L2 Logistics Chief, 321-867-6597

- KSC/ISS Logistics Mission Interfaces
  - Ewing (Skip) Swaney, GP-L2, 321-867-6076
  - Katie Zajdel, GP-L2, 321-861-6459

- KSC/ISS Logistics Team
  - Rick Rodriguez  Depot Operations  (321) 867-6576
  - Joe Tellado  Logistics Engineering  (321) 867-6064
  - Maria Stelzer  Technical Integration Manager  (321) 861-5375
  - Bernadette Brightman-Merrell  Technical Training  (321) 867-6072
  - Frances Cunningham  Warehouse Operations  (321) 861-4700
Back-Up Charts
## Logistics Launch Site Services

<table>
<thead>
<tr>
<th>Off-loading Transportation</th>
<th>Depot, Shops and Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load/offload coordination, transport to the assigned Facility and</td>
<td>Provide emergency shop support for failure analysis, alignment</td>
</tr>
<tr>
<td>required services at KSC point of entry</td>
<td>table, fabrication/repair of customer flight/GSE hardware</td>
</tr>
<tr>
<td>Arrange for cleaning of vehicle and shipping container before clean</td>
<td>Calibration, Proof load, cleaning / decontamination and other</td>
</tr>
<tr>
<td>work area entry</td>
<td>preventive maintenance support</td>
</tr>
<tr>
<td>Transport Flight Elements and GSE between KSC and/or Cape</td>
<td>Material Management</td>
</tr>
<tr>
<td>Canaveral Air Force Station (CCAFS) and local off-site facilities</td>
<td></td>
</tr>
<tr>
<td>Coordinate aircraft/ship/truck fueling for Flight Element and GSE</td>
<td>Provide bench stock consumable items such as plastics, foams,</td>
</tr>
<tr>
<td>arrival/departure</td>
<td>adhesives, wipes, and cleaning materials</td>
</tr>
</tbody>
</table>

### Receiving / Shipping

| Provide Receiving Count and Condition, report any damage to the     | Issue loan-pool equipment including tools, headsets, and clean-   |
| proper office(s).                                                  | room/anti-static/protective garments                              |
| Plan/prepare Flight Hardware and GSE for shipments from/to KSC,     |                                                             |
| including building of specialized container                         | Provide minor (<$1,000) procurement of material for KSC          |
| Facilitate customer interface with U.S. Customs (import or export) | Customers                                                        |

### Warehousing / Storage

| Controlled storage of hardware, equipment and material, including    | Plan, develop, implement and maintain a Technical Training and   |
| specialize containers                                              | certification program, Provide Area Access Courses               |
| Provide Kitting support for customer hardware                       |                                                             |
| Provide Logistics Launch Site Services to ISS Missions and other    | Property Management                                             |
| customers at KSC.                                                  | Asset tracking of customer hardware                              |