ULF5 PMM KSC Actions (post PMM TIM at JSC)

Actions and Minutes from daily Tag-up meetings

10/13/09 (Tue.)

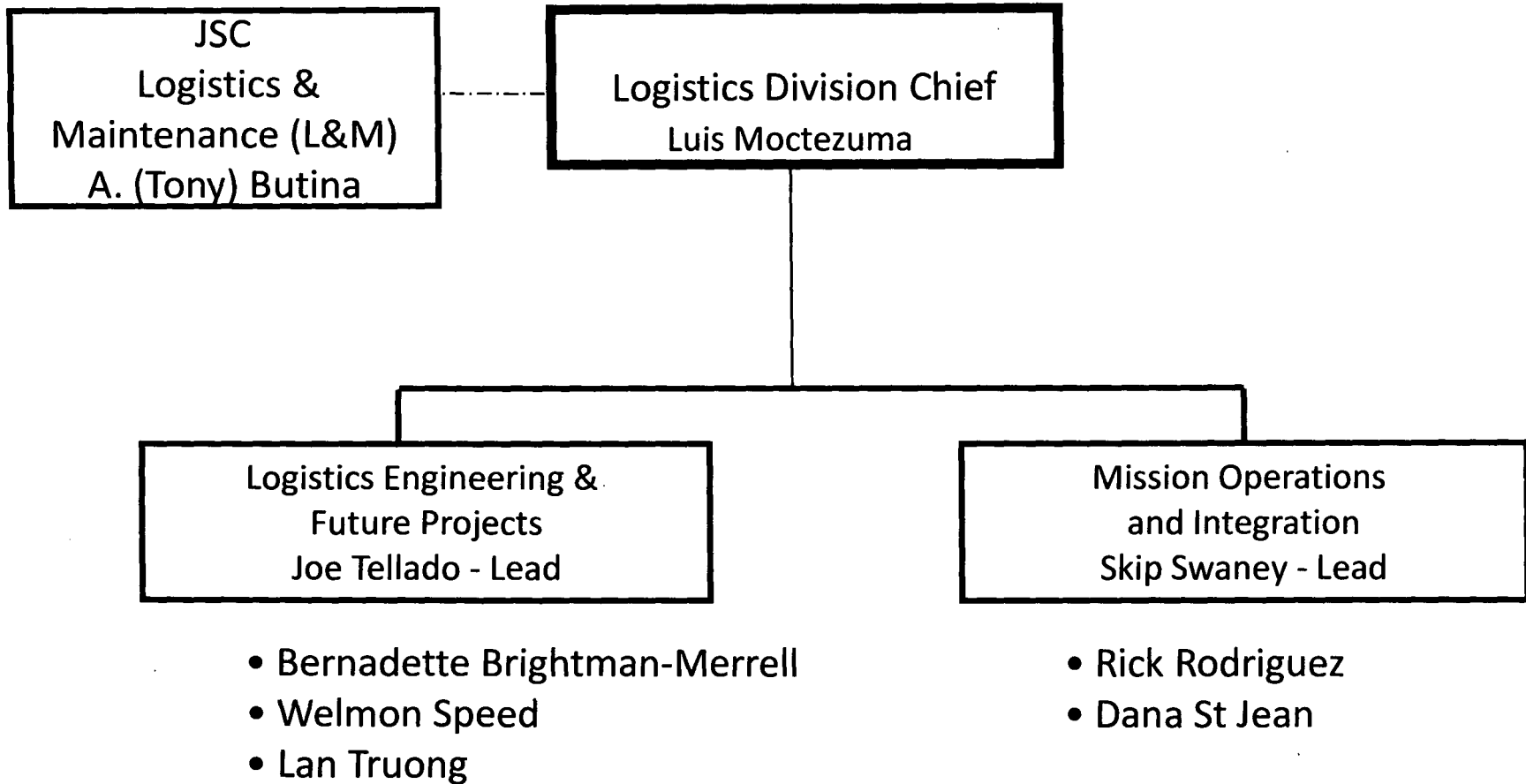Francesco Santoro discussed recent telecom information that has come from the ALTEC/TASI/ASI team:

A. TASI preference for the FM3 removal work is to have the module turned over to them so they can do the all MDPS and MLI work. They are working on their procedures and would like to have the FM3 in the ERS ready for them by first week of November . KSC is not ready to commit to having FM3 in the ERS by Nov. 3 and will need to see what schedule can be accomplished for the move of FM2 out of the ERS and placing FM3 into the ERS.

B. TASI wants all the FM3 MLI shipped to Torino.

   a. KSC needs some of the MLI to remain at KSC for the removal of the FRGF (for both FM1 [19A] and FM2 [STS-335]) since the MDPS and MLI is needed from FM3.

   b. KSC also wants some spare FM3 MLI blankets to remain here for spares in case we have to replace any blankets on FM1 for 19A. Taking MLI off FM2 is not a reasonable option since FM2 is being planned for STS-335.

C. TASI wants the remove the –Y Panel from FM3 during the turned over time so they can get it staged for a new (light weight) –Y Panel. They also will need to use some KSC cable checkout equipment when they re-integrate the cables back onto the new –Y Panel.

D. Seals on FM1 evaluation – This is still under way and they are looking into re-certification for the extended life past 2017.

E. Element Leak Test – TASI is still of the opinion that there is a requirement for conducting a Element Leak Test and they estimate that it will take 10 days to perform the test. This is a important topic of discussion since there is no leak test presently planned in the ULF5 schedule and it would be a major impact to our schedule and possible launch date impact.

F. Parallel Ops for re-integration of Armored MLI and MDPS is still a concern for TASI and still needs a schedule review. We should be able to work this and get the definition on the ULF5 schedule that defines the MLI and MDPS installations.

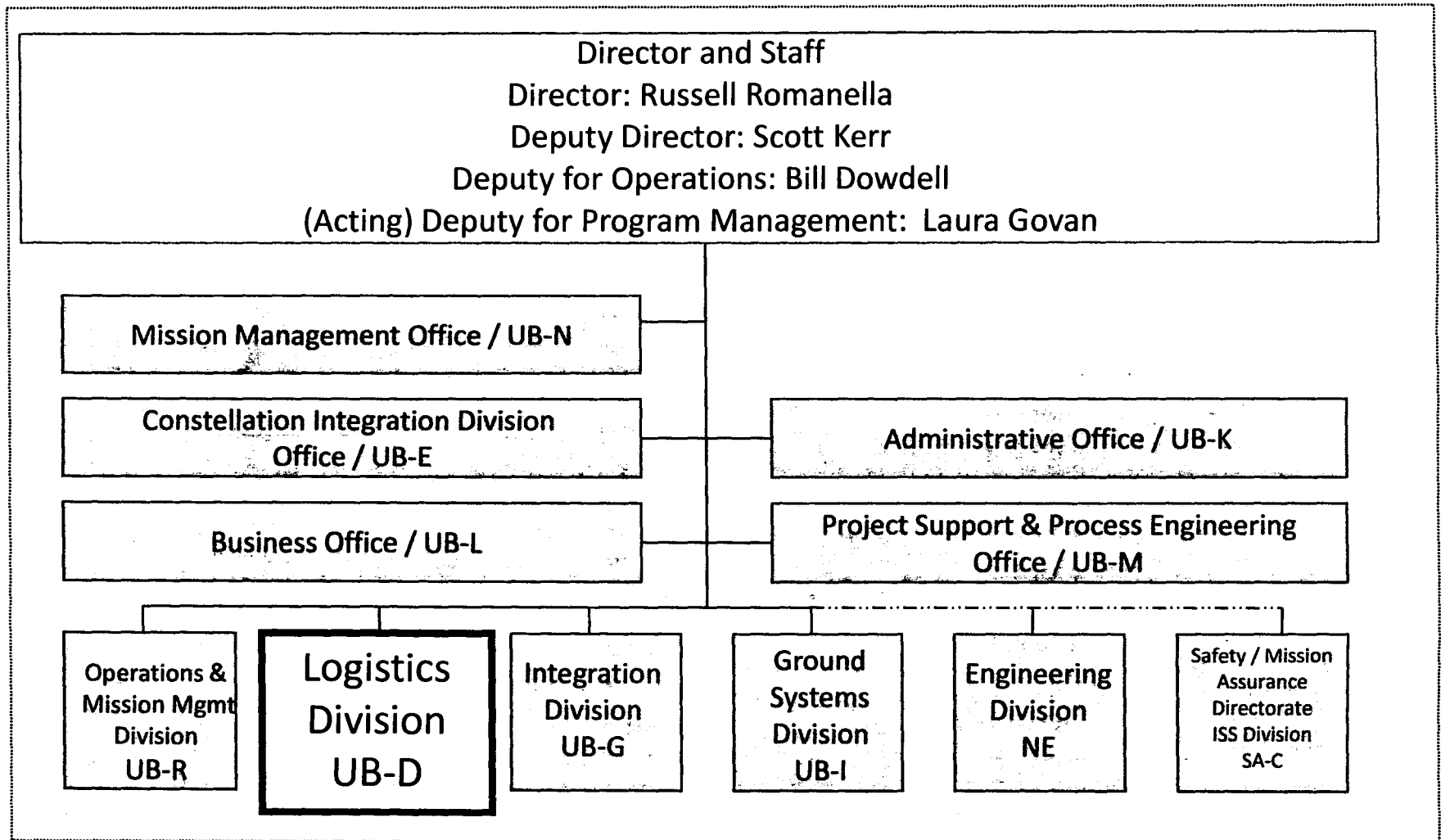# KSC ISS Post Shuttle Logistics Operations Role

KSC ISS Post Shuttle Logistics Operations Role

- Organization
- KSC ISS Logistics Infrastructure
- KSC IP Activities
- Post Shuttle Logistics Operations
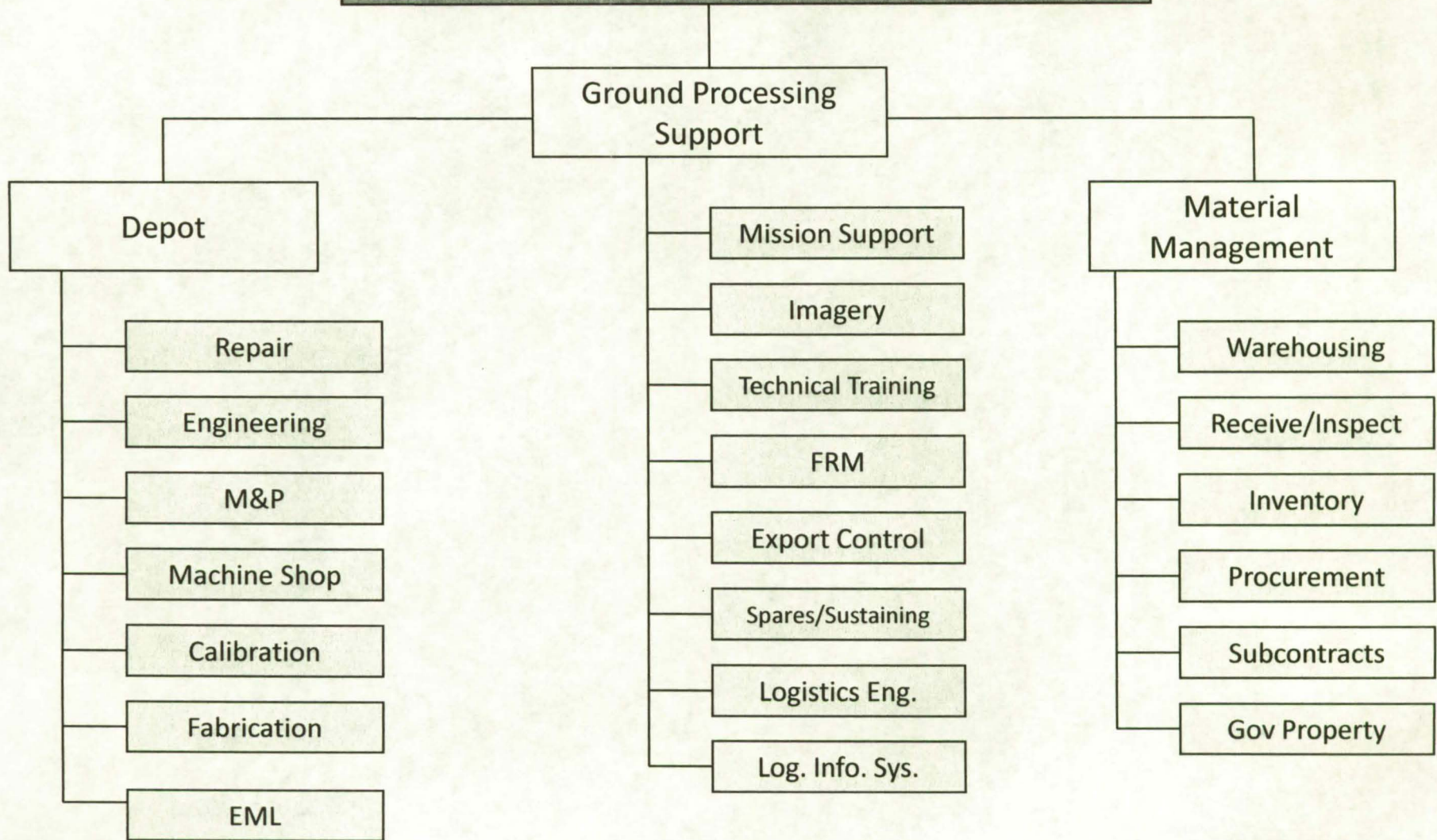- Top Challenges & Summary

UB-D Organization

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┌──────────────────────┐         ┌──────────────────────────┐
│         JSC          │         │                          │
│     Logistics &      │ - - - - │  Logistics Division Chief │
│  Maintenance (L&M)   │         │     Luis Moctezuma       │
│   A. (Tony) Butina   │         │                          │
└──────────────────────┘         └──────────────────────────┘
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┌────────────────────────────┐   ┌────────────────────────────┐
│ Logistics Engineering &   │   │   Mission Operations   │
│   Future Projects   │   │   and Integration   │
│   Joe Tellado - Lead   │   │   Skip Swaney - Lead   │
└────────────────────────────┘   └────────────────────────────┘

- Bernadette Brightman-Merrell
- Welmon Speed
- Lan Truong

- Rick Rodriguez
- Dana St Jean

ISS & Spacecraft Processing Directorate (UB)

Director and Staff
Director: Russell Romanella
Deputy Director: Scott Kerr
Deputy for Operations: Bill Dowdell
(Acting) Deputy for Program Management: Laura Govan

Mission Management Office / UB-N

Constellation Integration Division Office / UB-E

Administrative Office / UB-K

Business Office / UB-L

Project Support & Process Engineering Office / UB-M

Operations & Mission Mgmt Division UB-R

Logistics Division UB-D

Integration Division UB-G

Ground Systems Division UB-I

Engineering Division NE

Safety / Mission Assurance Directorate ISS Division SA-C

KSC ISS Logistics Operations (UB-D Functions)

Ground Processing Support

Depot
- Repair
- Engineering
- M&P
- Machine Shop
- Calibration
- Fabrication
- EML

- Mission Support
- Imagery
- Technical Training
- FRM
- Export Control
- Spares/Sustaining
- Logistics Eng.
- Log. Info. Sys.

Material Management
- Warehousing
- Receive/Inspect
- Inventory
- Procurement
- Subcontracts
- Gov Property

KSC Logistics Support Infrastructure

- **Transportation**
- **Receiving & Inspection**
- **Warehousing**
- **Property & Inventory Management**
- **Maintenance & Repair**
- Procurement
- Provisioning
- **Export Control**
- Logistics Engineering
- Technical Training
- Information Systems

KSC ISS Logistics Operations

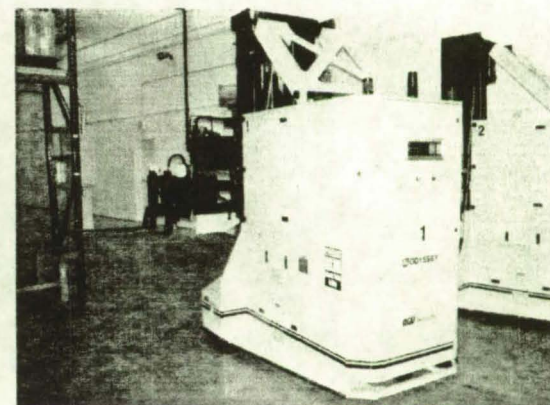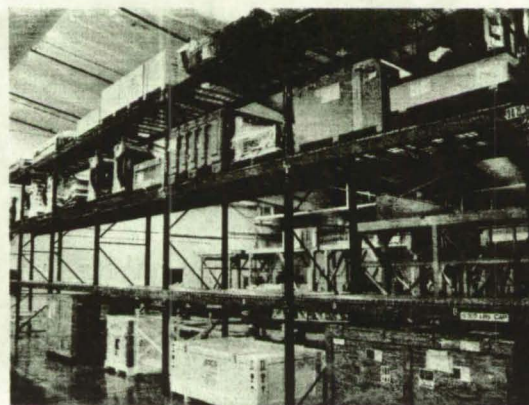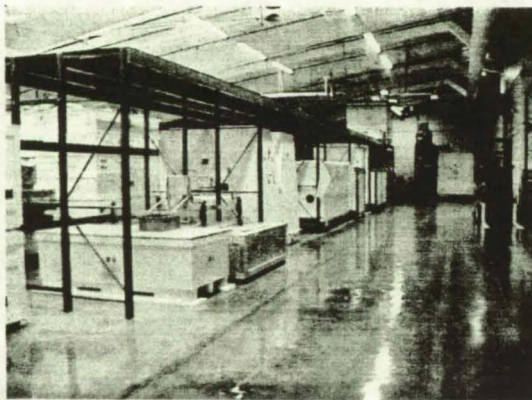VISITORS CENTER 1 MI + -

Main Badging Station .7 miles

M7-360
ISS Flight Hardware Processing

M7-505

- NASA Spacecraft Services Depot
- Warehouse (small to mid-size parts)

M6-698
Shipping & Receiving

M6-794
Main ORU Warehouse

KSC SOUTHERN INDUSTRIAL AREA
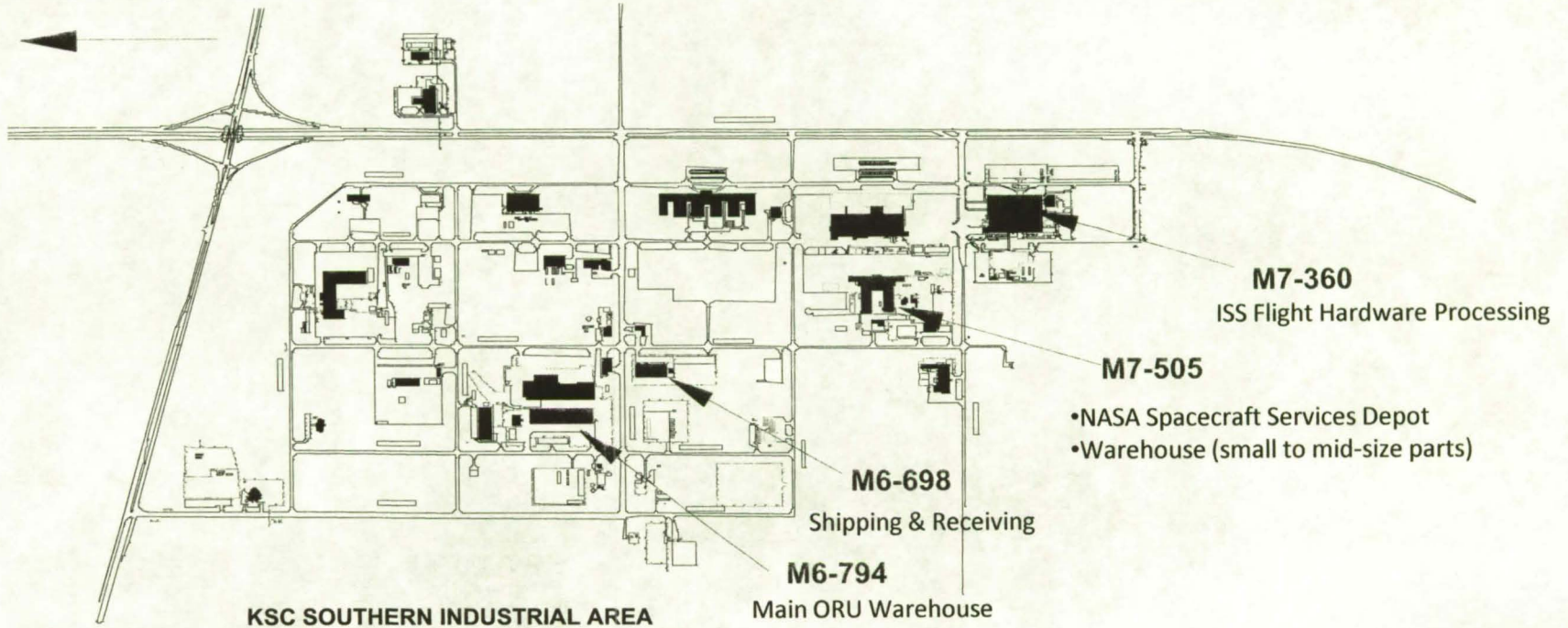
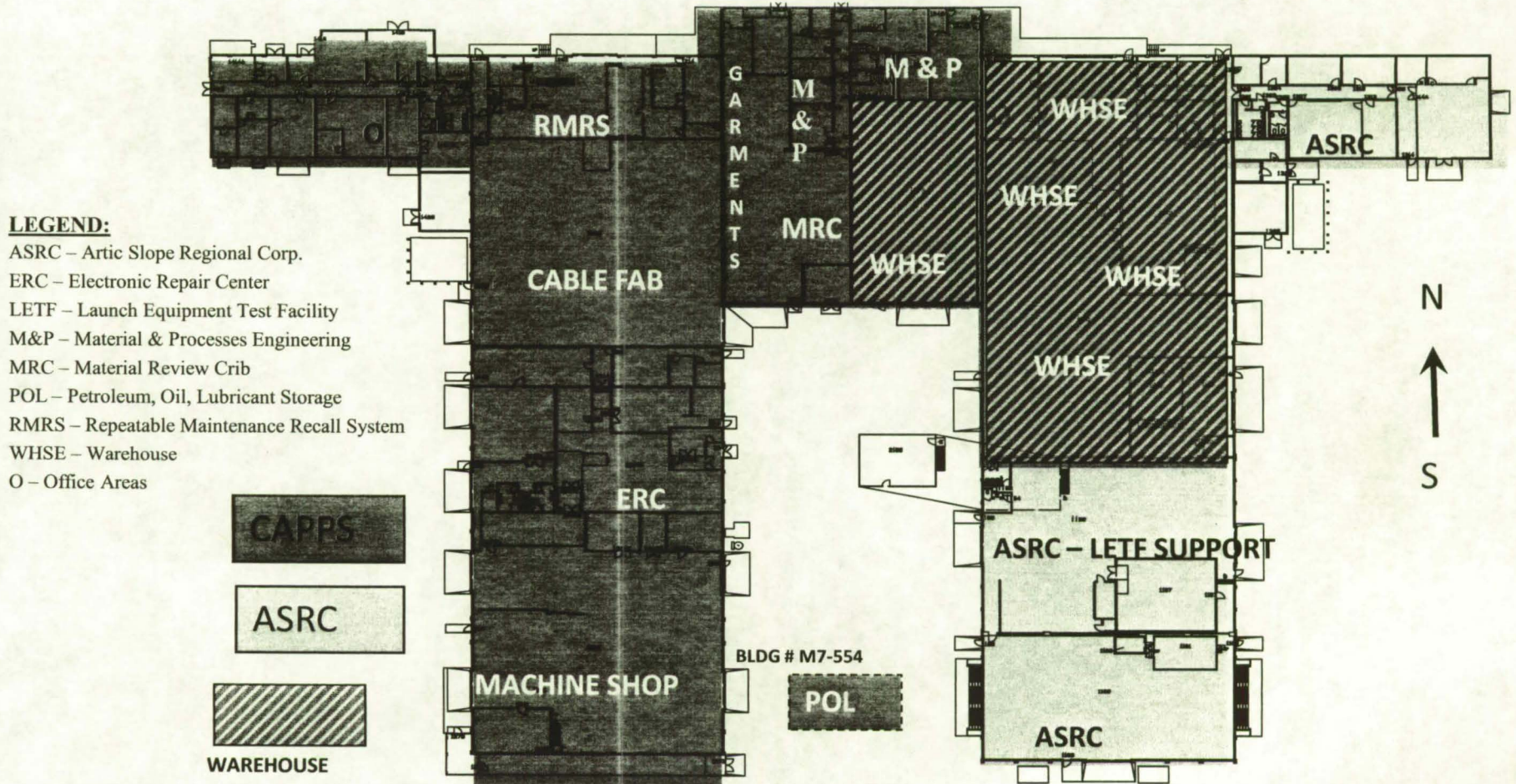# Main ISS Warehouse (M6-794)

RM1029　　　RM1032　　　RM1055
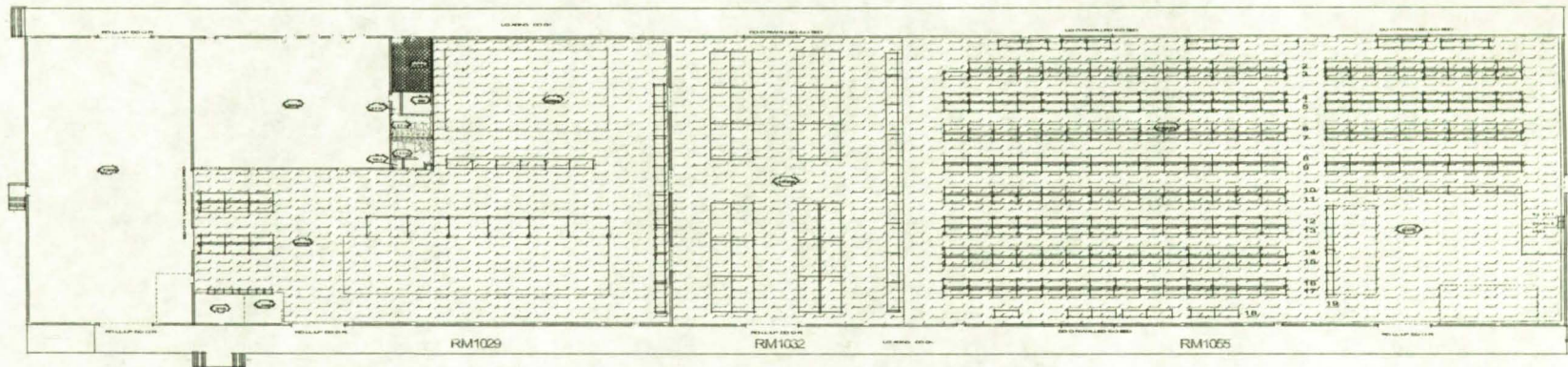
AREAS IN BLUE ARE CAPPS WAREHOUSE

M6-794

Payload Support Building (M7-505)
## NASA Spacecraft Services Depot (NSSD) & Warehouse (Small/mid-size parts)

LEGEND:
ASRC – Artic Slope Regional Corp.
ERC – Electronic Repair Center
LETF – Launch Equipment Test Facility
M&P – Material & Processes Engineering
MRC – Material Review Crib
POL – Petroleum, Oil, Lubricant Storage
RMRS – Repeatable Maintenance Recall System
WHSE – Warehouse
O – Office Areas

CAPPS

ASRC

WAREHOUSE

85,000 sq ft Facility (Does NOT include POL Bldg, # M7-554)
Total No. ISS Line Items: 71,633

M7-505

Shipping & Receiving (M6-698)
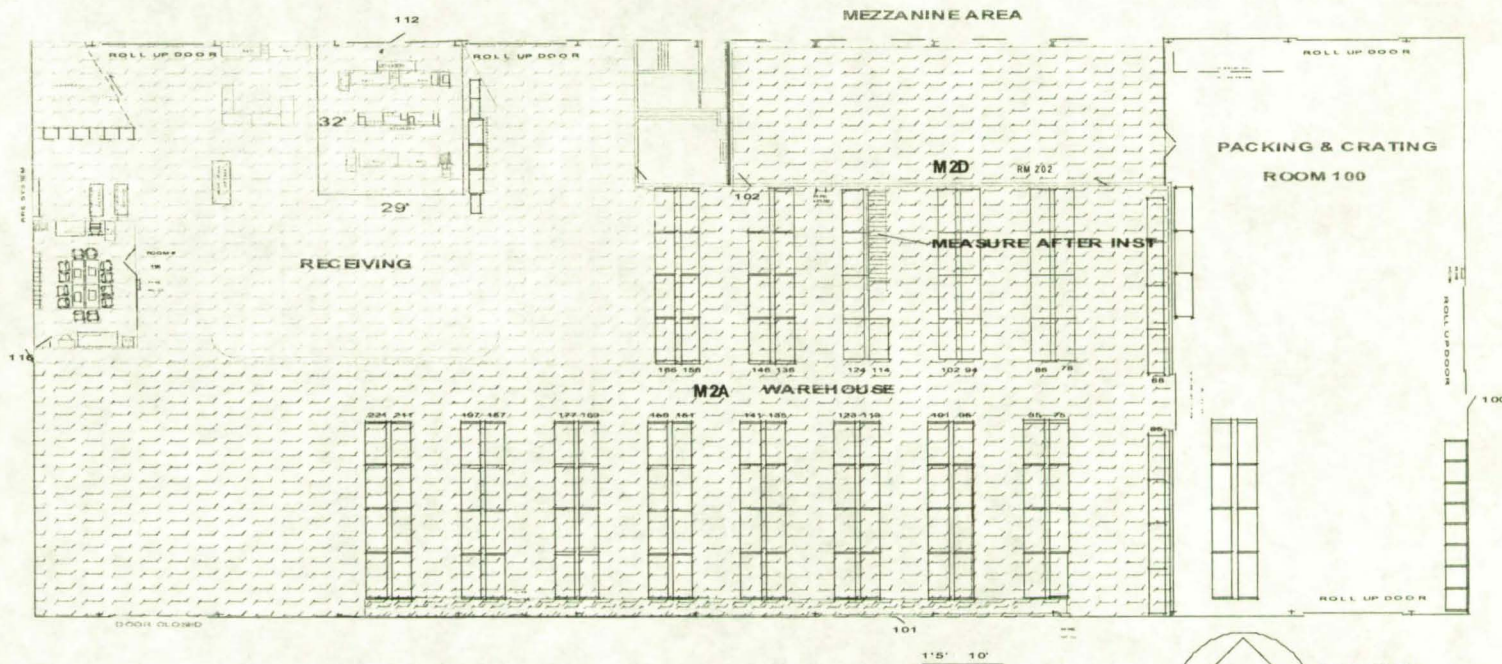
AREAS IN BLUE ARE CAPPS WAREHOUSE or RECEIVING

Export Control

- **Export Control**
  - The regulation of the transfer of H/W and/or technical data from the United States to any foreign person and/or country.
- **Office of Primary Responsibility, UB-D**
- **KSC process, KDP-P-2613**
- **KSC Export Control Program**
  - http://Exportcontrol.KSC.NASA.GOV
- **UB Process, KDP-P-3157**
- **UB Export Control Lead, Lan Truong, 867-6071**
- **UB Export Control Backup, Dana St. Jean, 867-6476**

KSC IP Activities

- ## JAXA
  - Returned 2J/A GSE to Japan
  - HTV-2 Planning
    - Transportation
      - Shipping concept established
      - Will need help getting hardware through Custom
    - Defining Logistics support at launch site based on processing requirements

- ## ESA
  - Supporting Permanent Multi-Purpose Module Project
    - Host Role support at KSC
    - Returning hardware back to Italy for modifications

- ## RSA/CSA (Currently No activities)

KSC Post Shuttle Logistics Operations

- Mission Processing Support
    - KSC (Hardware preparation)
    - Launch Site
- Shipping flight hardware to launch sites
- ISS Flight Hardware Storage
- Inventory & Property Management
- Maintenance & Repair
- Hardware disposition and excess

Top Challenges & Summary

- Optimizing Transportation Operations to Launch Site
- Expediting Shipments to Launch Site
- Working with Cargo Processing Team to define logistics role at Tanegashima launch site
- Having flight hardware storage capabilities to meet program requirements
- Plan hardware disposition schedule
- Continue to work with IP logistics interfaces