CM Process Improvement and the International Space Station Program (ISSP)

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Configuration as of December, 2006
Additional View of the ISS

December, 2006
ISS Final Configuration

- Elements Currently on Orbit
- Elements Pending US Shuttle Launch
- Elements Pending Russian Launch
## CM Process Improvement Activities

- **Assessment by ICM in September 2004**
- **Findings/Recommendations made by ICM**
- **Recommendations Implemented**
- **CMII Briefing sessions**
- **Follow-up Assessment August 2006**
FINDINGS/RECOMMENDATIONS
in 2004

- Fragmented Baseline Management.
- Closed-loop change management process needed for all changes to be tracked from initiation to closeout of all associated tasks.
- Change management process coupled with the baselines.
- Find an automated tool to provide automated workflow capability for online change creation, distribution, disposition, task identification, scheduling and tracking. Link process to the baseline.
- Formal CM training for ISSP CM group to become CM experts.
- CM overview training for ISSP personnel.
- Visit companies with CM Process Improvement Initiatives.
FINDINGS/RECOMMENDATIONS in 2004 (cont)

- Contractor & IP CM personnel to conform to NASA CM Processes.
- NASA CM to visit contractor & IP sites to verify conformance to new CM requirements and offer recommendations for improvement.
- NASA CM to determine options for Deviations vs. Changes where a departure from the requirements will be long-term.
- Do not allow many “Redline” documents and drawings.
- Define what metric reporting will be valuable for managing.
- NASA CM to establish & charter a CM Process Improvement Committee (with cross-functional participation).
Improvements Implemented

- All NASA CM personnel are CMII certified
- Updated CR flow with integrated closed loop process
- Updated forms
- CM overview training presentation developed and delivered to ISS personnel
- CMII briefing sessions open to all NASA JSC employees and programs (@ 200 people attended)
- Continual improvements implemented and training delivered
- Implemented a closed loop process
Improvements Implemented

- NASA visit to Boeing Commercial
- Regular meetings with senior managers to discuss process improvement suggestions
- Metrics redone
- Studies on integrated software systems
- Automated tools research & demos
- CM Process Improvement meetings
- CM Focus Group established with Quality, Safety, Engineering, CM personnel
- Monthly telecons with International Partners
- Semi-annual Face-to-Face meetings with our International Partners
What’s Next?

- Integrate software tools
- Reduce the number of databases used
- Update Boards & Charters
- Reduce amount of required signatures
- Continue CM Process Improvement
  meetings and activities