



Safety....The NASA Family....Excellence....Integrity

NASA 2005 Safety and Health Managers Meeting

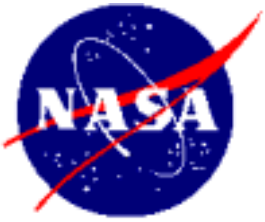
Exploration Systems Activities

**Up-front Safety and Mission
Assurance & Continuous Risk
Management Focus**

March 1, 2005

Presented by: John E. Tinsley

**Director, Mission Support Division
NASA HQ Safety and Mission Assurance Office**



OSMA Focus in Early Exploration Systems Mission Directorate(ESMD) Activities

- **ESMD Risk Management**
 - Office established late 2004
 - Integrated continuous, life-cycle risk management
 - Risk Informed decision making
 - Risk Based Acquisition Management (RBAM) approach endorsed
 - Risk Management Plan in draft form
 - Active Risk Manager included in IT Tool Suite
 - All ESMD use same, accessible risk reporting system
- Risk tied to requirements
- OSMA actively supporting ESMD risk management



OSMA Focus in Early Exploration Systems Mission Directorate(ESMD) Activities

- **Requirements Development**
 - **Level 0 Requirements (Exploration Vision)**
 - **Level 1 Requirements (OSMA review of 6 Documents)**
 - **Exploration System of Systems Programmatic Requirements**
 - **Exploration System of Systems Technical Requirements**
 - **Exploration Crew Transportation System Spirals 1,2,and 3**
 - **Robotic Lunar Exploration Requirements**
 - **Level 2 Requirements in work**
 - **Safety and Mission Assurance team member support at all Levels 0,1, and 2**



OSMA Focus in Early Exploration Systems Mission Directorate Activities

- **System of Systems Development**
 - Prometheus, Human & Robotics Technology, and Constellation
 - Constellation includes Crew Exploration Vehicle, Launch Vehicle, Infrastructure and Integration
 - ESMD Program Management Handbook (Program Neutral)
 - Systems Engineering Management Plan (Program Specific)
 - Single Management Acquisition Plan (Program Specific)



OSMA Focus in Early Exploration Systems Mission Directorate Activities

- **Acquisition**
 - Front end loaded, next 7-8 years
 - Broad area announcements for technology development (internal and external awards)
 - Crew Exploration Vehicle RFP (SOW/DRDs) (March 1 release)
 - Systems engineering and integration RFP(SOW/DRDs)
 - Integrated discipline team across NASA (RFP input)
 - Safety and Mission Assurance one of several major teams
 - JSC lead with MSFC and KSC sub-team leads
 - Other Centers being added
- **Safety and Mission Assurance Integration**
 - OSMA Mission Support Division coordination and integration
 - Lead Point of Contact soon to be selected



Ensuring Safety and Mission Success

