

— *Working Group Session Summary* —

# Strategies for Monitoring and Managing During System Acquisition and Development

*Session 10F*

Session Chair: Rosalind Lewis

# Session Goals

Explore methods for using information to monitor and manage software-intensive-systems more effectively

- How can information improve understanding of the system (acquisition/development) condition?
  - Organizational impact on systems/programs
  - Development indicators or “bell-ringers”
- How can information enhance effective decision making about the system?
  - Risk management investment
  - Transition to Sustainment

# Presenters/Panelists

Suellen Eslinger, Distinguished Engineer, The Aerospace Corporation - *Recognizing Common Patterns of Software Acquisition Failures*

- Mitigating the consequences of program proceeding along a failure profile requires recognition (awareness of the relevant indicators and data collection) and early – proactive intervention

Mary Ann Lapham, Senior Member Technical Staff, Software Engineering Institute - *Software Intensive Systems Sustainment – A Conundrum*

- Determining when a system is ready for sustainment is very much a function of how its defined and how challenges (such as programmatics, COTS, transition) are addressed

# Presenters/Panelists (cont'd)

Richard Adams, Senior Engineering Specialist, The Aerospace Corporation - *Identifying and Mitigating Management Risk Across Organizational Boundaries In Software-Intensive Programs*

- Understanding (of the system, program) across boundaries (groups, organizations, etc.) may suffer due to latent differences – but may be exposed earlier by artifacts that facilitate collaboration across boundaries

LiGuo Huang, University of Southern California - *Integrated Software Cost and Quality Modeling for Program Risk Management*

- Conflicting objectives, such as software quality (testing time) versus competitiveness (time to market) can be analyzed by finding the optimal point that minimizes loss

Julie Cohen, Deputy Program Manager TSAT Mission Operations System (TMOS) - *Invited Panelist*

# Conclusions

- Early planning (for processes, activities, and information) to get things right at the beginning - is critical
- An information repository – containing measurements of program attributes, based on consistent data definitions - is important for improvements in acquisition
- What we've learned in the software world for processes – should also apply to processes in acquisition