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a) What issues should program managers pay particular attention to?

b) How should engineering and program decisions be made in the face of uncertainty?

While the standard risk management process does a fair job at the first need, this is often done at the expense of effectively dealing with uncertainty. This workshop will explore how the risk process might manage uncertainty better without compromising focus on the primary aspects of a program.

Risk management is an active area of research and practice in numerous domains outside of systems engineering. Whole industries, such as insurance, petroleum exploration and pharmaceuticals, critically depend on effectively managing risk, and they invest in research on making strategic decisions in the face of uncertainty. The purpose of the workshop will be to consider which aspects of acquisition and program risk management in the defense domain can benefit from focused research.

Drawing on the rigorous probabilistic tools, and focusing on effective decision-making as the ultimate purpose of risk management, this workshop will map out a direction for improvement and attempt to articulate three to five research questions that should be addressed.

**ABSTRACT**

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**TENTATIVE AGENDA**

**Wednesday, December 13, 2017**

8:00  Welcome (Dinesh Verma)

8:15  Scope, background, and process for the workshop (Paul Collopy)

8:30  A position statement and a set of challenges on enhancing our ability to assess risks and make informed decisions in the face of risk (Jim Thompson)

9:00  Finding and assessing risk—a maritime industry perspective (David Card, formerly of Det Norske Veritas)

9:30  Coffee break

9:45  Breakout sessions on assessing and communicating risk

10:30  Debrief by scribes

10:45  Balancing risk and opportunity: a view from the investment community (Lou Steinberg, former CTO, TD Ameritrade)

11:15  Risk up close and personal (CAPT Jim Wetherbee, Ret, test pilot and astronaut)

11:45  Working lunch in breakout sessions on balancing risk and opportunity

1:00  Debrief by Scribes

1:15  Managing programs in the face of risk (Anna-Maria McGowan, NASA Tech Fellow for Complex Systems Design)

1:45  Breakout sessions on risk planning and investment

2:30  Coffee break

2:45  Debrief by scribes

3:00  Plenary discussion on a path to the future in risk management

4:00  Collection of research topics

4:30  Rating research topics

4:50  Wrap-up (Dinesh Verma)