Bias & Perspective from my field

• Problems: Can be solved with technology & people
• Hard Problems: problems not yet solved (technological) & complex systems (interactions, interfaces)
• Assumptions:
  – User interface critical (Space systems: run by officers, but executed by junior enlisted personnel (18-23 yrs old), Aircraft (pilots are officers, support activities (like maintenance, repair) done by junior enlisted
    • But future space systems envision “space planes” with officer model
  – Must be done right the first time (little tolerance for unmet requirements)
• Expertise valued: Operations. Previous positions held. Seniority. Technical graduate degrees (but only from top tier schools) – but PhDs discouraged (too academic and esoteric)
• Good/elegant designs: Look like an airplane or are controlled by a joystick; visual depictions preferred for information; look “simple” (fewer knobs, choices, flexibility)
My Biases and Perspectives

• Military career and perspective
  – Systems are very complex
  – Product cycle time is extremely long
  – Actual product development time is short compared with administrative and other overhead
  – SDM degree sharpened systems focus and broadened perspective (many ways to solve a problem)

• Raised in the western USA (mountains, open spaces)
• Lived for 2 years in Eastern Germany and spent time in Japan as High School exchange student
• Patriot, Private Pilot, and Perfectionist (in the sense of eschewing mediocrity)