SUGGESTED 402 DESIGN REVIEW OUTLINE

MAKING THE KEY POINTS WITHIN THE ALLOTTED TIME FRAME
PRESENTATION OVERVIEW

• Introduction (Project Manager)
• Specifics of the spacecraft design (delivered by Team Leads)
• Risk assessment (Project Manager or TBD)
• Budget review (Deputy Project Manager)
• Questions
INTRODUCTION (PM)

• Introduce yourself and the Deputy PM
• Point out changes from May presentation
• Mission overview
  • Brief description of the object of the design project
  • ConOps
  • Timeline (when will it be launched)
  • Spacecraft overview
    • Image of configuration – point out major parts
    • Mass, size, number, launch requirements
• Major requirements/design drivers
• Organization
  • Simple WBS with numbers and names
• High level schedule – Gantt chart
SUBSYSTEM PRESENTATION TEMPLATE – TEAM LEADS

• Have team members who are *not* presenting stand up (pictures/names on intro chart)

• Major requirements/design drivers specific to your subsystem
  • Design compromises due to constraints
    • Posed by other systems
    • Mother Nature, etc.

• Requirement verification matrix

• FMEA chart for your subsystem

• Any assumptions?

• Trade study results

• Final subsystem design
RISK ASSESSMENT – PROJECT MANAGER

• Risk matrix (fever chart)
  • Major risks
  • No risks in the red zone

• Address mitigation
  • What have you done to mitigate these risks?
    OR
  • Why can you accept the risks?
BUDGET REVIEW – DEPUTY PROJECT MANAGER

- Original budget requirement: $350M
- Does **not** include launch vehicle
- Difficulty obtaining costs from system providers
- Cost Estimating Relationships (CERs)
  - Historical
  - Etc.
- Which cost estimation system(s) did you use?
- Total cost estimate and estimated error
  - Breakdown into major parts, if possible
QUESTIONS?
8 PSYCHOLOGICAL PRESENTATION PRINCIPLES

• Audience is not necessarily aware of these things
  • May not like the presentation, but not know why
• How do individuals learn?
  • Receive and digest information
• The information must be:
  • Acquired
  • Processed
  • Connected to knowledge
• To be **acquired** it helps if information is
  1. Distinguishable
    • Colors
    • Fonts
8 PSYCHOLOGICAL PRESENTATION PRINCIPLES

2. Organization
   • Order and a sense of purpose
   • Logical flow

3. Salience
   • Critical concepts are clearly defined
   • Information must be processed

4. Message must be simple
   • Easy to understand
   • Easy to retain

5. Don’t use animations and transitions just for novelty
**8 PSYCHOLOGICAL PRESENTATION PRINCIPLES**

- Information must be **connected to knowledge**
  
  6. Avoid jargon, acronyms, esoteric language or concepts
     - “Brevity and levity”
     - The audience should enjoy the presentation

  7. Compatibility
     - Audience should feel that they learned something
     - Otherwise they’ve wasted 40 minutes of their life

  8. Relevance
     - Keep it at the right level
     - A well understood presentation is more impressive than a mystery presentation