

Space Shuttle Super Lightweight Tank (SLWT) Risk Management Case Study

CASE STUDY INSTRUCTOR NOTES

June 2010 Update

The case may be performed by a single user or in a classroom—instructor led environment. For the latter, there are two teaching aids—the case and the associated charts (on-line) which include 6 small group exercises.

Learning Objectives:

Participants will be expected to provide a rigorous assessment of risks that may be associated with the SLWT design considering, as a minimum, material availability, production quality, manufacturing issues, and most importantly design verification approaches.

Specific learning objectives include:

1. Developing risk identification skills
2. Understanding the broad range of control and mitigation options
3. Recognizing the power of collaboration - the “big brain”
4. Gaining experience in using powerful structured logic methods
6. Understanding challenges of introducing new technology

Instructor Lead – Preparation

1. Provide case study handout via email and/or hard copy to class participants at least one week prior to the training event.
2. If using a CD or web-based case study - verify audio hook-up from presentation laptop to amplified speakers system

Instructor Lead - Talking Points

1. Risk management case studies have been developed to assist ESMD practitioners in developing/enhancing skills and discipline in risk identification, control and mitigation.
2. Web and CD-based case study incorporates background videos from 4 Levels of Space Shuttle Program management providing a unique multi-level perspective on risk management within a complex hierarchal organization

3. The intent is to conduct a single Risk ID Exercise followed by 2 to 4 of the Risk Control & Mitigation Exercises – typically a 2 hour activity.
4. The training event will involve working in small groups as well as working in a large group environment
5. Establish small groups of 4-5 people
6. Distribute the case and allow 5-10 minutes to review – (assume a number of the students will have not previously reviewed)

Risk Identification Exercise

(Nominal time estimates)

1. Large Group Configuration: Review – discuss Case Study material (10 minutes)
2. Large Group Configuration: Present introductory video clips (10 minutes)
3. Small Group Configuration: Small group brainstorming (30 minutes)
4. Large Group Configuration: Report out to the large group (45 minutes)
5. Large Group Configuration: Summarize the actual risk issues tracked and managed by the SLWT Program
6. Large Group Configuration: Open discussion addressing similarities and differences (20 minutes)

Risk Control / Mitigation Exercise(s)

(Nominal time estimates)

1. Large Group Configuration: Discussion of Control and Mitigation strategies
2. Large Group Configuration: Present introductory video clips (10 minutes)
3. Small Group Configuration: Small group brainstorming (30 minutes)
4. Large Group Configuration: Small groups report out to the large group (45 minutes)
5. Large Group Configuration: Summarize the actual control and mitigation measures implemented by the SLWT Program
6. Large Group Configuration: Open discussion addressing similarities and differences (20 minutes)