

Reducing Space Mission Cost 1-Day Summary List of Topics

Note: This course assumes that participants are working in space technology or are broadly familiar with the material contained in the traditional Space Mission Analysis and Design (SMAD) course. The 1-day summary covers many of the same topics as the 2-day course, but in substantially less detail.

What's the Problem? — the Dramatic Need for Space Mission Cost Reduction

- The need for cost reduction
- Nobody starts out to create a high cost, overrun, overdue, failure-prone mission
- The Iridium experience
- The benefits to society and aerospace of mission cost reduction

Overview of Mission Cost Reduction

- The traditional approach to reduced budgets
- Is cost reduction real?
- Current examples of dramatically lower cost missions
- Range of cost options
- The need to talk about real cost
- Advantages of small and large organizations
- Low Cost does not mean Low Reliability
- Why reducing cost is hard to do and how to overcome that
- Creating a Proactive Program to Reduce Mission Cost
- The key litmus tests for whether a change intended to control cost will be counterproductive and, instead, increase cost and schedule
- Summary of cost reduction approaches

Cost and Schedule Overruns

- Why do they occur?
- What can be done to avoid or minimize them?
 - Technical solutions
 - Programmatic solutions
 - Government solutions
- Counterproductive approaches

Summary — The Two Broad Approaches to Reducing Mission Cost

