Evolved Expendable Launch Vehicle (EELV) Program Overview



Affordability Through Innovation



Overview

Program Background

Contractor Concepts

• Acquisition Reform



Program Background EELV Mission Statement

• Mission:

 Partner with Industry to develop a national launch capability that satisfies the Government's national mission model requirements and reduces the cost of space launch by at least 25%

Objectives:

- Increase the U.S. space launch industry's competitiveness in the international space launch market
- Implement acquisition reform initiatives resulting in reduced government resources necessary to manage system development and acquire launch services



Program Background Requirement for EELV

Space Launch Modernization Plan (SLMP) [May 94];

Gen Moorman, Chairman

Options:

- (1) Sustain current systems
- (2) Evolve current expendable systems
- (3) Develop new "clean sheet" expendable system
- (4) Develop a new reusable system

■ DoD
Intelligence
Civil
Industry
Natn'l Space
Trans Policy
(PDD/NSTC-4)
[5 Aug 94]

DoD Implementation Plan [25 Oct 94] supported Opt. 2

EELV

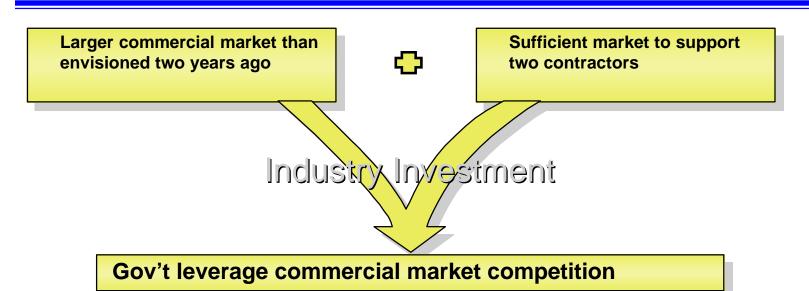


Program Background Acquisition Strategy

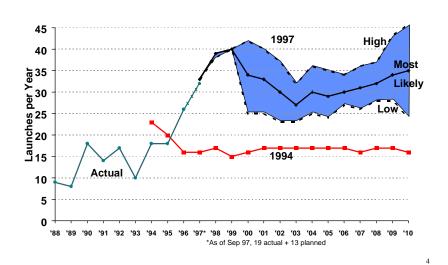
- Original acquisition strategy formulated in early 1995
 - Strategy called for downselecting to one contractor
 - Contractor provides a family of launch vehicles to support Government requirements
 - Contractor in a position to capture a larger share of the international commercial launch market
- Other features of original strategy:
 - Cost-type contract for Engineering & Manufacturing Development (EMD) contract
 - Two system test flights during EMD
- Approach in strategy revised on 6 Nov 97



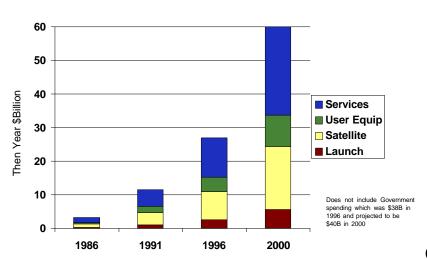
Program Background Reason for Acquisition Strategy Change



COMSTAC Addressable Commercial GTO Market



Commercial Space Market Growth





Program Background Summary of Strategy Change

<u>Old</u> <u>New</u>

- Cost-type contract for EMD
- Fixed Gov't investment for development in addition to contractor investment
- Two system test flights
- No system test flights

Downselect to one

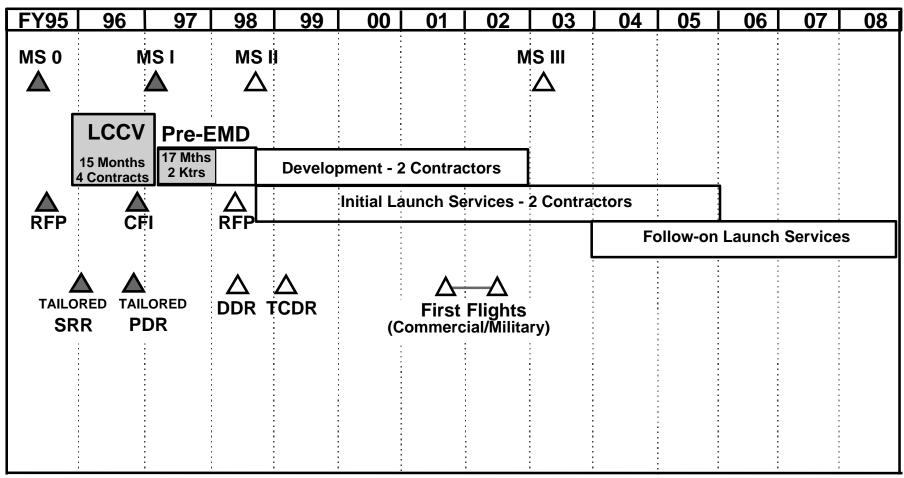
Compete two over life of program

Production

Launch services



Program Background EELV Acquisition Schedule



PDR - Preliminary Design Review DDR - Down-select Design Review

RFP - Request for Proposal

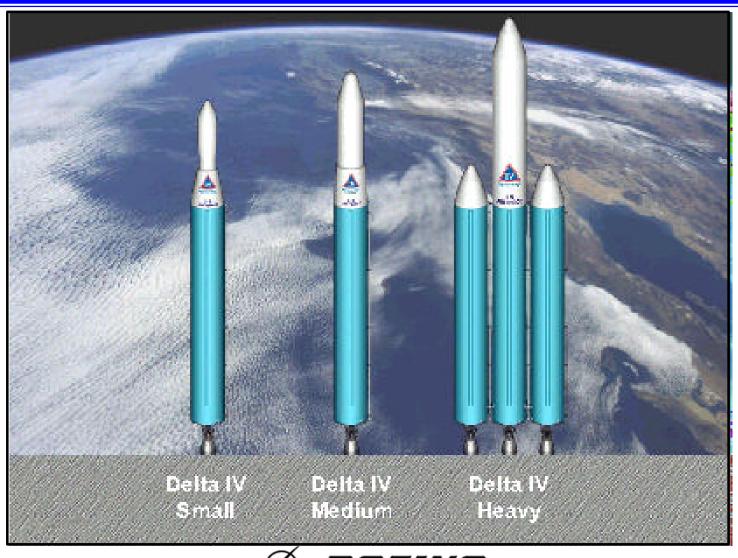
CFI - Call For Improvements

SRR - Systems Requirements Review

LCCV - Low Cost Concept Validation TCDR - Tailored Critical Design Review



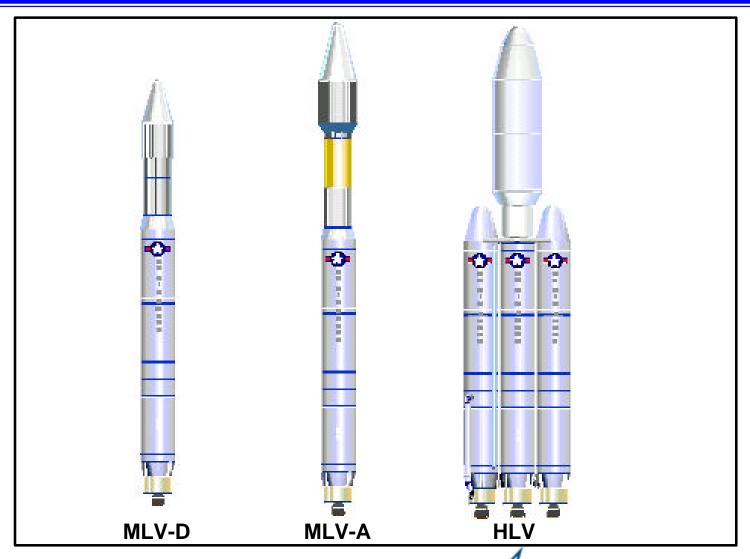
EELV Contractor Concepts Boeing







EELV Contractor Concepts Lockheed Martin

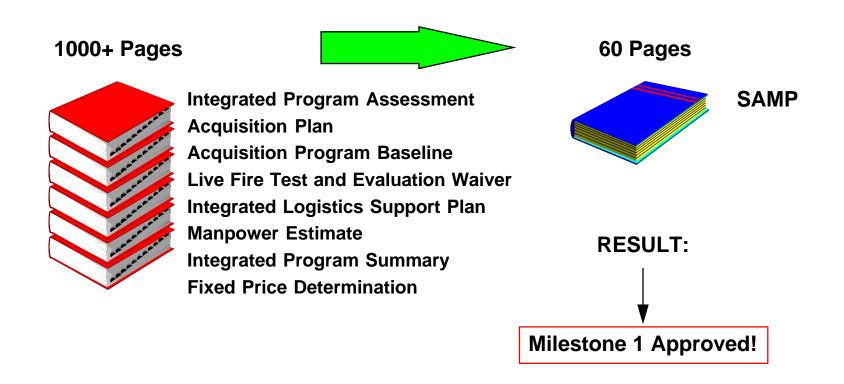


LOCKHEED MARTIN



Acquisition Reform Single Acquisition Management Plan

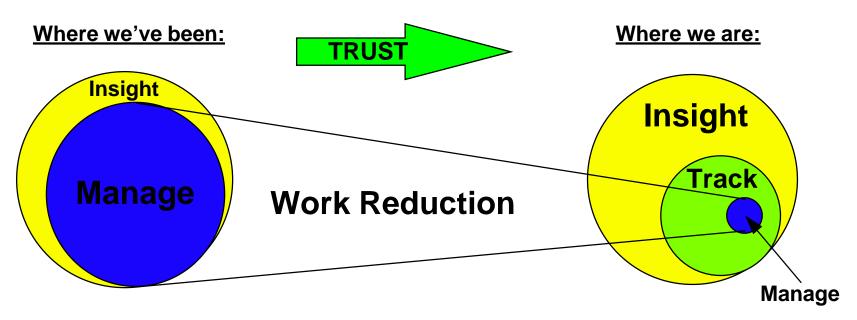
Objective: Streamline effort required for acquisition strategy approval





Acquisition Reform "Lean SPO" Concept

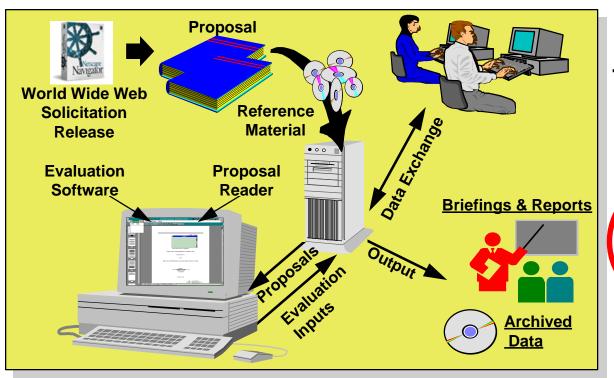
- EELV system program office fraction of typical program office size
- Focused insight vs traditional oversight
 - Less management, more insight
 - 39 military, 12 civilians, 30 contractor (81 total)





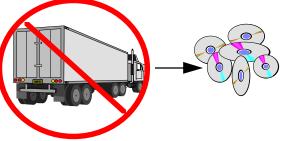
Acquisition Reform Electronic Source Selection

- Maximize information technology solutions
- No "truckloads" of paper copies
 - Source selection of this size: 2+ tons of paper



TOTALLY ELECTRONIC SOURCE SELECTION

RESULT:





Acquisition Reform CAIV

- EELV is a Cost As an Independent Variable (CAIV) program
- System designs must meet key performance parameters
 - Mass to orbit
 - Design reliability
 - Standard launch pads
 - Standard Payload Interface
- All other requirements are tradable

Can trade performance for reducing cost (Untraditional approach for launch vehicles)



Summary

- New EELV Acquisition Approach Provides
 - Two contractors for long term competition
 - Significant industry investment commensurate with the growing commercial market
 - Enhanced use of commercial launch services by the DOD
 - Reduction in Government's total cost of launch through 2020 by at least 25%
- EELV continues to lead the way in acquisition reform initiatives
- Program is on track!



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