INDUSTRIAL BASE PRESENTATION
ON THE
SPACE TECHNOLOGY TRACK PANEL
NASA CONFERENCE
“TURNING GOALS INTO REALITY”
Williamsburg, VA
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U.S. Space Transportation - Background

• U. S. Launch Industry is at a crossroads
  – Huge private investments anticipated a commercial market that has not occurred
  – No credible business case to obtain stockholder approval for future investments
  – Yet…national security and civil space needs depend on a strong domestic launch infrastructure
Worldwide Commercial Launches 1998 vs. 2002

1998 Worldwide Commercial Launches
(36 Total)

- United States: 47%
- Europe: 25%
- Russia: 14%
- China: 11%
- Ukraine: 3%

2002 Worldwide Commercial Launches
(24 Total)

- United States: 5 (21%)
- Europe: 10 (42%)
- Russia: 8 (33%)
- Multinational: 1 (4%)

U.S. Space Transportation - Background

• U.S. launch industry face increasing competition from foreign providers
  – ESA’s member governments pledging ~$2B into Europe’s launch sector for:
    • Ariane 5 recovery and enhancement
    • A five-year launch subsidies program to bolster the commercial market
    • A commercial Soyuz launch pad in F. Guiana
    • A future launch vehicle; guaranteed access to space
U.S. Space Transportation - Background

• U.S. industry needs a similar long-term government commitment to ensure national security responsiveness, continued research & exploration, and future commercial competitiveness.

• We’re optimistic that help is on the way:
  – New, “friendlier” space policy
  – Substantial USG financial investment
U.S. Space Transportation - Policy

• First space policy review since 1994/96
  – NSPD-15, June 28, 2002
  – Significant industry input
  – On hold pending Gehman Report

• Major industry inputs:
  – Focus on strong national goals
  – Eliminate stovepipes
  – Include policy implementing actions
U.S. Space Transportation - Policy

– Provide more flexibility in NASA & DoD roles
– Invest in space-related S&T; stimulate the U.S. space workforce/industrial base
– Streamline commercial launch regulations
– Involve industry in the review of policy, rulemaking, agreements, etc.
U.S. Space Transportation - Investment

• The primary government funding sources:
  – DoD’s National Aerospace Initiative (NAI)
    • Provides technology development & demonstration with off-ramps to future systems
    • Emphasizes high speed/hypersonics, and space access
    • Strong tie to NASA’s NGLT efforts
    • But…is it really new? Will Congress buy it?
U.S. Space Transportation - Investment

– NASA’s: Integrated Space Transportation Plan (ISTP) & Nuclear Systems Initiative (NSI)

• Bridges near-term heavy lift and human exploration/research (Shuttle upgrades) to emergency crew return and in-space transportation capabilities (OSP) to future requirements (NGLT)

• However, cost/execution details are not clear, nor has NASA convincingly “connected the dots”
U.S. Space Transportation - Investment

• Major program cancellations between Challenger and Columbia:
  – ASRM
  – STME
  – NASP
  – DC-X
  – X-33
  – X-34
  – X-38
  – COBRA

• The track record makes corporate investment a tough sell.
U.S. Space Transportation - Summary

• Only substantial, sustained government funding will keep U.S. space launch industry viable until a commercial market develops
• NASA’s ISTP/NSI and DoD’s NAI are the only feasible growth engines
• Neither are perfect…yet…but both are essential.