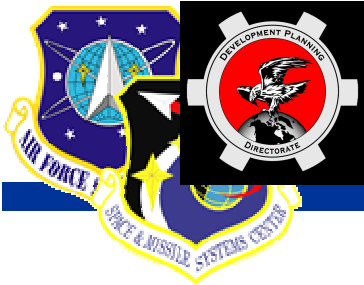




Leveraging Excess Launch/Spacecraft Margin

***SMC Industry Day
16 April 08***

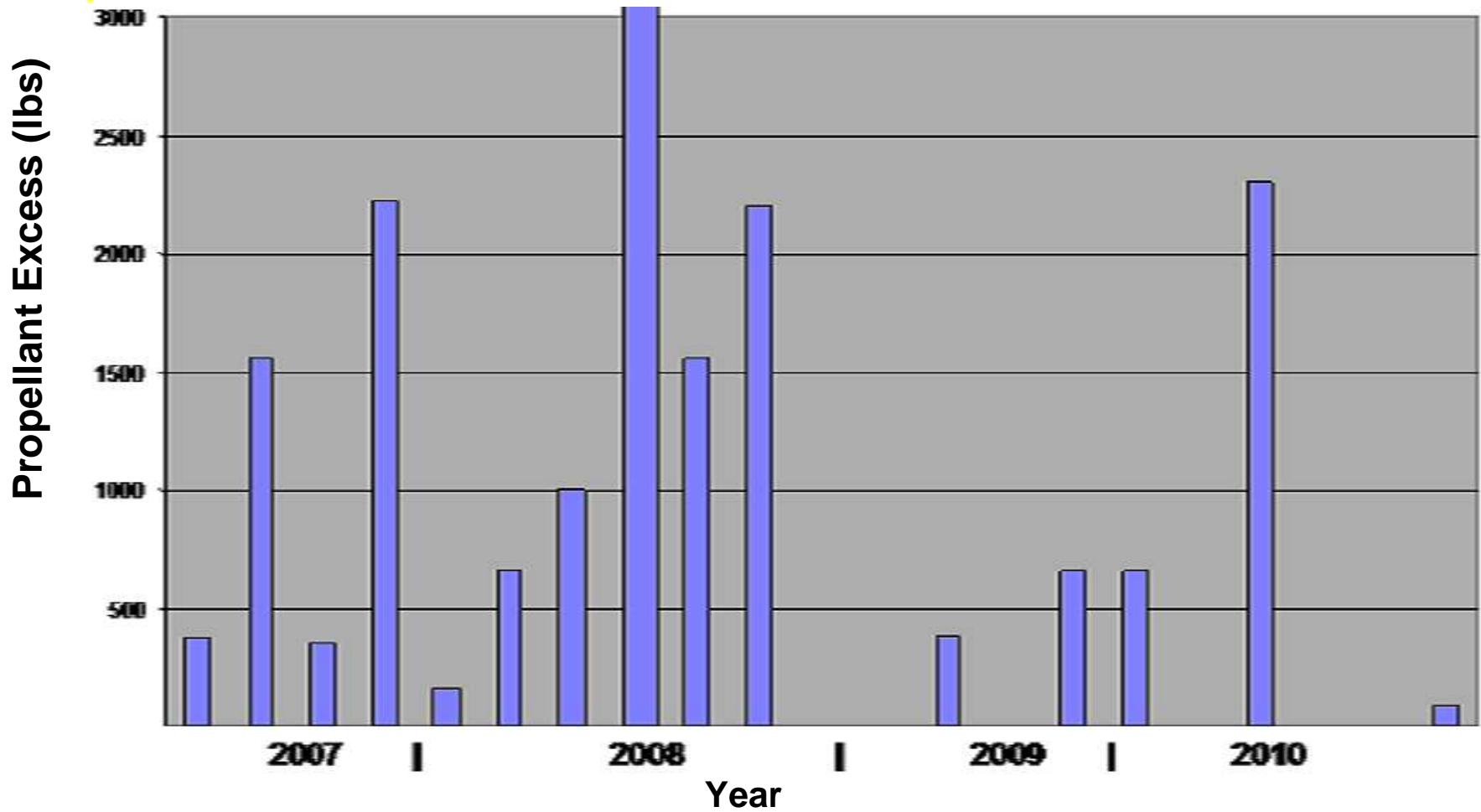


Background

- **US Govt has become highly reliant on space capabilities**
- **SMC has consistent need for spaceflight**
- **Insufficient resources to provide dedicated launches for all required spaceflight**
- **Opportunity:**
 - **Significant margin exists on planned launches—both military and commercial**
 - **US Govt aims to take advantage of booster propellant margin and size, weight, power margins of spacecraft bus**



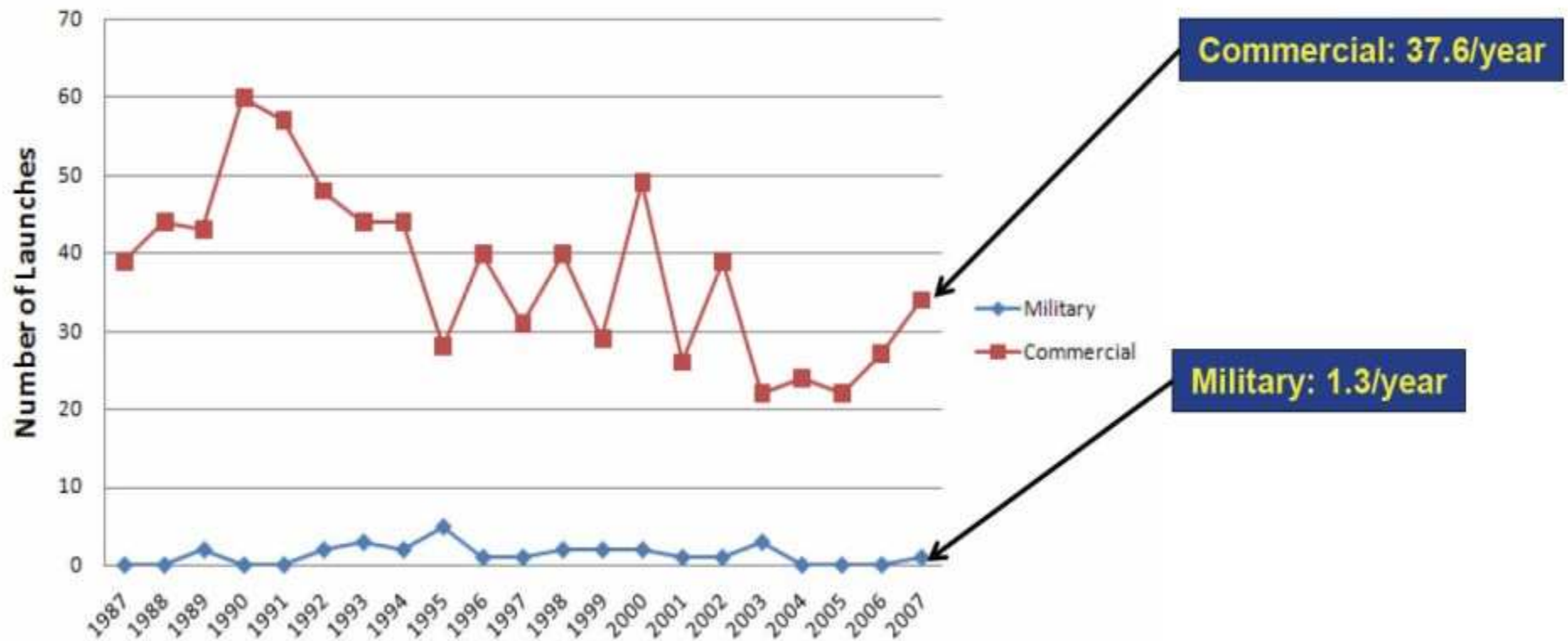
EELV Excess Margin



Mission Opportunities are available



Commercial Launch Opportunities

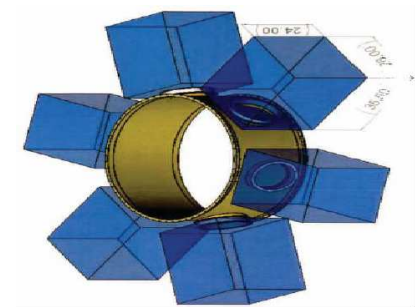


Source: Intelsat General



Existing Capabilities

- **Several secondary payload adaptors available**
 - Rideshare potential
- **Standard satellite bus (e.g., Boeing 601, 702 common busses)**
 - Common backplane allows “plug and play” for ease of hosting DoD payloads
- **Commercial spacecraft space, weight, and power margins**
 - Need better partnership with industry to identify and take advantage of opportunities



EELV Secondary Payload Adapter (ESPA)



Ariane Payload Adapter

Current capabilities need to be leveraged better



Issues

- **Integration timelines**
 - **Loads analysis, Finite Element Model, etc**
 - **EELV needs about 16 mo. lead time**
- **Policy/Legal implications**
 - **National Space Policy**
 - **US Depts and Agencies shall use US commercial space capabilities and services to maximum practical extent**
 - **Commercial systems must meet DoD reqts**
 - **Connectivity, Information Assurance, Operational Mgt, Interoperability, Operational Suitability**
 - **US Space Transportation Policy**
 - **US Govt payloads shall be launched on launch vehicles manufactured in the US unless specifically exempted by the OSTP**
 - **ITAR**



Industry Support Needed

- **Need your help in identifying launch opportunities**
 - **Non-traditional and traditional**
- **Identify barriers**
- **Identify ways to overcome**
- **SMC/XR issued RFI on 4 April to identify these opportunities**

Find ways to convert excess margin into usable capability



Industry Support Needed (cont'd)

- **Identification of POCs to work with Government**
 - **SMC/XR (Development Planning) POCs**
 - **Lt Col Hyon (David) Lee, SMC/XRF**
 - **Ms. Roberta Ewart, SMC Chief Scientist**
 - **Mr. Joe Simonds, PCO**