

**Guns and Missile Symposium
2007
23-26 April 2007**

**Requirements and Trends
Observations
For
Consideration**

- **Presentation Content and Comments are the Opinions of the Presenters: Dave Broden and Bob Glantz**
- **The Opinions Expressed do not Represent the Position of NDIA, any Company, or any DOD component.**
- **This Presentation is Intended to Stimulate Discussion of How Programs and Technology are evolving to Ensure Superior Capability to the US and Allied Armed Forces.**
 - **Program Structure—Roles--Responsibility**
 - **Program Schedule**
 - **Acquisition Management Approach**
 - Contract Type**
 - Risk Management Responsibility**

Trends Requirements & Contract Reform



- **Requirement Approach Shifted in 1980's thru early 2000's:**
 - **from Detailed Specific Design and TDP focus**
 - **Wills and Shalls**
 - **Build to print**
 - **to Performance Specifications and Criteria**
 - **Key Performance Perimeters**
 - **Threshold and Goals**
- **Both Contractor and Government Gain by Using Performance Specifications which allow Rigorous Trade-Off of Design and Performance—**
 - **Requirements viewed as Thresholds and Goals**
 - **Allows for Best Value**
 - **Allows for Spiral Development, Technology Insertion, and Pre-Planned**

- **Requirement Approach Shifted in 1980's thru early 2000's:**
 - **From: Government as System Integration Manager with**
 - **One Major integration contractor**
 - **Government Providing Major Sub Systems as GFE/GFM**
 - **Government conducting Sub System and System Testing**

 - **To: One Face to the Government Program Office**
 - **Corporate Contracts**
 - **Lead Systems Integrator**
 - **Ship Yard Manager**
 - **Contractor providing Certification**
 - **Purchase of Off the Shelf Items against Performance Specifications**

What did not change



- **Laws established by Congress after World War II**
 - **2 page letter contract for Liberty Ships**
 - **Support the Depot System**
 - **And Others**
- **Federal Acquisition Regulations (FAR's)**
- **Department Of Defense Acquisition Regulations (DAR's)**
- **Individual Service Supply & Support Directives and Requirements**

- **Recent trends seem to be moving:**
 - **Away from:**
 - **Performance Specifications**
 - **Lead Systems Integrators**

 - **Back toward:**
 - **Technical Data Packages procurements**
 - **Requiring a complete set of drawings.**
 - **Service Unique Technical Manuals**

- **Requirements Definition**
 - **Clarity**
 - **Creep**
 - **Responsive to Rapid Response Needs**
 - **Intellectual Property**
- **Technology Change Rate Before Product Completion**
 - **“Moore’s Law”---How can a Product be Realized –Timely**
- **Contracting Structure**
- **Contracting Type**
- **Funding Anticipated Decline**
- **Risk Responsibility—Industry vs. Government vs. Shared**

Requirements and Trends Recommendations



- Establish Acquisition Management Focused to **“Results”** with a Rigorous **“Process”**
 - **Timely Integration of New Technology and Systems**
- Ensure Utilization of **“Lessons Learned”**
 - Subject Matter Experts
 - Prior Program Life Cycle (Pros—Cons)
 - Acquisition Process Changes
- Maintain **Performance Specification** Concept and Incentives
 - Ensure joint Government and Industry SME’s
- Maximize Incremental **Performance Growth** —Threshold, Goals, Spiral Development, etc. ----Minimize time to Deploy
- Maximize **“Best Value”** thru Shared Risk Management

END

- Ability to Respond to the Rapid Changing Needs of **Asymmetric Warfare.**
- Meeting the **Reset, Refurbishment, and Inventory** Challenges
- Recognizing and planning to Ensure **Industrial Base Readiness** for Future Conflicts
- Evolving **“New” Capability while “Reset etc.”** Proceeds and Budgets are Constrained
- Ensuring Depth of **Subject Matter Experts** in Government and Industry