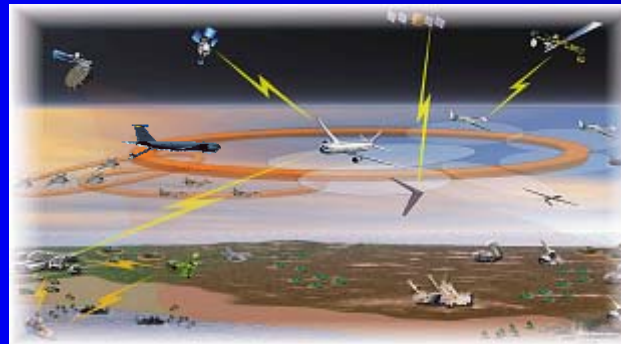


“Air Armament Solutions in an Interdependent Warfighting Environment”

2006 Armament Symposium

Gulf Coast Chapter of National Defense Industrial Association



Ms. Judy Stokley

**Deputy AFPEO for Weapons
and Executive Director
Air Armament Center
President, Gulf Coast
Chapter, NDIA**



Outline



- **Your Gulf Coast Chapter**
- **Context for 2006 Symposium**
- **Capability Planning – Our Environment**
- **Symposium – Annual Venue for Successful Collaborations**
- **Acquisition – Improving Our Portfolio's Performance**

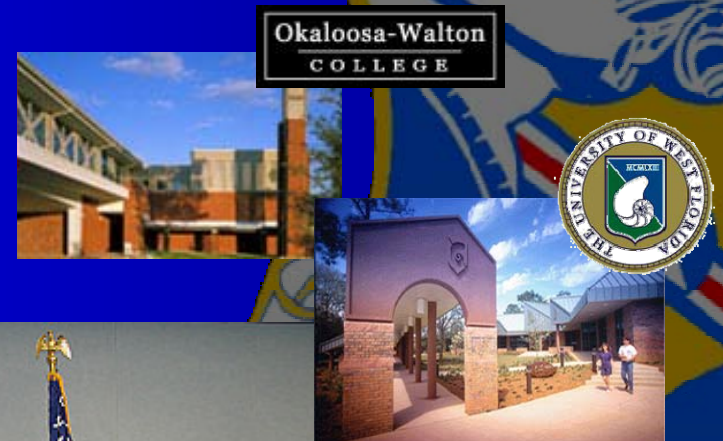




Your Gulf Coast Chapter

AAC

- Designated as Model Chapter for 2003, 2004 & 2005
- Chapter Membership All-time High: 900+ Members
- Fully Endowed Scholarships
 - 2 to Okaloosa Walton College
 - 3 to University of West Florida





Gulf Coast Chapter NDIA



Board Members

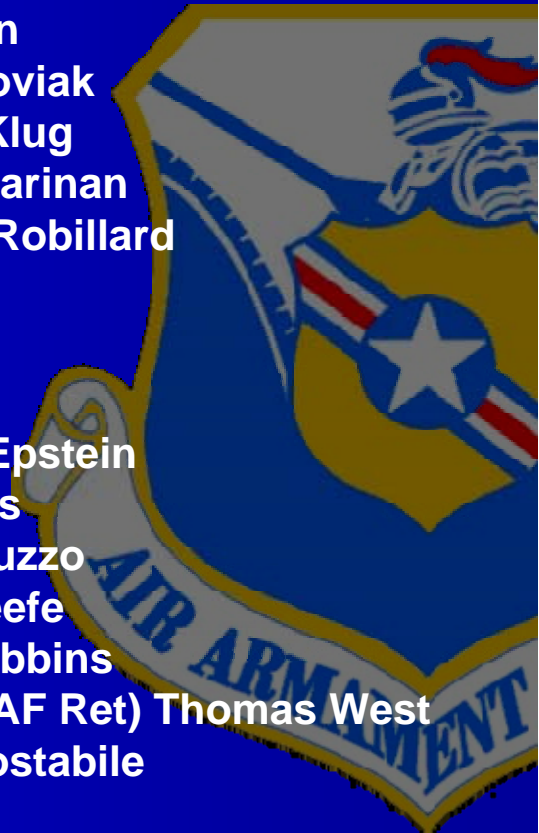
Ms. Judy Stokley
Ms. Lynda Rutledge
Mr. Grady Jordan
Dr. Murray Anderson
Col. Richard Justice
Mr. Reuben Manasco
Ms. Cheryl Nilsson
Ms. Betsy Thorn

Mr. David Andrews
Mr. Robert Blake
Ms. Gail Allen
Mr. Nick Holoviak
Mr. Russell Klug
Mr. Robert Marinan
Mr. Thomas Robillard

Advisors

Mr. Herb Brown
Lt Gen (USAF Ret) Gordon Fornell
Mr. Tom Hancock
Maj Gen (USAF Ret) Don Lamberson
Mr. David Price
Mr. Dick Roberts
Ms. Donna Lassiter
Ms. Marjory McCann

Mr. Charles Epstein
Mr. Jeff Haars
Mr. Len Iannuzzo
Mr. Tim O'Keefe
Mr. Frank Robbins
Maj Gen (USAF Ret) Thomas West
Mr. Gregg Costabile



Volunteers Contributing to Improving National Defense



Context for 2006 Symposium

AAC

- **Interdependent Warfighting Environment**
 - Mutual Support Among Joint Service and Coalition Forces
- **Key Characteristics**
 - Rapid and Accurate Exchange of Information and Data Among Land, Naval, Air, Space and Cyber Forces
 - Capability of Components and Systems to Operate Mutually or Stand Alone
- **Agenda Structured to Support Interdependence**
 - AF and Army Service Acquisition Executives
 - Senior Leaders from OSD, Joint Staff, Services, International, and Industry
 - Capability Areas – Lab Projects and Concepts for 2010 POM





Capability Planning – Our Environment

AAC

Integrated
Capabilities
Review And
Risk
Assessment

Planning,
Programming,
Budgeting,
And
Execution

Office of
Secretary of
Defense

Combatant
Commanders

Government
Laboratories
and
Acquisition
Teams

Applied
Technology
Councils

Joint
Capabilities
Integration
And
Development
System

Industry's
Innovative
Research and
Development
And Business
Plans

Annual Symposium – Spotlight on Armament



Why Do Capability Planning?

AAC

Joint Direct Attack Munition (JDAM) Timeline



Small Diameter Bomb I (SDB) Timeline



10+ Years of Laboratory – Led Demonstrations Until Formal Need
3-4 Years from Need to Program Start
5+ Years from Start to Fielding



JDAM For OEF And OIF The Future?



- **Prior to 11 Sept 01 Attacks**
 - 700 Units Per Month
 - Aircraft

MK 82 (500 lb)	MK 83 (1000 lb)	MK 84 (2000 lb)	
None	F/A-18 C/D	F-16 Blk 50	F-14
		F/A-18 C/D	B-2
		B-52	B-1

- **As of Sep 2006**
 - 2800 Units Per Month
 - More Aircraft Integrations - Smaller Bombs

MK 82 (500 lb)		MK 83 (1000 lb)	MK 84 & BLU-109 (2000 lb)	
AV-8B	F-15E*	F/A-18 C/DE/F	F-16 Blk 50	F-14
B-1	F/A-18 C/D/E/F	AV-8B	F/A-18 C/D/E/F	B-1
B-2	F-16 Blk 30*/40*/50*	F-22	F-117	B-2
B-52*	MQ-9* (FY07)			B-52

* Quick Reaction Capability

Message: We Must be Ready to Field the Unexpected



Symposium – Venue For Successful Collaborations

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- Universal Armament Interface
- Net-ready Weapon Data Link Demonstrations and Interface Standards
- Directed Energy Applications





Universal Armament Interface (UAI)

AAC

- UAI Implementation on Aircraft and Weapons is Underway
- Initiative to Provide Plug-And-Play, Standardized Software Interfaces in Platforms, Weapons, and Mission Planning
- Decouple Weapon Integration Schedules from Aircraft Platform Block Upgrade Cycle
- Industry Consortium Developed New Interface Standard
 - Baseline Complete and in Verification
 - Managed at Aeronautical Systems Center:
 - Ms. Nadine Thomas
- F-15E, JASSM, & JDAM UAI – Ready for the Unexpected in FY09

**First Fielded Capability Without Aircraft OFP Change:
SDB II on F-15E in FY14**



Net-Ready Weapons

AAC

- Government and Industry Team developed Interface/Message Standard to enable weapons to operate within a networked architecture
- Verified two-way communications in a Joint Advanced Concept Technology Demonstration
 - JASSM, WCMD-ER, SDB-II, JSOW
- Interface/Message Standard is transitioning to Link 16 and UHF/VMF Military Standards

First Fieldings Expected ~ 2010: HARPOON, JSOW, JASSM-ER



Directed Energy Systems

AAC

- **Oct 04: Symposium – Call to Action**
 - Feb 05: Workshop brought Lab, Acquisition, Warfighters and Industry Together
- **Feb 06: Hosted Expert Panel**
- **May – Aug 06: Stood up Organizational Structure**
 - DE Technology Transition Council
 - DE Capabilities Planning Office (AAC/XR)
 - DE Office at Air Combat Command (A8M)
- **Aug 06: DE Conference – Follow-up to Workshop**
- **Sep 06: Force Protection Analysis of Materiel Approaches (AMA) for Joint Staff (AAC/XR)**

Semi-Annual Conferences – 2010 POM Opportunities



Critical Capability Areas – 2006 Symposium

Focus Areas

AAC

- **Fuzes – Mr. Steve Vukelich, Industry Panel**
 - Exploring Enterprise Fuze Problems
- **Capability Planning – Col Mitch Dantzler**
 - Concept Developments for 2010 POM
- **Munitions Laboratory – Col Dan Morin**
 - FY07 Technology Development Opportunities



**Next Two Days Focus on
Warfighter Challenges and Potential Solutions**



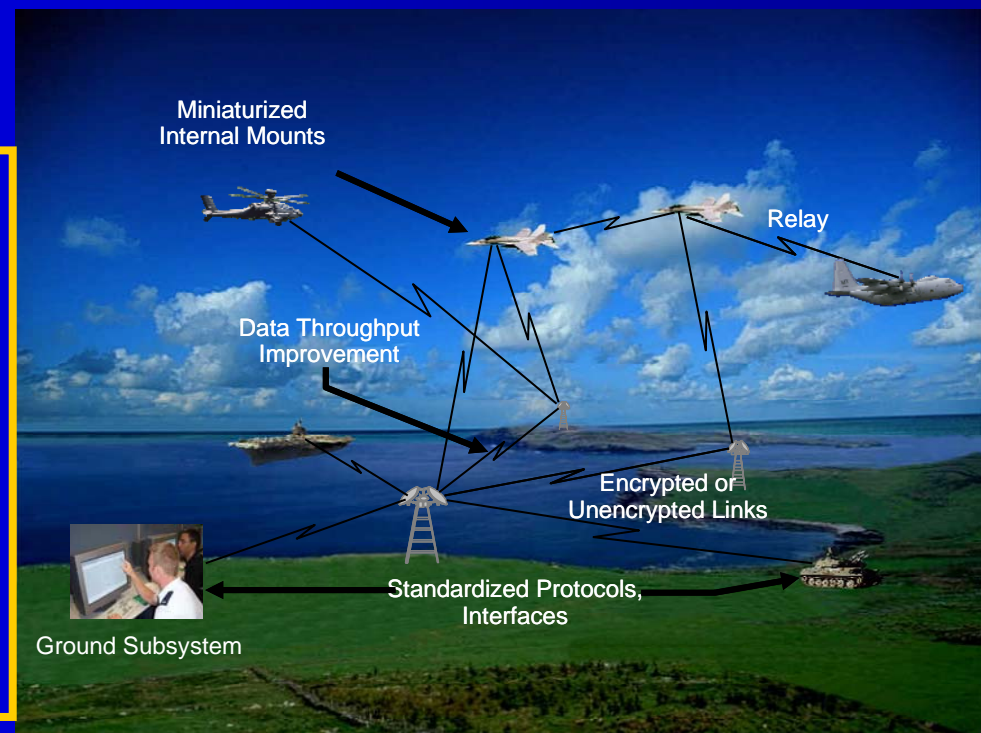
Common Range Integrated Instrumentation System (CRIIS)

AAC

- Objective: Develop and field a common test and training range instrumentation system for ground forces, aircraft, ships, and vehicles

Critical Technology Elements

- Data Links
- Data Compression
- TSPI Accuracy Improvements
- Miniaturized GPS Receivers
- Standardization
- Component & System Modularity
- Data Encryption



POC: Col Mun Kwon, 329 ARSG, Eglin AFB



New Capability Fielded!

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SMALL DIAMETER BOMB



Required Assets Available 28 Aug 06



MISSION CAPABLE



ON TIME

ON COST!



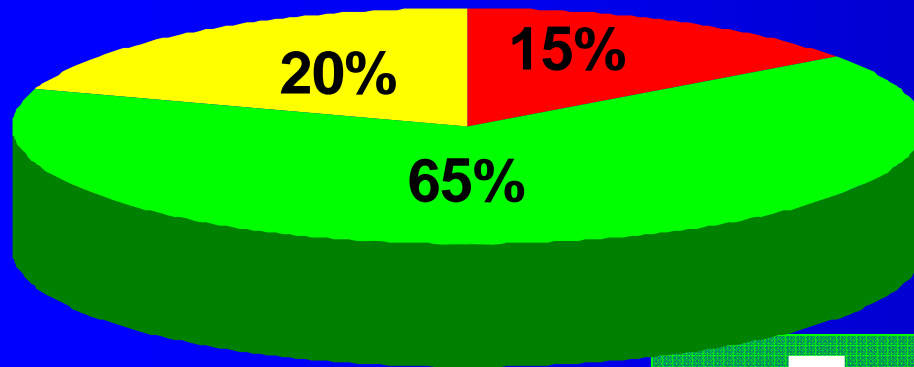
Savor The Moment – It Can Be Done!



Improving Our Portfolio's Performance

AAC

WEAPONS PORTFOLIO TODAY



Target

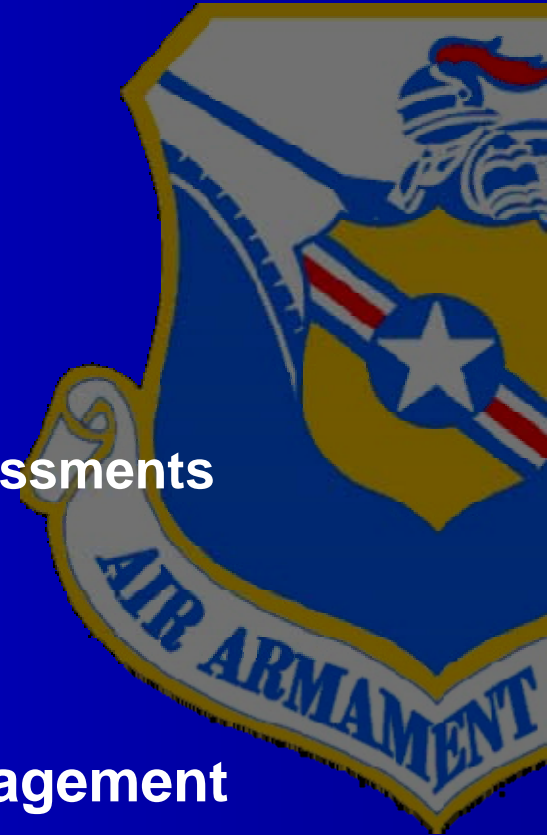
95%
Green
by 2010



Framework To Reach Our Target

AAC

- **Measure and Fix Existing Programs**
 - System Metric and Reporting Tool (SMART)
- **Strengthen Key Processes**
 - Probability of Program Success (PoPS)
 - High Confidence Source Selections
 - Systems Engineering Assessments
 - Technology Readiness and Integration Assessments
 - High Confidence Cost Estimates
 - Sufficiency Reviews
- **Establish Realistic, Frank Expectation Management Agreements (EMAs) with Warfighters**





Our Portfolio – The Rollup



Notional Data

Program	MAR Overall Rating G/Y/R	EMA In Place Y/N	Annual Commitments Est for FY07 Y/N	PoPS (%)	Sys Eng Status G/Y/R	Sufficiency Review On Program Y/N
# 1	Yellow	Y	N	74	Yellow	Y
# 2	Green	Y	Y	100	Yellow	Y
# 3	Green	Y	Y	82.5	Red	N
# 4	Yellow	Y	Y	72	Red	Y
# 5	Green	Y	Y	87	Yellow	N
# 6	Green	Y	Y	86	Yellow	Y
# 7	Green	Y	N	69	Red	N
# 8	Green	Y	N	81	Yellow	N
# 9...	Yellow	Y	Y	55	Yellow	N



Alignment - Example

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Notional Data

Program	MAR	CPAR*				AWARD FEE
		Tech	Sched	Cost	Mgt	
# 1	Yellow	Dark Blue	Purple	Green	Purple	NA
# 2	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	NA
# 3	Green	Dark Blue	Green	Dark Blue	Purple	98%
# 4	Red	Green	Green	Green	Green	96%
# 5	Green	Dark Blue	Dark Blue	White	Dark Blue	NA
# 6	Green	Dark Blue	Purple	Purple	Purple	93%
# 7...	Yellow	Dark Blue	Purple	Purple	Dark Blue	NA

I'm extremely concerned about those overruns, and I do not believe that award fees should be granted for anything except above average performance.

- Ms. Payton 2006

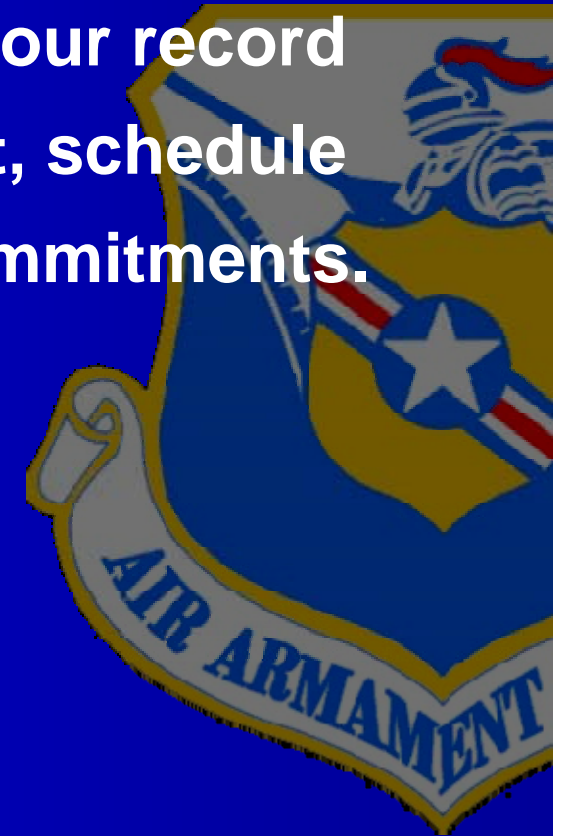
*Contractor Performance Assessment Report



It's a Journey

AAC

We are on a journey to improve our record of delivering to our original cost, schedule and operational performance commitments.



Industry: We Need Your Help



Together We Win

AAC

What does this mean to Industry?

- Risk-based Source Selections: Award to Highest Confidence Offerors
- Align Contractor Performance Assessment Reports & Fees With Program Results
- Emphasize Systems Engineering
- Generate Higher Confidence Cost Estimates

How can Industry help?

- Help Us Improve Execution Results
- Put Program Realism into Marketing
- Learn to Manufacture Smaller Quantities Affordably and Surge When Needed





Summary

AAC

War-Winning Capabilities... On Time, On Cost

Thank You for All You Do

