



UNITED STATES AIR FORCE



Air Force Aerial Targets

October 2009 NDIA Brief

Savannah, GA



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Overview



- **Purpose**
- System Description
- Organizational Structure
- Product Groups
 - Full-scale Aerial Targets
 - Subscale Aerial Targets
- Summary



Purpose



- **Provide “Presentations” of Realistic Threat Representative Systems (Aircraft and Cruise Missiles) in Support of the Following:**
 - **Lethality Testing Required for New or Improved Weapon Systems Prior to Production (10 USC 2366)**
 - **USAF Air-to-Air Weapon System Evaluation Program**
- **Validate Performance Of DoD Surface-to-Air and Air-to-Air Missiles and Aircraft Systems**
 - **Emulates Performance, Signatures and Countermeasures (Infrared and Electronic Attack)**



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System Description



- **Aerial Target “Presentations” Include:**
 - **The Target Itself**
 - **Target Control System**
 - **Gulf Range Drone Control System (GRDCS)**
 - **Missile Scoring**
 - **Launch, Recovery, Maintenance & Repair of Target**



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691 ARSS Staff



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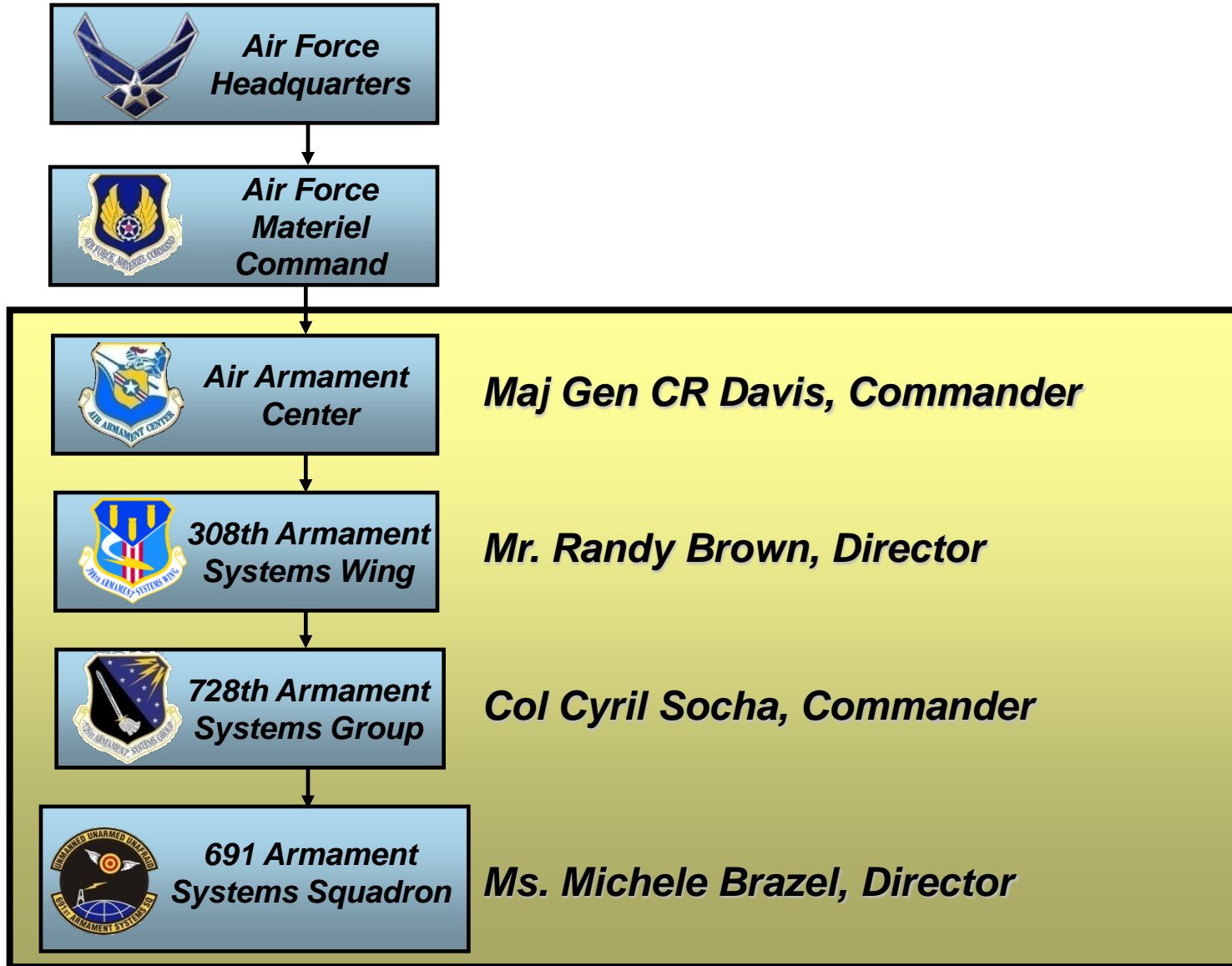
MR. KEN HISLOP
QF-16 PM



MS. LEE NEUGIN
QF-4 PM

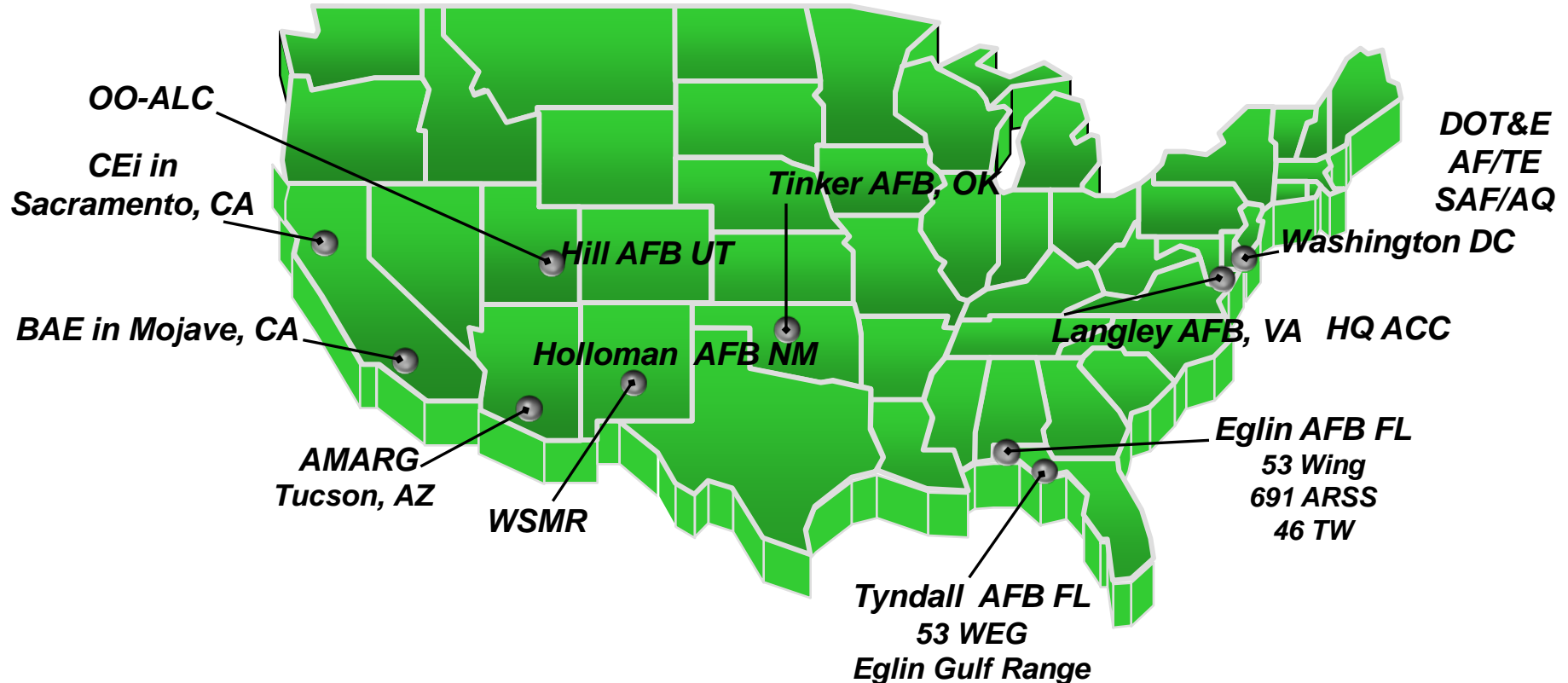


Where We Fit In





USAF Aerial Targets Stakeholders



Click Middle of Screen to Start Movie



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QF-4 Full Scale Aerial Target



Description

- Full Scale Aerial Target for Threat-Representative Weapon System Evaluation
- Meets USAF, Army, Navy, Allied Test Requirements
- Droned, Refurbished F-4 Aircraft Out of AMARG
- Program in Full Rate Production
- Prime Contractor is BAE Systems, Mojave, CA

Key Features

- Satisfies Title 10 "Live Fire/Lethality"
- Operates via Ground-Based Target Control System
- Supersonic, High-G, Heavy Payload Capability
- Provides 3rd Generation Threat Representation



QF-4 2009 Accomplishments



- **Completed Lot 13 and Began Lot 14 Deliveries Oct 09**
 - Total of 256 QF-4s Delivered to Date
- **Transitioned from F-4E to RF-4C Production in July 08**
 - Provides Three Additional Years of Full Scale Capability
 - Lot 15 on Contract with 2 Additional Planned (Lots 16 & 17)
- **FY09 Supported Live Fire and WSEP Test Missions**
 - 52 NULLO
 - 113 Missiles Fired
 - 22 Kills



QF-4 Master Schedule



	FY07	FY08	FY09	FY10	FY11	FY12	FY13
	O J A J	O J A J	O J A J	O J A J	O J A J	O J A J	O J A J
Transition Milestones			Lot Awd	16	17		
		Transition to OO-ALC				Transfer (with Lot 17)	
Lot 13 (20)	 Mar 07						
		Deliveries Aug 08 – Jul 09					
Lot 14 (17)		 Jan 08					
			17 C (5 USN)				
			Deliveries Aug 09 – Jul 10				
Lot 15 (15)			 Jan 09				
					15 C (5 USN)		
					Deliveries Aug 10 – Jul 11		
Lot 16 (12)							
			RFP Release	Jan 10		12 C (3 USN)	
						Deliveries Aug 11 – Jul 12	
Lot 17 (9)					 Jan 11		
							9 C (0 USN)
						Deliveries Aug 12 – Jul 13	



The Future of QF-4



- **Last QF-4 Delivery Planned FY13**
- **Sufficient Inventory Through FY15**
 - **Assumes 16 to 20 QF-4 Kills Per Year**
 - **Assumes Current Production Plan**
 - **Maintains Full Scale Operational Capability Until Planned QF-16 Deliveries**



QF-16 Full Scale Aerial Target



Description

- **Fullscale Target for Threat-Representative Weapon System Evaluation**
- **Meets USAF, Army, Navy, Allied Test Requirements**
- **Program in Source Selection Phase**
- **Refurbished F-16 Aircraft With Drone Modification Installed**
- **Risk Reduction in Progress: Airframes, Engines & Target Control System**

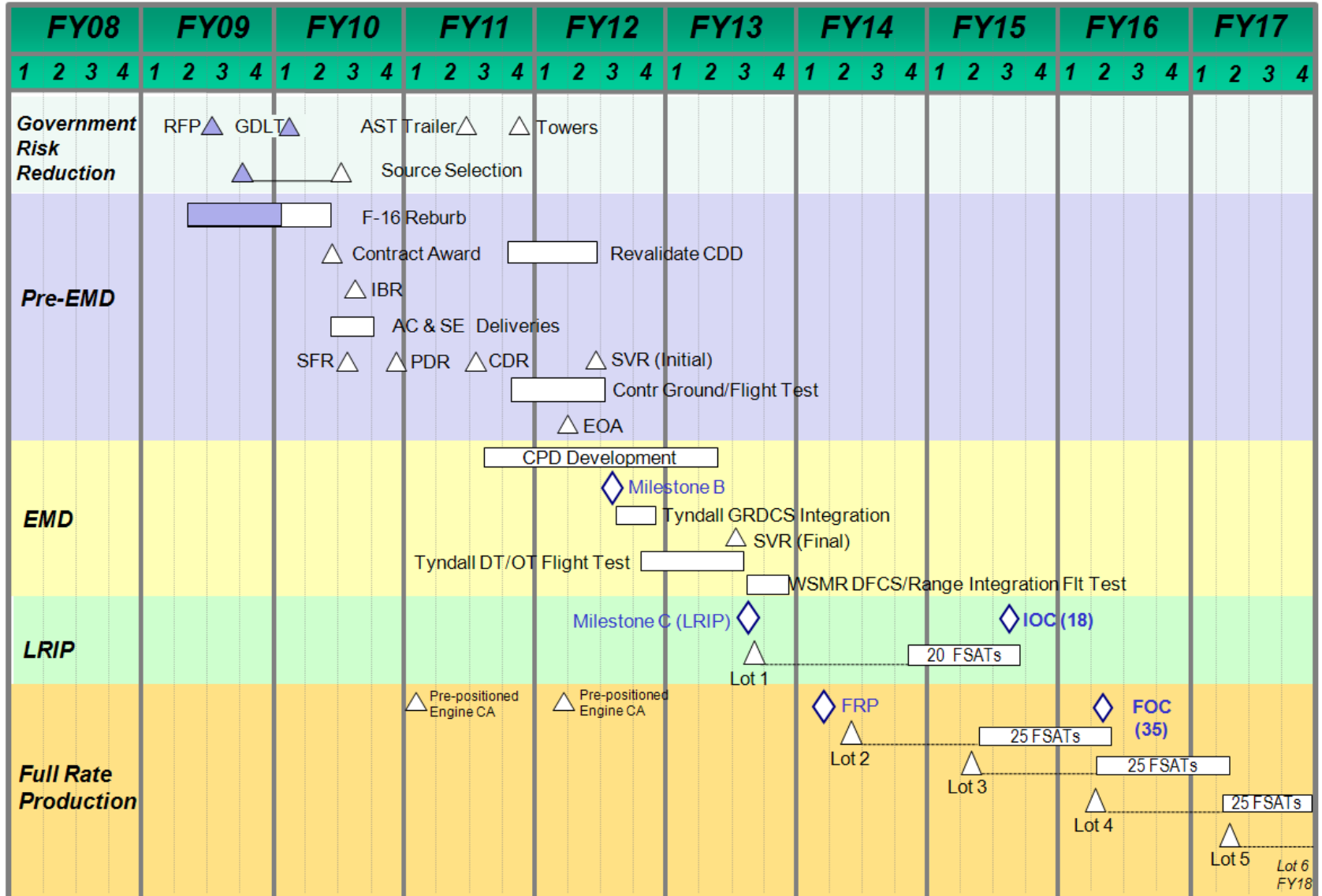


Key Features

- **Follow on for QF-4 Program: Supersonic, High-G, Heavy Payload Capability**
- **Satisfies Title 10 "Live Fire/Lethality"**
- **Provides 4th Generation Threat Representation**



Program Schedule





QF-16 Risk Reduction



- **Risk Reduction Activities: FY07-09**
 - Focus on Government Furnished Equipment
- **F-16 Airframe Study**
 - Assess Condition and Availability of Block 15s, 25s and 30s
 - Cost of Refurbishment
- **Engine Study**
 - OSS&E Impacts to Manned and Unmanned Capability
 - Assesses Multiple F100 Engine Configurations
- **Target Control System (TCS)**
 - Data Link Tester Development
 - Integrate GFI Ground S/W with Contractor-Developed Airborne S/W
 - Portable TCS For Contractor Development Support



QF-16 Status



- **Industry Days Complete (2 Events)**
 - 63 Industry Attendees Representing 23 Companies
- **Acquisition Strategy Panel Approved 21 Nov 08**
- **Draft RFP Released 29 Jan 09**
 - Received Industry Comments
 - Refined Final RFP
- **RFP Released on 25 Jun 09**
- **Source Selection in Progress**
- **Contract Award in 2Q FY10**



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AFSAT Subscale Aerial Target



Description

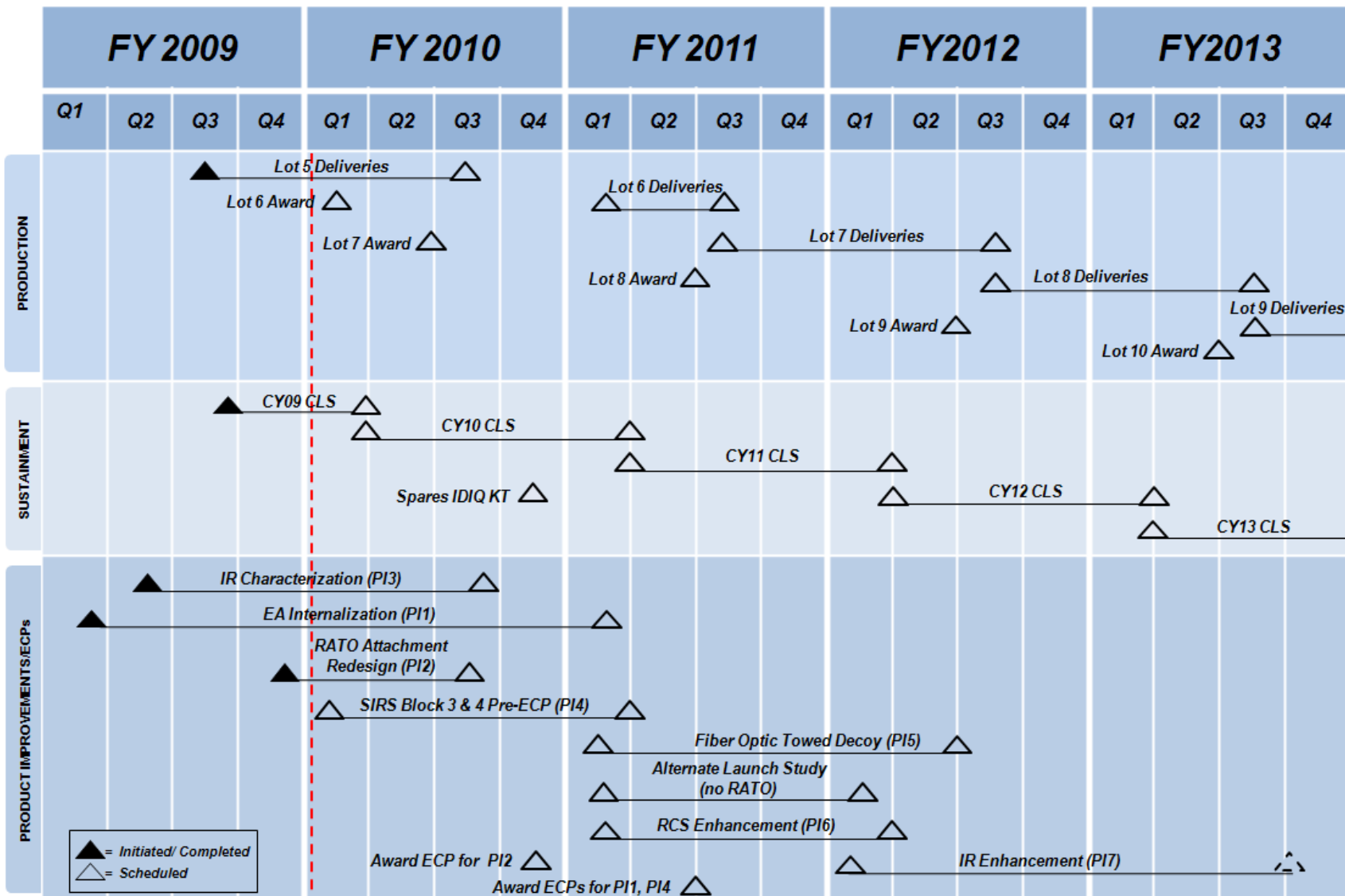
- **An Affordable, All-Composite Airframe**
- **Flies Faster/Slower, Higher/Lower, and Provides 3x+ More Presentations Than Legacy Subscale Targets**
- **Program in Production Phase**
- **Prime Contractor is CEi, Sacramento, CA**

Key Features

- **Supports Title 10 "Live Fire/Lethality"**
- **Operates via Ground Based Target Control System**
- **Subsonic, Relatively Heavy Payload Capability**



Program Schedule





AFSAT FY09 Accomplishments



- **Completed First Year of Standard Ops**
- **148th Target Delivered**
- **40 WEG Operational “Hot” Missions Supported**
 - **72 Launches**
 - **240 Presentations**
 - **214 Missile Shots**
- **Demonstrated Operational Capability at UTTR**



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- **QF-4 Production Planned Through FY13**
 - Using RF-4E Model
 - Inventory Expected to Be Depleted in FY15
- **QF-16 Pre-EMD Underway**
 - Request for Proposal (RFP) Released
 - Production Deliveries Planned to Begin in FY15
- **AFSAT Supporting Operational Missions**
 - Next Step to Award Lot 6-10 in 2QFY09
 - Award Product Improvement Efforts in FY09