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

MS. MICHELE BRAZEL
DIRECTOR

MR. MICHAEL VANDENBOOM
DEPUTY DIRECTOR

MS. AUDREA FEIST
CONTRACTING

MR. ALLAN FINLEY
ENGINEERING

MS. TAMMAY ROBBINS
FINANCE

MR. JIM CORMWELL
SUBSCALE FLT LEAD & AFSAT PM

MS. HOLLY REEDY
FULLSCALE FLT LEAD

MR. KEN HICSLOR
QF-16 PM

MS. LEE NEUGIN
QF-4 PM
Where We Fit In

Air Force Headquarters

Air Force Materiel Command

Air Armament Center:
- Maj Gen CR Davis, Commander

308th Armament Systems Wing:
- Mr. Randy Brown, Director

728th Armament Systems Group:
- Col Cyril Socha, Commander

691 Armament Systems Squadron:
- Ms. Michele Brazel, Director
Click Middle of Screen to Start Movie
Overview

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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

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Lot Awd 16
Transition to OO-ALC
Planning
Transfer (with Lot 17)

Lot Awd 17
Deliveries Aug 08 – Jul 09

Lot 17 C (5 USN)
Deliveries Aug 11 – Jul 12

Lot 16 C (3 USN)
Deliveries Aug 12 – Jul 13

Lot 15 C (5 USN)
Deliveries Aug 10 – Jul 11

Lot 14 C (5 USN)
Deliveries Aug 09 – Jul 10

Lot 13 C (5 USN)
Deliveries Aug 08 – Jul 09

Lot 12 C (3 USN)
Deliveries Aug 11 – Jul 12

Lot 11 C (0 USN)
Deliveries Aug 12 – Jul 13

Lot 10 C (0 USN)
Deliveries Aug 11 – Jul 12

Lot 9 C (0 USN)
Deliveries Aug 12 – Jul 13

Lot 8 C (0 USN)
Deliveries Aug 11 – Jul 12

Lot 7 C (0 USN)
Deliveries Aug 12 – Jul 13

Lot 6 C (0 USN)
Deliveries Aug 11 – Jul 12

Lot 5 C (0 USN)
Deliveries Aug 12 – Jul 13

Lot 4 C (0 USN)
Deliveries Aug 11 – Jul 12

Lot 3 C (0 USN)
Deliveries Aug 12 – Jul 13

Lot 2 C (0 USN)
Deliveries Aug 11 – Jul 12

Lot 1 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
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
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**Government Risk Reduction**
- RFP
- GDL
- AST Trailer
- Towers
- Source Selection
- F-16 Reurb
- Contract Award
- IBR
- AC & SE Deliveries
- SFR
- PDR
- CDR
- SVR (Initial)
- Contr Ground/Flight Test
- EOA

**Pre-EMD**
- CPD Development
- Milestone B
- Tyndall CRDCS Integration
- SVR (Final)
- Tyndall DT/OT Flight Test
- WSMR DFCS/Range Integration Flt Test

**EMD**
- Milestone C (LRIP)
- IOC (18)

**LRIP**
- Pre-positioned Engine CA
- 20 FSATs

**Full Rate Production**
- FRP
- Lot 2
- Lot 3
- Lot 4
- Lot 5
- 25 FSATs

96ABW-2009-0432
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
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
Overview

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Summary

• 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