Direct Attack SPO

Integrity - Service - Excellence

Fuze Programs
(DSU-33 & JPF)

Direct Attack SPO
Eglin AFB

For Official Use Only
Direct Attack SPO

Integrity - Service - Excellence

DSU-33 Proximity Sensor
DSU-33B/B Description

- Joint ACAT III program
- System Description:
  - Radar Proximity Sensor
  - Provides Height of Burst (HOB) fire pulse signal to the fuze for JDAM and GP bombs (FMU-139 & FMU-152A/B Fuzes)
- Performance Parameters:
  - Height of Burst: 5-35ft (80%)
  - Multiple Weapon Release: 2 or more
  - Operational Life (“B/B”): 200 seconds
- Program Info:
  - Phase – Full Rate Production (AF, Navy & FMS)
    - To date: ~ 37,000 DSU-33 sensors built (2 contracts)
    - On Contract: currently 48,000
    - FMS: 2 cases on contract w/ several pending
  - Contract Type – FFP
  - Contractor - Alliant Ordnance & Ground Systems, Janesville, WI
**DSU-33 Status**

- Full Rate Production – Alliant Techsystems (ATK) prime contractor
  - 1400 to 2000/month
  - Production through March 06

- Current Contract – Basic contract w/ 5 options (each 12k) = 72,000 qty limit

- Presently through Option 3 w/ 48,000 sensors on contract; 24,000 remaining

- Options 4 & 5 exercised ~ Dec 04

- VECP (DSU-33 C/B if approved) – Production cut-in Feb 05
  - Obsolete parts
  - Reduced costs
  - Improved producibility
Future Program Status

• New Full & Open Competition in late FY05 - FY06 contract award
  – Flexible, multi-year contract
  – Funding through FY09
  – Approximately 87,000 sensors
  – Build to Performance Specification and ICD

• Transfer Program to OO-ALC/WMG
  – Increment 1 Current Contract/sustainment: 30 June 05
  – Increment 2 New Contract
    • 30 Dec 05 (no requal)
    • 30 June 06 (requal)
Joint Programmable Fuze (FMU-152A/B)
Agenda

- FAAT IV Results
- Road to RAA
- Reliability Incentive
- Long Term Schedule
USAF FAAT IV Test Matrix

• Eglin AFB: 4 F-16 and 2 A-10 missions
  – 12 Fuzes @ Low/Medium Altitude
    • 2 MK-84 / 2 MK-82 High Drag Bombs
    • 2 MK-84 / 2 MK-82 Low Drag Bombs
    • 2 GBU-31(V)1 JDAMs
    • 2 GBU-31(V)3 JDAMs

• UTTR: 2 B-52H missions
  – 8 GBU-31(V)1 JDAMs
  – 10 GBU-31(V)3 JDAMs

• China Lake: 3 F-16 missions
  – 6 GBU-38 JDAMs

• 9 Eglin Test Range Static Detonations

• Sled Testing: 5 fuzes tested on BLU-109/113
Good Results

F-16
JDAM
Joint Programmable Fuze

16-18 March 2004
Good Results

BLU-109

BLU-113
## FAAT IV Final Results

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<th>Planned</th>
<th>Executed</th>
<th>Success</th>
<th>Failure</th>
<th>Comments</th>
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<tr>
<td>Flight Tests</td>
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<td><strong>Totals</strong></td>
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<td><strong>86</strong></td>
<td><strong>79</strong></td>
<td><strong>5</strong></td>
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- 94.1% Reliability Point Estimate
Near Term Plan

• Passed FAAT IV
  – Still have some Manufacturing Concerns
  – RAA Planned for B-2 / GBU-31 @ Whiteman AFB in Jun 04

• AF Strategy
  – Enter Production – Grow Reliability with Production Experience
  – Reliability Demonstration – Establish Thresholds/Objectives
  – Incentivize Reliability
Reliability Incentives

- Options 2 – 8 Awards
  - Designed to incentivize to reach 98% Reliability
- Incentives not awarded, turned back into fuzes
- Total Incentive Funds throughout Program
- 3% Reliability gained (95% → 98%) – 3,361 less duds
  - Average $1983/fuze equates to $6.664M
  - 3,361 JDAMs x $22K/kit = $74M
  - Other: Sortie Re-fly, Bomb body etc..
Joint Programmable Fuze
Current Schedule

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- Basic Contract Award
- FMU-152 Design
- FMU-152/B
- FMU-152A/B
- FAATs
- Operational Test
- LRIP Deliveries
- Option 1 Deliveries
- Option 2 Deliveries
- Option 3 Deliveries
- Option 4 Deliveries
- Option 5 Deliveries
- Option 6 Deliveries
- Option 7 Deliveries
- Option 8 Deliveries

Today
Summary

• JPF Passed FAAT IV! -- Field on B-2A/GBU-31
  – Projected RAA: Jun 04 @ Whiteman AFB
Any Questions?