

Integrity - Service - Excellence



# Fuze Programs (DSU-33 & JPF)

Direct Attack SPO Eglin AFB

For Official Use Only



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#### **DSU-33 Proximity Sensor**

For Official Use Only



### **DSU-33B/B Description**



**Direct Attack SPO** 

- 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













- 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







Direct Attack SPO

- 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)



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#### Joint Programmable Fuze (FMU-152A/B)

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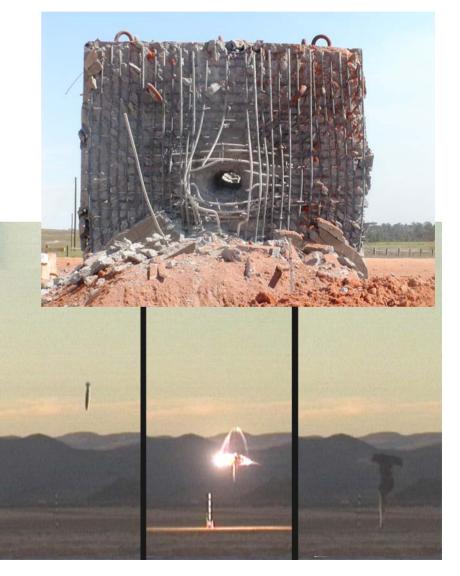






**Direct Attack SPO** 

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



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# **USAF FAAT IV Test Matrix**



- 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

















**Direct Attack SPO** 

# F-16 JDAM Joint Programmable Fuze

16-18 March 2004



## **Good Results**



**Direct Attack SPO** 



BLU-109

BLU-113



## **FAAT IV Final Results**



**Direct Attack SPO** 

	Planned	Executed	Success	Failure	Comments
Contractor FAAT	36	36	33	3	
Flight Tests	36	36	33	1	2 No-test
Sled tests	5	5	4	1	
Static Arena	9	9	9	0	
Totals	86	86	79	5	

• 94.1% Reliability Point Estimate







#### • 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**



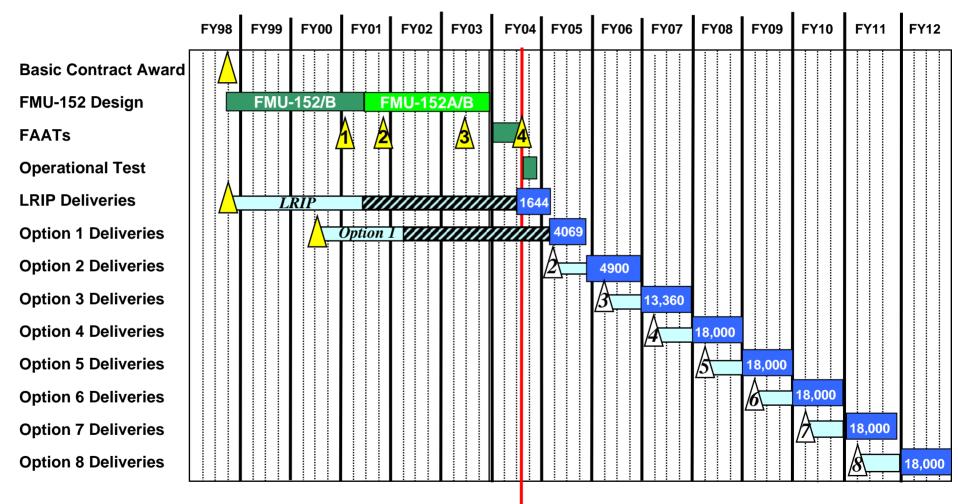
- Options 2 8 Awards
  - Designed to incentivize to reach 98% Reliability
- Incentives not awarded, turned back into fuzes
- Total Incentive Funds throughout Program
- 3% Reliability gained (95%→98%) 3,361 less duds
  - Average \$1983/fuze equates to \$6.664M
  - 3,361 JDAMs x \$22K/kit = \$74M
  - Other: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



### Joint Programmable Fuze Current Schedule



Direct Attack SPO









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

#### F/WCMD #2 078:02:56:55.1187 RND#1 F-16 JPF JDAM 3/17/04



## Any Questions?