

**UNCLASSIFIED**

PE NUMBER: 0604270F  
 PE TITLE: EW Development

<b>Exhibit R-2, RDT&amp;E Budget Item Justification</b>	<b>DATE</b> <b>February 2008</b>
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<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604270F EW Development</b>
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Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	95.949	102.601	54.995	86.443	65.881	0.507	0.512	Continuing	TBD
3891 Advanced IR Counter Measures (AIRCM)	0.009	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
3945 TEWS Upgrade	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	TBD
4832 Precision Location and Identification (PLAID)	19.441	5.517	0.007	0.000	0.000	0.000	0.000	Continuing	TBD
8462 Miniature Air Launched Decoy	75.837	97.084	54.988	86.443	65.881	0.507	0.512	Continuing	TBD

The Advanced Strategic and Tactical Infrared Expendables (ASTE) component of AIRCM was transferred to Ogden Air Logistics Center, Hill AFB (OO-ALC) under PE 28030F War Reserve Ammunition.

**(U) A. Mission Description and Budget Item Justification**

This program element (PE) consolidates Air Force funding and management of common Electronic Warfare (EW) systems from engineering development through transition to operational capability. EW is an integral part of offensive and defensive Counter-air, Counterland, and Countersea operations. EW systems influence, deceive, disrupt, degrade, deny, and destroy threats to air operations throughout the electro-magnetic spectrum. This PE supports Electronic Support (ES), Electronic Protection (EP), and Electronic Attack (EA). ES programs support the collection, analysis, and dissemination of information related to the detection, geo-location, characterization, and identification of threats to air operations. EP programs provide self-protection through active and passive measures that deceive threats to air operations. EA programs provide kinetic and non-kinetic means to defeat threats that rely on the electro-magnetic spectrum.

This program is in budget activity 5 - System Development and Demonstration (SDD) because of the common development to meet user requirements that provide electronic warfare combat capability.

**(U) B. Program Change Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Previous President's Budget	92.832	101.649	16.637
(U) Current PBR/President's Budget	95.949	102.601	54.995
(U) Total Adjustments	3.117	0.952	
(U) Congressional Program Reductions			
Congressional Rescissions		-0.653	
Congressional Increases		1.600	
Reprogrammings	5.100	0.005	
SBIR/STTR Transfer	-1.983		

**(U) Significant Program Changes:**

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- FY2007, Project 654832, funds added to support AT3 ACTD development and integration
- FY2008, Project 654832, congressional add for Rapid Replacement of Mission Critical Logistics Electronic Components
- FY2009-FY2011, Project 658462, funds added for continued development of MALD-J

**Exhibit R-2a, RDT&E Project Justification**

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BUDGET ACTIVITY <b>05 System Development and Demonstration (SDD)</b>				PE NUMBER AND TITLE <b>0604270F EW Development</b>			PROJECT NUMBER AND TITLE <b>3891 Advanced IR Counter Measures (AIRCM)</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
3891 Advanced IR Counter Measures (AIRCM)	0.009	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

The Advanced Strategic and Tactical Infrared Expendables (ASTE) component of AIRCM was transferred to Ogden Air Logistics Center, Hill AFB (OO-ALC) under PE 28030F War Reserve Ammunition.

**(U) A. Mission Description and Budget Item Justification**

The Advanced Infrared Countermeasure (AIRCM) project contains related aircraft self-protection efforts aimed at increasing aircraft survivability against the increasing threat of sophisticated infrared-guided surface-to-air and air-to-air missiles. These missiles may employ sophisticated next-generation electro-optics or dual-mode IR and radio frequency seekers. AIRCM will provide advanced IR expendable countermeasures and/or IRCM techniques that will be functionally compatible with existing ALE-40, 45, and 47 dispenser systems and will be employed across multiple USAF weapon systems and the Navy's F/A-18 E/F. This also explicitly includes any and all flare and decoy development and testing that may be demanded or needed in current operations supporting the war on terrorism regardless of aircraft platform. These activities may also be paid for under platform specific funding or through other testing activities such as joint services or NATO test groups. The Advanced Strategic and Tactical Infrared Expendables (ASTE) component of AIRCM was transferred to Ogden Air Logistics Center, Hill AFB (OO-ALC) for sustainment and modernization. FY07 funds are being used to close out technical support to complete transition to OO-ALC.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) AIRCM Modeling & Simulation, flight test analysis and technical support	0.009		
(U)			
(U)			
(U) Total Cost	0.009	0.000	0.000

**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) Procurement of Ammunition, AF, PE 0208030F, WSC flares	42.180	32.337	164.729	145.487	144.296	144.520	147.417	Continuing	TBD

**(U) D. Acquisition Strategy**

The planned acquisition strategy for AIRCM efforts is competitive cost-plus

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**Exhibit R-3, RDT&E Project Cost Analysis**

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<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>	<b>PE NUMBER AND TITLE</b> <b>0604270F EW Development</b>	<b>PROJECT NUMBER AND TITLE</b> <b>3891 Advanced IR Counter Measures (AIRCМ)</b>
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<u>(U) Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
<u>(U) Product Development</u>												
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
<u>(U) Support</u>												
CESS/TW IRCM technical support for EW roadmap	Various	Combat Electronic Systems Squadron, WPAFB OH									0.000	
542 EWSG/CI support	Various	542 Electronic Warfare Group Warner Robins ALC (WR-ALC)	0.000	0.009							0.009	
Subtotal Support			0.000	0.009		0.000		0.000		0.000	0.009	0.000
Remarks:												
<u>(U) Test &amp; Evaluation</u>												
Subtotal Test & Evaluation			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
<u>(U) Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
<u>(U) Total Cost</u>			0.000	0.009		0.000		0.000		0.000	0.009	0.000

**Exhibit R-4, RDT&E Schedule Profile**

DATE

**February 2008**

BUDGET ACTIVITY

**05 System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

**0604270F EW Development**

PROJECT NUMBER AND TITLE

**3891 Advanced IR Counter Measures (AIRCМ)**

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<b>Exhibit R-4a, RDT&amp;E Schedule Detail</b>	DATE <b>February 2008</b>
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BUDGET ACTIVITY <b>05 System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604270F EW Development</b>	PROJECT NUMBER AND TITLE <b>3891 Advanced IR Counter Measures (AIRCМ)</b>
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(U) <u>Schedule Profile</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U)			

**Exhibit R-2a, RDT&E Project Justification**

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<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>				<b>PE NUMBER AND TITLE</b> <b>0604270F EW Development</b>			<b>PROJECT NUMBER AND TITLE</b> <b>3945 TEWS Upgrade</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
3945 TEWS Upgrade	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

The Tactical Electronic Warfare Suite (TEWS) Upgrade program will develop a Fiber Optic Towed Decoy (FOTD) for the joint Integrated Defensive Electronic Countermeasures (IDECM) Navy-led program. The current AF approved program will provide a FOTD suitable for future F-15 requirements and will include a Reel-In/Reel-Out (RORI) prototype launcher capability.

**(U) A. Mission Description and Budget Item Justification**

The FOTD improves electronic countermeasure performance against tier one-threat systems and improves electronic warfare system performance against future missile threat systems. The Radio Frequency (RF) towed decoy is a countermeasure that increases survivability against monopulse, semi-active, and active RF missile threats during the terminal portion of an engagement.

This program develops and establishes integration for an Air Force FOTD system. The FOTD portion of the budget provides Air Force participation in the Navy-led IDECM program that is jointly developing, integrating, flight testing, conducting effectiveness testing, and live fire testing using a FOTD. The Air Force will provide for its unique development, integration, and testing requirements that are not covered by the Navy-led joint development effort. The Air Force also participates in a joint FOTD risk reduction effort with the Navy looking at alternate FOTDs and methods of deployment to develop an alternative launcher system (Reel-Out/Reel-In [RORI]), which reduces life cycle cost. The Air Force completes FOTD testing and development in FY07.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) F-15 ( F-15 TEWS & Two Tube FOTD & Flight Test)	0.000		
(U) FOTD Integration and RORI Development	0.000	0.000	0.000
(U) Mission and Test Support	0.662	0.000	0.000
(U) Total Cost	0.662	0.000	0.000

**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u> <u>Actual</u>	<u>FY 2008</u> <u>Estimate</u>	<u>FY 2009</u> <u>Estimate</u>	<u>FY 2010</u> <u>Estimate</u>	<u>FY 2011</u> <u>Estimate</u>	<u>FY 2012</u> <u>Estimate</u>	<u>FY 2013</u> <u>Estimate</u>	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U) Aircraft Procurement, AF PE 0207442F, War Consumable (RF decoys)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

**(U) D. Acquisition Strategy**

The acquisition strategy for IDECM RDT&E is competitive, cost-plus incentive fee, cost-plus award fee and cost-plus fixed fee.

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**Exhibit R-3, RDT&E Project Cost Analysis**

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BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE			
<b>05 System Development and Demonstration (SDD)</b>				<b>0604270F EW Development</b>					<b>3945 TEWS Upgrade</b>			
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
USAF IDECM: Development BAE	CPAF	BAE, Nashua, NH								0.000	0.000	
Development Raytheon	CPIF	Raytheon, Goleta, CA								0.000	0.000	
Raytheon Development (FO-50 Two Tube)	CPFF	Raytheon, Goleta, CA								0.000	0.000	
IDECM Misc Development Contracts (IMPLC/Alt. Strategy/Flt Test Assets)	Various	Misc								0.000	0.000	
RORI Launcher Prototype/Development	CPFF	Raytheon, CA & BAE, NH								0.000	0.000	
Subtotal Product Development			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Support</u>												
ASC/AA - IDECM	Various	Misc			Nov-06		Nov-07		Nov-08	0.000	0.000	0.000
Subtotal Support			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
Flight Test Support (Effectiveness Testing)	Various	Misc		0.662	Apr-07	0.000		0.000		0.000	0.662	
Eglin Flight Test Support	Various	Misc			Apr-07					0.000	0.000	
NRL F-15 Effectiveness Flight Test					Jan-07						0.000	
Subtotal Test & Evaluation			0.000	0.662		0.000		0.000		0.000	0.662	0.000
Remarks:												
(U) <u>Management</u>												
Subtotal Management			0.000	0.000		0.000		0.000		0.000	0.000	0.000
Remarks:												
(U) Total Cost			0.000	0.662		0.000		0.000		0.000	0.662	0.000

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604270F EW Development

PROJECT NUMBER AND TITLE

3945 TEWS Upgrade

## RDT&E Schedule Profile Milestones

ID	Task Name	2006				2007				2008			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
1	RORI Launcher Prototype Demo Flt Test		★										
2	FOTD Envelope Expansion Final Flt Test (ALE-55)				☆								
3	RORI Launcher Protoype Final Demo Flt Test				☆								
4	FOTD Envelope Expansion Final Flt Test (AFOTD)				☆								
5	FOTD Effectiveness Flt Test						☆						
6	Program Close out & HW Disposition										☆		
7	Program Closed Out										☆		

Exhibit R-4a, RDT&E Schedule Detail

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05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604270F EW Development

PROJECT NUMBER AND TITLE

3945 TEWS Upgrade

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <b>Schedule Profile</b>			
(U) FOTD Effectiveness Flight Test	2Q		
(U) Program Closeout & HW Disposition	1-3Q		
(U) Program Closeout	3Q		

**Exhibit R-2a, RDT&E Project Justification**

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<b>BUDGET ACTIVITY</b> <b>05 System Development and Demonstration (SDD)</b>				<b>PE NUMBER AND TITLE</b> <b>0604270F EW Development</b>			<b>PROJECT NUMBER AND TITLE</b> <b>4832 Precision Location and Identification (PLAID)</b>		
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total
4832 Precision Location and Identification (PLAID)	19.441	5.517	0.007	0.000	0.000	0.000	0.000	Continuing	TBD
Quantity of RDT&E Articles	0	0	0	0	0	0	0		

**(U) A. Mission Description and Budget Item Justification**

The AN/ALR-69A radar warning receiver (RWR) is an evolutionary development program consisting of a core digital receiver/processor with growth increments. The core ALR-69A program objectives are to improve identification of threat type, provide substantially more receiver sensitivity compared to the legacy AN/ALR-69, and utilize digital processor technology to operate in a dense signal environment. Effort has begun on evolutionary growth spirals for single and multi-ship geolocation. The underlying technology and algorithms enabling precise threat geolocation and Specific Emitter Identification (SEI) are often collectively known as Precision Location and Identification (PLAID) technology. When integrated with existing mission planning systems, the AN/ALR-69A will improve aircrew situational awareness by providing real time threat avoidance route information. ALR-69A development is currently focused on a replacement RWR for AFSOC and AMC C-130 aircraft but this digital RWR is also installed in three ANG F-16Cs for developmental and operational testing and this RWR is also under consideration by AFSOC, AMC and ACC for installation in other mission design series aircraft. Quantities shown reflect preproduction ALR-69A systems being used in testing. Full rate production for AFSOC and AMC C-130 aircraft begins in FY09.

Multiple platform geolocation capability is being developed under an OSD-ATL and CENTCOM sponsored Advanced Tactical Targeting Technology (AT3) Advanced Concept Technology Demonstration (ACTD). A plan to develop this technology for US Armed Forces airborne platforms has been approved.

In FY07 Congress added \$1.0M AF RDT&E funds to the EW Development PE 064270F for "Rapid Replacement of Mission Critical Logistics Electronics Components" (RRMCLEC). Warner Robins Air Logistics Center (ALC) is performing RRMCLEC work and tracking those funds. RRMCLEC will rapidly develop prototypes of replacement electronic components and subassemblies to combat obsolescence and vanishing vendor issues in Electronic Warfare systems.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) Raytheon Core C-130 SDD	6.060	0.477	
(U) Raytheon Option 11 AT3 ACTD	4.299	1.400	
(U) AT3 ACTD Program Office Support	1.038	0.850	
(U) Engineering Support	1.281	0.300	
(U) AFOTEC Det 1 46 OGS Responsible Test Organization (RTO)	1.020	0.000	
(U) AT3 ACTD Test and Evaluation	1.566	0.690	
(U) Platform Integration	3.177	0.200	0.007
(U) Rapid Replacement of Mission Critical Logistics Electronic Components	1.000	1.600	
(U) Total Cost	19.441	5.517	0.007

**Exhibit R-2a, RDT&E Project Justification**

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BUDGET ACTIVITY

**05 System Development and Demonstration (SDD)**

PE NUMBER AND TITLE

**0604270F EW Development**

PROJECT NUMBER AND TITLE

**4832 Precision Location and Identification (PLAID)**

**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) DARPA Funding (AT3 ACTD)									1.300
(U) OSD Funding (AT3 ACTD)									14.000
(U) PE 0207442F Common ECM Equipment	0.000	10.308	10.532	1.651	0.000			Continuing	TBD
(U) PE 0401115F ALR-69 (RWR) AMC C-130 Airlift Squadrons. PLAID procurement to commence in FY07	34.090	30.227	23.711	39.021	31.492	9.337	9.522	Continuing	TBD

**(U) D. Acquisition Strategy**

Acquisition was accomplished through full and open competition. The SDD contract was awarded to Raytheon Corporation in August 2001.

Program is based on 'Evolutionary Acquisition Strategy'.

- CORE SDD: SOF-130 DT/OT
- Option 1: F-16 DT/OT
- Option 2: Risk Reduction, AT3 Bridge Requirements Definition
- Option 3: F-16 Geo-Location
- Option 4: SOF-130 Geo-Location
- Options 5-10: Production
- Option 11: Advanced Tactical Targeting Technology (AT3)

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**Exhibit R-3, RDT&E Project Cost Analysis**

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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT NUMBER AND TITLE				
<b>05 System Development and Demonstration (SDD)</b>				<b>0604270F EW Development</b>				<b>4832 Precision Location and Identification (PLAID)</b>				
(U) <u>Cost Categories</u> (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	<u>Contract Method &amp; Type</u>	<u>Performing Activity &amp; Location</u>	<u>Total Prior to FY 2007 Cost</u>	<u>FY 2007 Cost</u>	<u>FY 2007 Award Date</u>	<u>FY 2008 Cost</u>	<u>FY 2008 Award Date</u>	<u>FY 2009 Cost</u>	<u>FY 2009 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
(U) <u>Product Development</u>												
Raytheon CORE SDD + Fee	Full & Open Comp CPAF	Raytheon - Goleta CA		6.060		0.477				0.000	6.537	23.152
Raytheon Option 3/4 SDD + Fee	Full & Open Comp CPAF	Raytheon - Goleta CA								0.000	0.000	5.440
Raytheon Option 11 AT3 + Fee	Sole Source - Raytheon	Raytheon - Goleta CA		4.299	Apr-07	1.400	Feb-08			0.000	5.699	8.384
Subtotal Product Development			0.000	10.359		1.877		0.000		0.000	12.236	36.976
Remarks:												
(U) <u>Support</u>												
AT3 Program Office Support Program Office	PR	Various Contractors		1.038						0.000	0.850	1.255
Engineering	Various			1.281		0.300				0.000	1.581	2.500
Subtotal Support			0.000	2.319		1.150		0.000		0.000	3.469	5.365
Remarks:												
(U) <u>Test &amp; Evaluation</u>												
AFOTEC Det 1 46 OGS C-130	PO			1.020						0.000	1.020	4.455
AT3 ACTD T&E (Western Test Range)	PO			1.566		0.690					2.256	0.739
Subtotal Test & Evaluation			0.000	2.586		0.690		0.000		0.000	3.276	5.194
Remarks:												
(U)												
Platform Integration - C-130, F-16 AT3 ACTD	Various	Various		3.177		0.200		0.007		0.000	3.384	7.027
Platform Integration Options 3/4	Various	Various									0.000	0.395
Subtotal			0.000	3.177		0.200		0.007		0.000	3.384	7.422
Remarks:												
(U)												
Rapid Replacement of Mission Critical Logistics Electronic Components	IDIQ Time and Matls	Scientific Research Corp - Atlanta GA		1.000		1.600					2.600	3.900
ALQ-172 AEA Upgrade	Sole Source, BOA	ITT, Clifton, NJ									0.000	
Subtotal			0.000	1.000		1.600		0.000		0.000	2.600	3.900
Remarks:												
(U) Total Cost			0.000	19.441		5.517		0.007		0.000	24.965	58.857

R-1 Line Item No. 64

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Project 4832

Exhibit R-3 (PE 0604270F)

Exhibit R-4, RDT&E Schedule Profile

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BUDGET ACTIVITY  
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE  
0604270F EW Development

PROJECT NUMBER AND TITLE  
4832 Precision Location and Identification (PLAID)



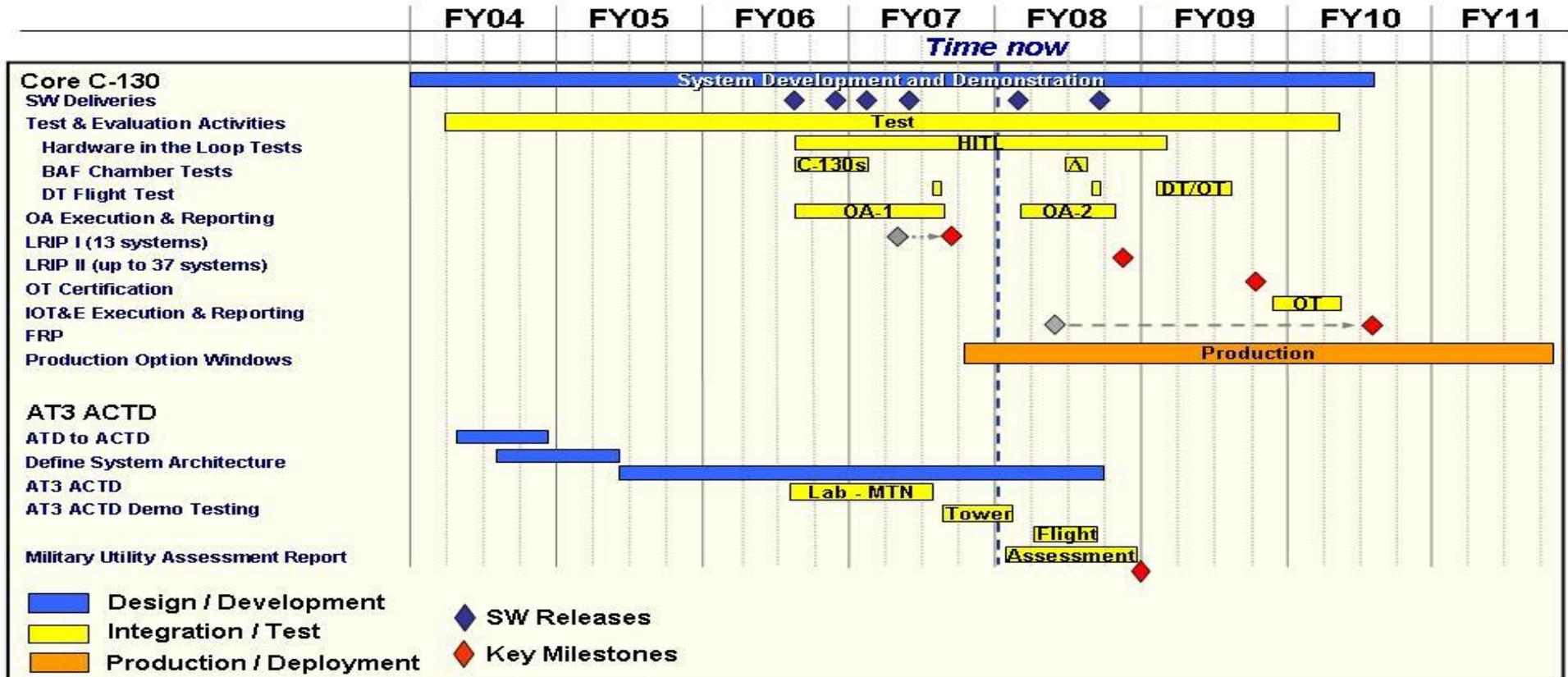
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# ALR-69A Schedule

U.S. AIR FORCE

*Dominant Air Power: Design For Tomorrow... Deliver Today*



As of 3 Jan 08 1

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<b>Exhibit R-4a, RDT&amp;E Schedule Detail</b>	DATE <b>February 2008</b>
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BUDGET ACTIVITY <b>05 System Development and Demonstration (SDD)</b>	PE NUMBER AND TITLE <b>0604270F EW Development</b>	PROJECT NUMBER AND TITLE <b>4832 Precision Location and Identification (PLAID)</b>
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	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) <b>Schedule Profile</b>			
(U) Developmental Testing and Evaluation			1-3Q
(U) Initial Operational Test and Evaluation			4Q
(U) LRIP I Decision	3Q		
(U) LRIP II Decision		4Q	

**Exhibit R-2a, RDT&E Project Justification**

DATE  
**February 2008**

BUDGET ACTIVITY <b>05 System Development and Demonstration (SDD)</b>							PE NUMBER AND TITLE <b>0604270F EW Development</b>		PROJECT NUMBER AND TITLE <b>8462 Miniature Air Launched Decoy</b>	
Cost (\$ in Millions)	FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total	
8462 Miniature Air Launched Decoy	75.837	97.084	54.988	86.443	65.881	0.507	0.512	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0			

**(U) A. Mission Description and Budget Item Justification**

This project develops the Miniature Air Launch Decoy (MALD) and MALD Jammer (MALD-J). The decoy and jammer configurations are key enablers supporting the Air Force Global Strike, Global Response, Space and C4ISR, and the Air and Space Expeditionary Force Concepts of Operations. MALD is a low cost, powered, expendable decoy designed to represent the kinematics and radar signature characteristics of various combat aircraft. The MALD will be employed from various aircraft platforms to stimulate, saturate, and deceive an enemy Integrated Air Defense System (IADS) thus increasing the survivability of coalition strike aircraft.

MALD-J will provide stand-in jamming capability for the Airborne Electronic Attack Systems of Systems. MALD-J will be launched against a preplanned target and will jam specific radars in a stand-in role to degrade or deny the IADS detection of friendly aircraft or munitions. MALD-J will be able to operate in both decoy and jammer modes.

Planned efforts for this program are risk reduction (to include prototyping) and System Development and Demonstration (SDD) of the decoy, jammer, and any future configurations. This will include design, development, test, aircraft integration, and seamless verification.

**(U) B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
(U) MALD SDD Contract	38.950	36.218	0.000
(U) MALD-J Risk Reduction and SDD Contract	20.329	50.025	48.378
(U) MALD Program Office Support (Government)	2.708	1.816	0.000
(U) MALD-J Program Office Support (Government)		1.816	1.296
(U) MALD B-52 Aircraft Integration	3.269	0.500	
(U) MALD-J B-52 Aircraft Integration		0.460	0.335
(U) MALD Mission and Test Support	8.885	4.749	
(U) MALD-J Mission and Test Support	1.491	1.117	4.774
(U) MALD F-16 Aircraft Integration	0.205	0.100	
(U) MALD-J F-16 Aircraft Integration		0.283	0.205
(U) Total Cost	75.837	97.084	54.988

**(U) C. Other Program Funding Summary (\$ in Millions)**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) AF RDT&E									
(U) Other APPN (PE 0207442F)	0.000	9.544	56.438	112.244	44.861	119.364	151.784	Continuing	TBD

## Exhibit R-2a, RDT&amp;E Project Justification

DATE

February 2008

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604270F EW Development

PROJECT NUMBER AND TITLE

8462 Miniature Air Launched Decoy

(U) **C. Other Program Funding Summary (\$ in Millions)**

MALD/MALD-J procurement)

(U) **D. Acquisition Strategy**

A full and open competition for MALD was held in FY03 resulting in award of a cost plus award fee contract to Raytheon.

MALD-J risk reduction is based on a pair of decision points to evaluate progress towards meeting required effectiveness for the jammer payload. The Phase 1 effort is geared toward completing the subsystem design and characterizing effectiveness measures for that design. Phase 2 risk reduction will take the full system through PDR and establish an Integrated Baseline for the following MALD-J SDD program.

UNCLASSIFIED

**Exhibit R-3, RDT&E Project Cost Analysis**

DATE

**February 2008**

BUDGET ACTIVITY				PE NUMBER AND TITLE					PROJECT NUMBER AND TITLE				
<b>05 System Development and Demonstration (SDD)</b>				<b>0604270F EW Development</b>					<b>8462 Miniature Air Launched Decoy</b>				
(U) Cost Categories (Tailor to WBS, or System/Item Requirements) (\$ in Millions)	Contract Method & Type	Performing Activity & Location	Total Prior to FY 2007 Cost	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
(U) <u>Product Development</u> MALD SDD ACTD	CPFF	Northrop Grumman - Ryan Aeronautical Center									0.000	40.074	
MALD SDD	CPAF	Raytheon Missile Systems, Tucson AZ	114.384	38.950	Oct-07	36.218	Mar-08	0.000			189.552	TBD	
MALD-J RR and SDD				20.329	Apr-07	50.025	Mar-08	34.378	Dec-08		104.732		
MALD-J Improvement Risk Reduction								14.000			14.000		
MALD B-52 Aircraft Integration	MIPR	B-52 SPO	10.250	3.269	Jun-07	0.500	Nov-08				14.019	0.000	
MALD-J B-52 Aircraft Integration	MIPR	B-52 SPO				0.460	Jun-08	0.335	Jun-09		0.795		
MALD F-16 Aircraft Integration	MIPR	F-16 SPO	0.694	0.205	Dec-06	0.100	Mar-08				0.999	0.000	
MALD-J F-16 Aircraft Integration	MIPR	F-16 SPO				0.283	Jun-08	0.205	Jun-09		0.488		
Subtotal Product Development			125.328	62.753		87.586		48.918		0.000	324.585	TBD	
Remarks:													
(U) <u>Support</u> MALD Contractor Support to AAC/AAMSW/SASG/RC	Various	Various	5.924	1.678	Dec-06	1.316	Dec-07				8.918		
MALD-J Contractor Support to AAC/AAMSW/SASG/RC	Various	Various				1.316	Dec-07	0.861	Dec-08		2.177		
Subtotal Support			5.924	1.678		2.632		0.861		0.000	11.095	0.000	
Remarks:													
(U) <u>Test &amp; Evaluation</u> MALD Government Test Planning	Various	Various	11.862	8.885		4.749					25.496		
MALD-J Government Test Planning	Various	Various		1.491		1.117		4.774			7.382		
Subtotal Test & Evaluation			11.862	10.376		5.866		4.774		0.000	32.878	0.000	
Remarks:	Element includes detailed planning, support data reduction and reports from such testing.												
(U) <u>Management</u> MALD AAC/AAMSW/SASG/RC	Various	AAC, Eglin AFB FL	1.866	1.030		0.500					3.396		
MALD-J AAC/AAMSW/SASG/RC	Various	AAC, Eglin AFB FL				0.500		0.435			0.935		
Subtotal Management			1.866	1.030		1.000		0.435		0.000	4.331	0.000	
Remarks:	Element includes miscellaneous administrative costs incurred in the day-to-day operations by the program office. Costs include travel, office equipment, office supplies, printing, contract services, program management administration and information technology expenses.												
(U) Total Cost			144.980	75.837		97.084		54.988		0.000	372.889	TBD	

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Project 8462

Exhibit R-3 (PE 0604270F)

Exhibit R-4, RDT&E Schedule Profile

DATE

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BUDGET ACTIVITY  
05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE  
0604270F EW Development

PROJECT NUMBER AND TITLE  
8462 Miniature Air Launched Decoy



# MALD / MALD-J Schedule

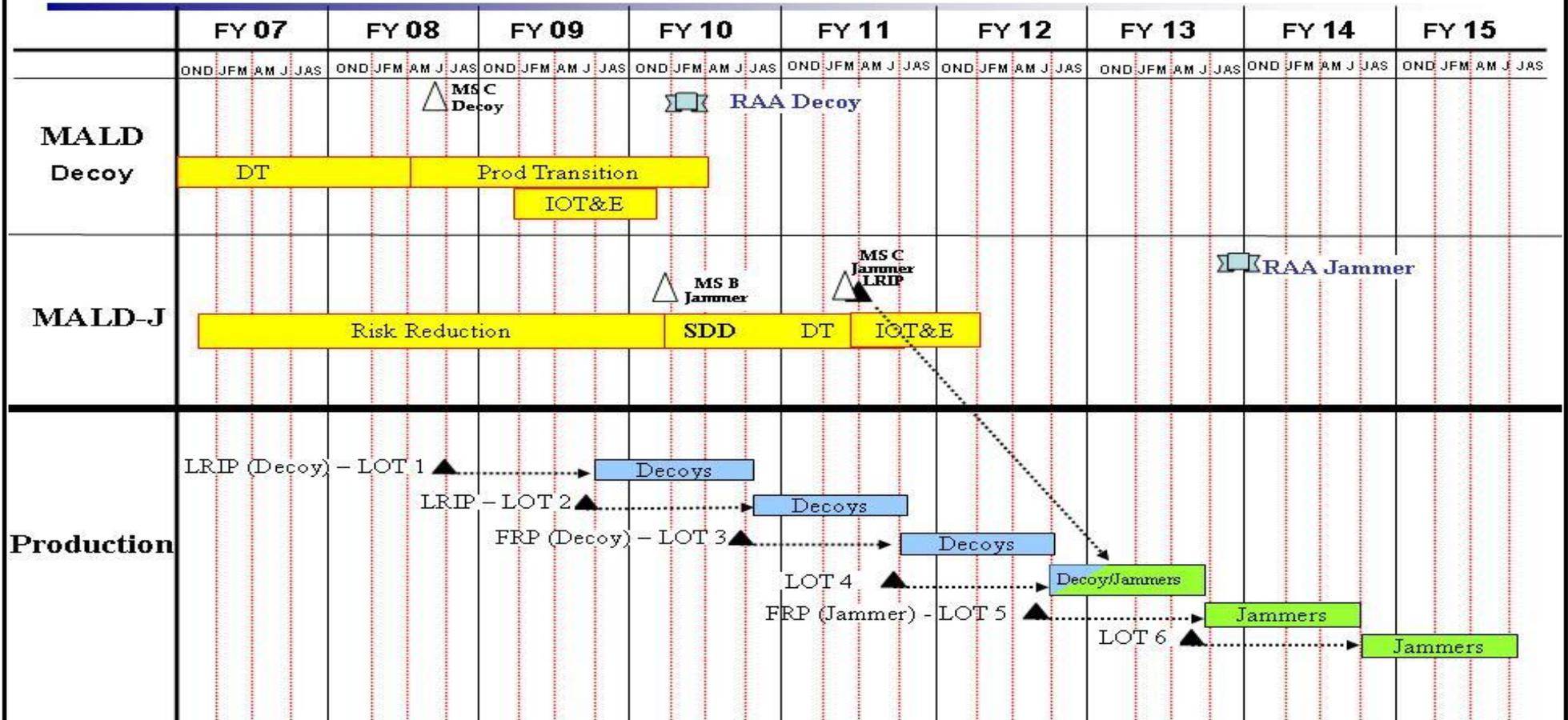


Exhibit R-4a, RDT&E Schedule Detail

DATE

February 2008

BUDGET ACTIVITY

05 System Development and Demonstration (SDD)

PE NUMBER AND TITLE

0604270F EW Development

PROJECT NUMBER AND TITLE

8462 Miniature Air Launched Decoy

(U) Schedule Profile

FY 2007

FY 2008

FY 2009

(U) MALD Flight Readiness Review

1Q

(U) MALD MS C

3Q

(U) MALD IOT&E

1-4Q