PE NUMBER: 0604270F PE TITLE: EW Development

	RDT&E BUDGET ITEM	I JUSTI	FICATI	ON SH	EET (R	-2 Exhi	bit)		DATE	June 2001			
	et ACTIVITY  Engineering and Manufacturing De	velopme	ent		UMBER AND <b>4270F</b>	TITLE EW Deve	elopmen	t					
	COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost		
	Total Program Element (PE) Cost	69,266	52,611	41,267	45,842	55,972	43,838	37,430	38,222	Continuing	TBD		
1011	Joint Service Electronic Combat Systems Tester	2,618	2,937	3,521	0	0	0	0	0	0	48,334		
2462	Compass Call (CC)	693	812	0	0	0	0	0	0	0	66,782		
3891	Advanced IR Counter Measures (AIRCM)	39,635	4,366	991	3,343	3,351	3,425	3,498	3,570	Continuing	TBD		
3945	RF Towed Decoy Systems	15,373	25,968	34,928	42,499	52,621	40,413	33,932	34,652	Continuing	TBD		
4832	Precision Location and Identification (PLAID)	10,947	13,376	1,827	0	0	0	0	0	0	30,320		
8462	MALD	0	5,152	0	0	0	0	0	0	0	5,152		
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0		

AIRCM includes four subprojects: Common Missile Warning System (CMWS), Advanced Strategic and Tactical Infrared Expendables (ASTE), Large Aircraft IRCM (LAIRCM)/Large Aircraft IR Flyout Experiment (LIFE), and software upgrade to AAR-47.

FY03 - FT07 budget numbers do not reflect the DoD strategic review results.

### (U) A. Mission Description

This program element (PE) consolidates engineering development efforts related to Air Force Electronic Warfare (EW) requirements. It centralizes USAF funding and management of common EW systems development. These funds transition EW technologies to an installed operational capability. This PE executes projects to provide capabilities to deter, detect, deceive and counter enemy acquisition and tracking of DoD operational platforms plus enemy Radio Frequency (RF) information operations worldwide. These projects include Infrared (IR), RF and laser situational awareness and self protection systems, command and control warfare (C2W) electronic attack systems, and the test equipment needed to support them.

Page 1 of 33 Pages

Exhibit R-2 (PE 0604270F)

# **RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)**

June 2001

BUDGET ACTIVITY

PE NUMBER AND TITLE

05 - Engineering and Manufacturing Development

0604270F EW Development

#### (U) A. Mission Description Continued

The following net transactions are not reflected in the FY01 program total: BTR:+507K and SBIR of -\$1,674K. These transactions are not reflected in other sections of the R-docs where FY01 total is shown.

#### (U) B. Budget Activity Justification

A key criterion for the included projects in this program element is the need for engineering and manufacturing developmental activities, therefore these programs are in Budget Activity 5 - Engineering and Manufacturing Development (EMD).

# (U) <u>C. Program Change Summary (\$ in Thousands)</u>

ı		<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>Total Cost</u>
(U)	Previous President's Budget (FY 2001 PBR)	87,187	58,198	53,655	TBD
(U)	Appropriated Value	86,847	53,098		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions	-569	-372		
	b. Small Business Innovative Research	-2,480			
	c. Omnibus or Other Above Threshold Reprogram	-2,565			
	d. Below Threshold Reprogram	-11,627			
	e. Rescissions	-340	-115		
(U)	Adjustments to Budget Years Since FY 2001 PBR			-12,388	
(U)	Current Budget Submit/FY 2002 PBR	69,266	52,611	41,267	TBD

#### (U) Significant Program Changes:

\$11,627M of FY00 funding was transferred from PE64270F for higher Air Force priorities.

\$2.565M of FY00 funding is identified for Omnibus.

Congressional reduction in FY01of \$19.8M for Air Force withdrawal from the CMWS program.

Congressional add of \$1.2M in FY01 for MALD transition from Advanced Concept Technology Demonstration, \$10M for Precision Location and Identification (PLAID) EMD, and \$3.5M for Survivability Enhancements: \$2.5M for ALR-56C processor upgrade, \$0.7M for Comet Pod force development evaluation, and \$0.3M for Pouncer 2 hosting on an airborne platform.

\$2.6M was transferred in FY02 from this PE to the Compass Call PE.

\$3.5M was transferred in FY02 from JSECST production to JSECST RDT&E to fund development of the follow-on test program sets.

\$14.8M was removed from FY02 due to the cancellation of the Common Missile Warning System

\$0.3M was removed from FY02 from IDECM due to program realignment.

Page 2 of 33 Pages

Exhibit R-2 (PE 0604270F)

	RDT&E BUDGET ITEM JUSTIFICAT	•	DATE June 2001
	GET ACTIVITY  Engineering and Manufacturing Development	PE NUMBER AND TITLE  0604270F EW Development	
(U)	C. Program Change Summary (\$ in Thousands) Continued		
(U) (U)	Significant Program Changes Continued: \$1.8M was added in FY02 to fund PLAID RDT&E cost growth.		
		Page 3 of 33 Pages	Exhibit R-2 (PE 0604270F)

	RDT&E BUDGET ITEM	JUSTIF	ICATIO	N SHE	ET (R-	2A Exh	ibit)		DATE	June 2	2001
	PE NUMBER AND TITLE  PE NUMBER AND TITLE  D604270F EW Development  10										
	COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
1011	Joint Service Electronic Combat Systems Tester	2,618	2,937	3,521	0	0	0	0	0	0	48,334
( <b>U</b> )	FY07 budget numbers do not reflect the DoD stra  A. Mission Description  The Leint Service Electronic Combat Systems To	C		1. 14.	Г	N					

The Joint Service Electronic Combat Systems Tester (JSECST) fills a combined Air Force and Navy operational requirement for a small, adaptable, and highly mobile tester capable of verifying system level performance of installed electronic countermeasures systems. JSECST provides an organizational-level flight line capability for verifying operational status of aircraft-installed electronic combat (EC) systems including Group A antennas and transmission lines. JSECST will fill a void in current Air Force end-to-end test capability. The JSECST system consists of core test sets (CTS), nomenclature AN/USM-670, test program sets (TPS), and software development stations (SDS). The CTS provides the stimulus, measurement, operator-interface, analysis and control functions common across all applications. The TPSs provide aircraft specific hardware interfaces and software packages to employ the CTS. The SDS provides computer resources for developing and maintaining CTS and TPS software. Initial TPS will support the F-15C. The Follow-on Test Program Set (FOTPS) program will design, develop, assemble, integrate, test, and deliver TPSs for use with the AN/USM-670 for additional aircraft. The follow-on Air Force platforms include the F-15E, F-16 (Blocks 25/30/32/40/42/50/52), and OA/A-10. Navy platforms include the AV-8B, F/A-18 A/B and the F-14 B/D. (Navy platforms will be funded by the Navy.) JSECST is intended to meet the organizational level support equipment requirements of electronic combat systems for service through a 20-year life cycle.

### (U) FY 2000 (\$ in Thousands)

Ш	) \$1,253	Initiate FOTPS Engineering Manufacturing Development (EMD) Co.	ntract

(U) \$874
 (U) \$325
 (U) \$136
 (U) \$30
 Continue CTS Development Continue SPO Support
 Continue Government Test
 Continue TPS Lab Support

(U) \$2,618 Total

#### (U) FY 2001 (\$ in Thousands)

(U)	\$2,216	Continue FOTPS EMD Contract
(U)	\$102	Complete CTS Development
(U)	\$364	Continue SPO Support
(U)	\$185	Continue Government Test
(U)	\$70	Continue TPS Lab Support

Project 1011 Page 4 of 33 Pages Exhibit R-2A (PE 0604270F)

	RDT&E BUD	GET IT	EM JUS	TIFICAT	TION SH	EET (R-	2A Exhi	bit)	I	DATE <b>June</b>	2001
	GET ACTIVITY  Engineering and Manu	ufacturing	g Develor	oment		NUMBER AND <b>04270F</b> I		opment			PROJECT <b>1011</b>
(U)	A. Mission Description Conti	nued									
(U) (U) (U)	FY 2001 (\$ in Thousands) Cor \$0 No Acti \$2,937 Total The following net transactions R-docs where an FY01 total is	vity are not reflec	cted in the F	Y01 program	ı total: BTR=	-626K and S	BIR=-93.3K.	These trans	actions are n	ot reflected in oth	er sections of the
(U) (U) (U) (U) (U) (U)	\$390 Continu \$195 Comple	te FOTPS EM e SPO Suppo te Governme te TPS Lab S	ort nt Test								
( <b>U</b> )	<b>B. Project Change Summary</b> \$3.5M of FY02 production fun	ding was zer	o balance tra	nsferred to J	SECST RDT	&E to fund F	OTPS devel	opment.			
	C. Other Program Funding S  AF RDT&E	ummary (\$ i FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
(U)	Other APPN Aircraft Procurement, AF PE 27442F (Common ECM Equipment), In Service	0	17,089	24,269	5,449	0	0	0	0	0	46,807
(U) (U)	Direct Ground Support Equipment, BP-12 Initial Spares, BP-16 Total Aircraft Porcurement, AF	0 0	717 17,806	152 24,421	318 5,767	0 0	0 0	0 0	0 0	0 0	1,187 47,994
P	roject 1011				Page 5 of	33 Pages				Exhibit R-2A	(PE 0604270F)

	RDT&E BUDGET ITEM JUSTIFICAT	ION	SHEE	T (R-	2A Ex	khibit	t)		DAT		une 2	001	
	GET ACTIVITY - Engineering and Manufacturing Development		PE NUM <b>06042</b>		D TITLE <b>EW D</b> e	evelop	ment					PROJ <b>101</b>	
( <b>U</b> )	<u>D. Acquisition Strategy</u> The acquisition strategy is competitive, cost-plus contracts for CTS desupport contract is sole source.	velopm	nent. FOT	`PS acqı	uisition s	trategy i	is a sole	source, co	st-plus	contract.	Produc	etion and	
( <b>U</b> )	E. Schedule Profile		EV	000			EV	2001			EV	2002	
		1	<u>FY 2</u> 2	3	4	1	<u>FY</u> 2	2 <u>001</u> 3	4	1	<u>FY 2</u> 2	<u>2002</u> 3	4
(U) (U) (U) (U) (U) (U)	Punctional Configuration Audit Operational User Flight Line Assessment CTS Milestone III (Apr 01) CTS Production Lots award (Jul 01) Complete FOTPS Development * - Denotes a completed event X - Denotes a planned event		*	*		*		*	X				X
F	Project 1011	Page	e 6 of 33 I	ages					E	Exhibit R	R-2A (PI	≣ 06042	70F)

	RDT&E PROC	RAM ELE	MENT/P	ROJECT C	OST B	REAKDO	WN (R-3)	)	DATE	June 200	1
	GET ACTIVITY  Engineering and Ma	nufacturing	Developm	nent		ER AND TITLE <b>'0F EW D</b> e	velopmer	nt			PROJECT <b>1011</b>
( <b>U</b> )	A. Project Cost Breakdown	ı (\$ in Thousan	ds)								
(T.D.	ENT. C							<u>2000</u>	FY 200		FY 2002
(U)	EMD Contracts							,127	2,31		2,871
(U)	SPO Support							325	36		390
(U) (U)	Government Test FOTPS Lab Support							136 30	18 7		195 65
(U) (U)	Total						2	,618	2,93		3,521
(0)							۷,	,016	2,93	1	3,321
<b>(U)</b>	<b>B. Budget Acquisition Historical Control</b>	ory and Plannin	g Information	<u>n (\$ in Thousanc</u>	<u>ls</u> )						
( <b>U</b> )	<b>Performing Organizations:</b>										
	Contractor or	Contract									
	Government	Method/Type	Award or	<b>Performing</b>	<b>Project</b>						
	Performing	or Funding	<b>Obligation</b>	<u>Activity</u>	<u>Office</u>	Total Prior	<b>Budget</b>	<u>Budget</u>	<u>Budget</u>	Budget to	<u>Total</u>
	Activity	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	to FY 2000	FY 2000	FY 2001	FY 2002	<u>Complete</u>	<u>Program</u>
	Product Development Organi										
	AAI	CPAF	Mar 96	28,340	28,340	27,106	874	102		0	28,082
	FO TPS AAI	CPIF	Jun 00	6,325	6,325	0	1,253	2,216	2,871	0	6,340
	Support and Management Or	ganizations									
	ASC/SMNT, NAVAIR,		Various			11,064	325	364	390	0	12,143
	Wright Labs	.•									
	Test and Evaluation Organiza					1.000	1.00	255	2.00	0	1.760
	53 EWG, 46 TW, Eglin AFB					1,088	166	255	260	0	1,769
	FL					Total Prior	Budget	Budget	Budget	Budget to	Total
	Subtotals					to FY 2000	FY 2000	FY 2001	FY 2002	Complete	<u>rotar</u> Program
	Subtotal Product Developme	nt				27,106	2,127	2,318	2,871	0	34,422
	Subtotal Support and Manage					11,064	325	364	390	0	12,143
	Subtotal Test and Evaluation					1,088	166	255	260	0	1,769
	Total Project					39,258	2,618	2,937	3,521	0	48,334
	,										
P	roject 1011			Pag	e 7 of 33 Pa	ges			Exhib	it R-3 (PE 0	604270F)

RDT&E BUDGET ITEM	JUSTIF	ICATIO	N SHE	ET (R-	2A Exh	ibit)		DATE	DATE June 2001			
BUDGET ACTIVITY  05 - Engineering and Manufacturing De		UMBER AND <b>4270F</b>				PROJECT <b>2462</b>						
COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost		
2462 Compass Call (CC)	693	812	0	0	0	0	0	0	0	66,780		

FY03-07 budget numbers do not reflect the DoD strategic review results.

### (U) A. Mission Description

COMPASS CALL is the USAF's only non-lethal Suppression of Enemy Air Defense (SEAD) platform and airborne wide area coverage offensive counter information system. It denies, disrupts, degrades and deceives adversary voice and data communications, disrupting the ability to effectively command and control forces in the field. Although a fielded, operational capability, COMPASS CALL continues to evolve and adapt to counter the changing adversary tactical communications systems. The Tactical Radio Acquisition and Countermeasures Subsystem (TRACS) replaces the aging compressive receiver suite responsible for acquiring target systems with a digital, reprogrammable receiver system. TRACS will enable COMPASS CALL to remain viable in countering the next generation of deployed threats. Additionally, new target (class 6) countermeasures capability is under development. This effort funds the non-recurring efforts associated with TRACS development for COMPASS CALL.

### (U) FY 2000 (\$ in Thousands)

(U) \$393 Continue new target class countermeasures development

(U) \$150 Initiate Block 30 threat signal update (U) \$150 Initiate Block 30 waveform update

(U) \$693 Total

#### (U) FY 2001 (\$ in Thousands)

(U) \$312 Continue New target class countermeasures development

(U) \$250 Continue New target class countermeasures operational flight test

(U) \$125 Continue Block 30 threat signal update
(U) \$125 Continue Block 30 waveform update

(U) \$812 Total

The following transactions are not reflected in the FY01 program total: BTR=-\$7K and SBIR=-\$37K. These transactions are not reflected in other sections of the R-docs where an FY01 total is shown.

Project 2462 Page 8 of 33 Pages Exhibit R-2A (PE 0604270F)

	RDT&E BUD	GET ITI	EM JUS	TIFICAT	ION SI	ΗE	ET (R-2	2A E	xhib	it)		DA	ATE <b>J</b>	une 2	001	
	GET ACTIVITY - Engineering and Manu	ıfacturing	g Develop	oment			JMBER AND <b>4270F E</b>		evelc	pment					PRO <b>246</b>	JECT <b>32</b>
(U)	A. Mission Description Conti	nued														
(U) (U) (U)	FY 2002 (\$ in Thousands) \$0 No Activ \$0 Total	vity (RDT&I	E funding has	s been transfe	erred to Co	mpa	ss Call PE2	27253F)	)							
(U)	B. Project Change Summary All program funding in this pro	ject for FY0	2 and later ha	as been transi	ferred to C	omp	ass Call PE	E 27253	F.							
(U)	C. Other Program Funding S	ummary (\$ i	in Thousand	<u>ls</u> )												
		FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	_	FY 2004 Estimate	FY 20 Estin		FY 2006 Estimate	FY 20 Estim		Cost Compl		<u>T</u>	otal Cost
(U) (U)	AF RDT&E Other APPN															
(U)	Compass Call (RDT&E), AF PE27253F	13,780	21,681	3,885	3,878		3,870		0	5,000	6,4	56	Continui	ng	Co	ntinuing
(U)	D. Acquisition Strategy Cost Plus Incentive Fee/Award	Fee contract	ing will be er	nployed for a	all activitie	s.										
(U)	E. Schedule Profile															
							<u>Y 2000</u>			FY 20					2002	
(II)	TRACS Flight Test				1	2	3	4	1	2	3	4	1	2	3	4
(U) (U)	TRACS PDR				*											
(U)	New Countermeasures#				*	*	*	*	*	*	*	X				
(U)	New CM Flt Test				*	*	*	*	*	*	*	X				
(U)	Block 30 Signals Update#					*	*	*	*	*	*	X				
(U)	Block 30 Waveform Update#					*	*	*	*	*	*	X				
	# - New countermeasures devel emerging threats. Due to the dy	_	_		_			-	_	rove the exi	sting sys		ability to e	effective	ely coun	ter
P	Project 2462				Page 9	of 33	3 Pages						Exhibit R	-2A (P	E 06042	270F)

	RDT&E BUDGET ITEM JUSTIFICAT	ΓΙΟΝ	SHEE	ET (R	-2A E	DAT	DATE June 2001						
	GET ACTIVITY - Engineering and Manufacturing Development				ND TITLE <b>EW D</b> O	evelop	ment		7		PROJECT <b>2462</b>		
(U)	E. Schedule Profile Continued	1	<u>FY</u> 2	<u>2000</u> 3	4	1	<u>FY :</u> 2	2001 3	4	1	<u>FY 2</u>	2 <u>002</u> 3	4
	* - Denotes a completed event X - Denotes a planned event												
F	Project 2462	Page	e 10 of 33	Pages					E	Exhibit I	R-2A (PI	E 06042	70F)

	RDT&E PRO	GRAM ELE	MENT/P	ROJECT C	OST B	REAKDO	WN (R-3)	)	DATE	June 200	1
	SET ACTIVITY  Engineering and Ma	nufacturing	Developr	nent		ER AND TITLE <b>70F EW D</b> e	velopmer	nt			PROJECT <b>2462</b>
(U)	A. Project Cost Breakdown	n (\$ in Thousand	ds)								
(II)	TRACS-Basic						<u>FY 2</u>	2000	FY 200		FY 2002
(U)	New Threat (class 6) CM De	1						0 393	56	0	0
(U) (U)	Block 30 Signals Update De							393 150	12		0
(U) (U)	Block 30 Waveform Update							150	12		0
(U)	Total	Development						693	81		0
, ,								073	01	<i>L</i>	U
( <b>U</b> )	<b>B. Budget Acquisition Historical</b>	ory and Plannin	g Informatio	on (\$ in Thousand	<u>ls</u> )						
( <b>U</b> )	<b>Performing Organizations:</b>										
	Contractor or	Contract									
	Government	Method/Type	Award or	<b>Performing</b>	<b>Project</b>						
	Performing	or Funding	<b>Obligation</b>	<u>Activity</u>	<b>Office</b>	Total Prior	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>	Budget to	<u>Total</u>
	Activity	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	to FY 2000	FY 2000	FY 2001	FY 2002	<b>Complete</b>	<u>Program</u>
	Product Development Organ										
	Sanders	SS/CPIF	1QFY99		TBD	27,099	468	562	0	0	28,129
	Raytheon Ft Wayne	SS/CPIF	N/A		23,543	23,535	0	0	0	0	23,535
	GTE	SS/CPIF	N/A		8,875	8,875	0	0	0	0	8,875
	Support and Management Or										
	Misc (SPO, Labs)	Various	N/A			3,172	25	25	0	0	3,222
	Test and Evaluation Organiz										
	EPG, Ft. Huachuca NM	MIPR	2QFY99			500	125	125	0	0	750
	WTR	616	2QFY99			500	75	100	0	0	675
(U)	<b>Government Furnished Pro</b>	perty:									
		Contract									
		Method/Type	Award or								
	<u>Item</u>	or Funding	<b>Obligation</b>	<u>Delivery</u>		Total Prior	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>	Budget to	<u>Total</u>
	Description	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>		to FY 2000	FY 2000	FY 2001	FY 2002	Complete	<u>Program</u>
	Product Development Proper	<u>ty</u>									
	Misc					1,594	0	0	0	0	1,594
Р	roject 2462			Page	: 11 of 33 Pa	ıges			Exhib	it R-3 (PE 0	604270F)

RDT&E PROGRAM ELEMENT/PROJEC	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)											
BUDGET ACTIVITY 05 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604270F EW De			ROJECT 2 <b>462</b>								
(U) Government Furnished Property Continued: Support and Management Property Test and Evaluation Property  Subtotals Subtotal Product Development Subtotal Support and Management Subtotal Test and Evaluation Total Project	Total Prior to FY 2000 61,103 3,172 1,000 65,275	Budget FY 2000 468 25 200 693	Budget FY 2001 562 25 225 812	Budget FY 2002 0 0 0 0	Budget to Complete 0 0 0 0	Tota Program 62,133 3,222 1,425 66,780						
Project 2462	Page 12 of 33 Pages			Exhib	it R-3 (PE 06	04270F)						

RDT&E BUDGET ITEM	JUSTIF	ICATIO	N SHE	ET (R-	2A Exh	ibit)		DATE	June :	2001
BUDGET ACTIVITY  05 - Engineering and Manufacturing De		UMBER AND <b>4270F</b>				PROJECT <b>3891</b>				
COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
3891 Advanced IR Counter Measures (AIRCM)	39,635	4,366	991	3,343	3,351	3,425	3,498	3,570	Continuing	TBD

<sup>\*</sup>Advanced Infrared Countermeasures (AIRCM) now includes two subprojects: Advanced Strategic and Tactical IR Expendables (ASTE), and software upgrade to AAR-47. The Air Force terminated its participation in Common Missile Warning System (CMWS) in the FY02 budget cycle. The Large Aircraft IRCM/Laser Infrared Flyout Experiment (LAIRCM/LIFE) transferred to PE 0603270F in FY99, FY00 and FY01.

#### (U) A. Mission Description

The Advanced IR Countermeasure (AIRCM) project contains related aircraft self-protection efforts aimed at increasing aircraft survivability against the increasing threat of sophisticated surface-to-air and air-to-air missiles, which may employ such features as next-generation electro-optics or dual IR and radio frequency seekers. AIRCM currently consists of two efforts, the USAF/USN Advanced Strategic and Tactical IR Expendables (ASTE) program, and USAF/USN AAR-47 software upgrade. The LAIRCM/LIFE effort and funding was transferred to PE 63270F for FY99, FY00, and FY01 to support ongoing Advanced Technology Demonstration study at Wright Lab. Air Force participation in the CMWS program was terminated in the FY02 budget process. ASTE will provide advanced IR expendable countermeasures. ASTE flares will be functionally compatible with existing ALE-40, 45, and 47 dispenser systems and will be employed across multiple USAF and USN weapon systems. The AAR-47 software upgrade supports two configurations of software intended to decrease the AAR-47 false alarm rate and improve threat detection for all large body aircraft.

#### (U) FY 2000 (\$ in Thousands)

(U)	\$36,873	CMWS (Common Missile Warning System) Program Costs
(U)	\$308	ASTE Development
(U)	\$235	ASTE Test and Evaluation
	\$288	ASTE Modeling and Analysis
(U)	\$445	ASTE Mission Support
(U)	\$765	ASTE identified for Omnibus
(U)	\$23	LAIRCM/LIFE Mission Support
(U)	\$200	AAR-47 Modeling & Analysis
(U)	\$236	AAR-47 Algorithm Development

AAR-47 Verification & Validation

(U) \$39,635 Total

(U)

\$262

Project 3891 Page 13 of 33 Pages Exhibit R-2A (PE 0604270F)

<sup>\*\*</sup>The FY03-FY07 budget numbers do not reflect DoD's strategic review results.

	RDT&E BUDGET ITEM JUSTIFICAT	ΓΙΟΝ SHEET (R-2A Exhibit)	DATE June 2001
	ET ACTIVITY  Engineering and Manufacturing Development	PE NUMBER AND TITLE  0604270F EW Development	PROJECT <b>3891</b>
U)	A. Mission Description Continued		
U)	FY 2001 (\$ in Thousands)		
U)	\$1,239 ASTE Flare Development		
U)	\$264 ASTE Test & Evaluation		
U)	\$100 ASTE Verification and Validation		
U)	\$230 ASTE Modeling & Simulation		
U)	\$481 ASTE Mission Support		
U)	\$994 LAIRCM/LIFE		
U)	\$74 CMWS Residual		
J)	\$560 AAR-47 hardware and software upgrades		
J)	\$424 AAR-47 Modeling and Analysis / Hardware to	± •	
J)	\$0 AAR-47 Algorithm development / live fire test	sting / data collection	
U)	\$4,366 Total		
	The following net transactions are not reflected in the FY01 program the RDocs where an FY01 total is shown.	n total: BTR= +\$500K and SBIR -\$139K. These transaction	s are not reflected in other sections
U)	FY 2002 (\$ in Thousands)		
	\$286 AAR-47 hardware and software upgrades		
U)	\$500 AAR-47 Modeling and Analysis / Hardware te	est capability	
Ú)	\$205 AAR-47 Algorithm development / live fire test	· •	
Ú)	\$991 Total		
U)	B. Project Change Summary \$19.8M Congressional reduction in FY01 due to Air Force terminatio LAIRCM PE64270F to PE63270F to support LAIRCM/LIFE efforts. higher Air Force priorities.	· · ·	

Exhibit R-2A (PE 0604270F)

Project 3891

	RDT&E BUD	GET IT	EM JUS	TIFICAT	ION SH	EET (R-2	2A Exhil	bit)		date <b>Ju</b> i	ne 2001
	GET ACTIVITY  • Engineering and Manu	ıfacturing	g Develop	ment		NUMBER AND <b>04270F</b>		opment	•		PROJECT <b>3891</b>
(U)	C. Other Program Funding St	ummary (\$ 1 FY 2000 Actual	in Thousand FY 2001 Estimate	<u>FY 2002</u> Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	<u>Cost to</u> Complet	
(U) (U)	AF RDT&E Other APPN										
(U)	Procurement of Ammunition, AF, PE 28030F, ASTE flares, BA-1, Appn 3011	4,835	4,779	4,815	4,806	4,767	4,873	5,269	5,775	Continuing	g Continuing
(U)	RDT&E, AF, PE 63270F, EO/IR Warning & Countermeasures, BA-3, BPAC 691X, Funds multiple EO/IR Science and Technology projects	14,203	10,247	12,349	12,673	13,554	13,532	12,560	12,806	Continuing	g Continuing
(U)	<ul><li>D. Acquisition Strategy</li><li>The planned acquisition strategy</li></ul>	y is competit	ive cost-plus	award fee.							
(U)	E. Schedule Profile					FY 2000 2 3	4 1	<u>FY 2</u> 0	001 3 4	. 1	<u>FY 2002</u> 2 3 4
1 ' '	ASTE DT&E - Fighter						*				
(U) (U)	ASTE OT&E - Fighter ASTE OT&E - Covert				*				X		
(U)	ASTE MS III - Fighter								Х	<u> </u>	
(U)	ASTE MS III - Covert				;	*					
	ASTE PDR - Transport (Comp	leted Apr 99	))					*			
(U) (U)	ASTE CDR - Transport ASTE DT&E-Transport							*		X	
(U)	ASTE DT&E-Transport ASTE OT&E -Transport AAR-47 Analyze Data (V21.2)				*					Α	X
Р	roject 3891				Page 15 of	f 33 Pages				Exhibit R-2	2A (PE 0604270F)

	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)											DATE June 2001				
	GET ACTIVITY - Engineering and Manufacturing Development		PE NU	MBER A	ND TITLE <b>EW D</b>							PROJ <b>389</b>				
(U)	E. Schedule Profile Continued			2000				<u> 2001</u>			FY 2					
	AAR-47 SW Upgrade Contract (V22) AAR-47 Collect/Validate Data (V22) * - Denotes a completed event X - Denotes a planned event	1	2	3	4	1	2	3	4 X	1	2 X	3	4			
F	Project 3891	Page	: 16 of 33	Pages					1	Exhibit	R-2A (PI	E 06042	70F)			

	RDT&E PRO	GRAM ELEME	NT/PR	OJECT C	OST BI	REAKDO	WN (R-3)		DATE	June 200	1
	SET ACTIVITY  Engineering and Ma	nufacturing Dev	elopme	ent		ER AND TITLE <b>70F EW D</b> e	velopmen	ıt			PROJECT <b>3891</b>
(U)	A. Project Cost Breakdow	n (\$ in Thousands)									
							<u>FY 2</u>		FY 200		FY 2002
(U)	CMWS Joint Program Costs							089		0	0
(U)	CMWS F-16 aircraft (Group	. ,						800		0	0
(U)	CMWS Test and Evaluation	l						676		0	0
(U)	CMWS Mission Support							200	7		0
(U)	CMWS Identified for Omni							900		0	0
(U)	ASTE Prime Contract Costs	3						308	1,23		0
(U)	ASTE Test & Evaluation							235	26		0
(U)	ASTE Verification & Valida							0	10		0
(U)	ASTE Modeling and Simula	ation						288	23		0
(U)	ASTE Mission Support							445	48		0
(U)	ASTE Identified for Omnib	us					•	765	(	0	0
(U)	LAIRCM/LIFE							23	99.	4	0
(U)	AAR-47 Hardware and Soft							0	56	~	286
(U)	AAR-47 Modeling & Analy	-	•					200	42	4	500
(U)	AAR-47 Algorithm Develop		/ data col	lection				236	(	0	205
(U)	AAR-47 Verification & Val	idation						262		0	0
(U)	Total						39,	635	4,36	6	991
( <b>U</b> )	<b>B. Budget Acquisition Hist</b>	ory and Planning Info	ormation	(\$ in Thousand	<u>ls)</u>						
( <b>U</b> )	<b>Performing Organizations</b>	<u>:</u>									
	Contractor or	<u>Contract</u>									
	Government	• • •	<u>ırd or</u>	<u>Performing</u>	<b>Project</b>						
	Performing		gation	<u>Activity</u>	<u>Office</u>	Total Prior	<b>Budget</b>	<u>Budget</u>	<u>Budget</u>	Budget to	<u>Total</u>
	Activity	<u>Vehicle</u> <u>Date</u>	?	<u>EAC</u>	<u>EAC</u>	to FY 2000	FY 2000	FY 2001	FY 2002	<u>Complete</u>	Progran
Р	roject 3891			Page	17 of 33 Pa	nges			Exhib	it R-3 (PE 0	604270F)

RDT&E PRO	GRAM ELE	EMENT/PF	ROJECT C	OST BR	EAKDO\	WN (R-3)		DATE	June 2001	
SUDGET ACTIVITY		Davalanm	o.n.t		R AND TITLE	volonmoni				ROJECT
05 - Engineering and Ma	anutacturing	0604270	or Ew De	velopment		3	891			
U) Performing Organizations	Continued:									
Product Development Organ	nizations									
CMWS Sanders	CAAF/CPFF	Sep 95	60,099	60,099	34,699	13,700	0	0	0	48,399
CMWS Integration	CPAF	Various	52,259	52,259	24,497	3,008	0	0	0	27,505
ASTE - BAE	CPAF	Nov 95	8,324	8,324	16,640	308	1,239	0	Continuing	TBD
LIFE - Lockheed Martin	CPFF	TBD	3,400	0	0		994	0	0	994
Akron OH										
AAR-47 - GTRI (V21.2)	T&M	2Q99	0	0	0	698	0	0	0	698
AAR-47 - GTRI (V22)	T&M	1Q01	0	0	0	0	984	786	Continuing	TBD
Support and Management O	rganizations								C	
CMWS - CAS INC	CPFF	Sept 95		28,619	19,028	3,364	0	0	0	22,392
CMWS - MWS	T&M	Jun 97		13,144	9,524	1,250	0	0	0	10,774
CMWS - Mod & Sim	Various			4,116	2,596	1,445	0	0	0	4,041
CMWS -Misc	Various			38,330	8,199	12,206	74	0	0	20,479
ASTE M&A - SAIC	PR	Various		2,554	1,454	288	230	0	Continuing	TBD
ASTE V&V - Mac B	PR	Various		789	359	0	100	0	Continuing	TBD
ASTE - Misc	Various	Various		Continuing	36,304	445	481	0	Continuing	TBD
LIFE Flight A/C Support -	TBD	June 99		1,416	0	0	0	0	0	0
contractor TBD				, -						
LIFE - Misc					0	23	0	0	0	23
Test and Evaluation Organiz	zations									
AIRCM Identified for	0	0		0	0	2,665	0	0	0	2,665
Omnibus						,				,
ASTE - 46TW	Various	Various		2,897	897	235	264	0	Continuing	TBD
ASTE - Misc	Various	Various		Continuing	282	0	0	0	Continuing	TBD
46TW/AFFTC/ BAE Suppo	ort Various	Various		30,114	17,092	0	0	0	Continuing	TBD
AAR-47 Live Fire Test / Da					,	0	0	205	Continuing	TBD
Collection						-	~	_30	B	-22
Project 3891			Paga	e 18 of 33 Pag	es			Exhi	bit R-3 (PE 06	04270F)

RDT&E PROGRAM ELEMENT/PROJEC	T COST BREAKDO	DATE June 2001					
SUDGET ACTIVITY	PE NUMBER AND TITLE		.1	<del>.</del>	PROJECT <b>3891</b>		
5 - Engineering and Manufacturing Development	0604270F EW De						
	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	Budget to	<u>Total</u>	
Subtotals	to FY 2000	FY 2000	FY 2001	FY 2002	<u>Complete</u>	Prograi	
Subtotal Product Development	75,836	17,714	3,217	786	TBD	TBI	
Subtotal Support and Management	77,464	19,021	885	0	TBD	TBI	
Subtotal Test and Evaluation	18,271	2,900	264	205	TBD	TBI	
Total Project	171,571	39,635	4,366	991	TBD	TBD	
Project 3891	Page 19 of 33 Pages			Exhib	it R-3 (PE 06	(04270F)	

RDT&E BUDGET ITEM	JUSTIF	ICATIO	N SHE	ET (R-	2A Exh	ibit)		DATE	June :	2001
BUDGET ACTIVITY  05 - Engineering and Manufacturing De	velopme	ent		UMBER AND <b>4270F</b>				PROJECT <b>3945</b>		
COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
3945 RF Towed Decoy Systems	15,373	25,968	34,928	42,499	52,621	40,413	33,932	34,652	Continuing	TBD

<sup>\*</sup> RDT&E funds are used for development, risk reduction, integration, flight test, and procurement of lab and test assets. Hardware is purchased by component, not as a complete upgrade kit, therefore aircraft funding does not completely portray the IDECM Programs.

### (U) A. Mission Description

This project develops, integrates and tests radio frequency (RF) towed decoy systems. RF towed decoys are low cost RF countermeasures that provide increased survivability against monopulse, semi-active, and active RF missile threats during the terminal portion of an engagement. This project developed, integrated and tested the Joint Air Force and Navy-led ALE-50 Advanced Airborne Expendable Decoy program. The Air Force is currently participating in the Navy-led Integrated Defensive Electronic Countermeasures (IDECM) program to jointly develop a common techniques generator (TG) and a Fiber Optic Towed Decoy (FOTD). Air Force funding pays for unique Air Force IDECM development costs, integration and test of an FOTD subsystem on the F-15, IDECM RF Countermeasures (RFCM) field and test support for host platform integration activities, and alternative FOTD risk reduction activities. The Defensive Systems Upgrade Program (DSUP) program funds integration and test of IDECM hardware on the B-1B.

### (U) <u>FY 2000 (\$ in Thousands)</u>

(U) \$8,403 IDECM Common (U) \$4,423 IDECM F-15

(U) \$2,547 Mission and Test Support

(U) \$0 No Activity

(U) \$15,373 Total

### (U) <u>FY 2001 (\$ in Thousands)</u>

(U) \$8,599 IDECM Common (U) \$14,150 IDECM F-15

(U) \$3,219 Mission and Test Support

(U) \$25,968 Total

The following net transactions are not reflected in the FY01 program total: BTR= \$1108K, SBIR= -\$825K. These transactions are not reflected in other sections of the RDocs where an FY01 total is shown.

Project 3945 Page 20 of 33 Pages Exhibit R-2A (PE 0604270F)

<sup>\*\*</sup>The FY03-FY07 budget numbers do not reflect DoD's strategic review results.

#### DATE RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) June 2001 BUDGET ACTIVITY PE NUMBER AND TITLE **PROJECT** 05 - Engineering and Manufacturing Development 0604270F EW Development 3945 A. Mission Description Continued **(U)** FY 2002 (\$ in Thousands) (U)(U) \$2,438 **IDECM Common** \$27,939 IDECM F-15 \$4,551 (U) Mission and Test Support \$34,928 Total **B. Project Change Summary** The IDECM program was restructured in June 98 and July 99 due to significant contract cost overruns. Impact to the USAF is a \$31M total increase in USAF IDECM RFCM contract cost share. Funding for the overrun was sourced from F-15 IDECM integration and resulted in delay to F-15 IDECM EMD. Due to F-15 IDECM slow down \$6.6M was removed from FY01 RDT&E funding during the FY01 ABES. A FY00 Congressional reduction of \$15M was also sourced from F-15 integration. As a result of the budget constraints, F-15 IDECM EMD activities were severely reduced in FY00 and the F-15 EMD program was rephased. F-15 IDECM funding in FY01 will support return to full EMD to support F-15 IDECM Milestone III production decision in FY06. Additionally, a zero balance transfer from F-15 IDECM production to RDT&E, resulted in a net increase to IDECM RDT&E funding of \$8.184M in FY03, \$16.681M in FY04 and \$6.983M in FY05. The B-1B DSUP program was zeroed out during the FY02 POM. As a result, all B-1 IDECM Initial Spares funds and IDECM procurement funds relating to the B-1B (BP-11) and decoys (BP-17) were removed from the program. C. Other Program Funding Summary (\$ in Thousands) FY 2001 FY 2000 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 Cost to **Total Cost** Actual Estimate Estimate **Estimate** Estimate Estimate Estimate **Estimate** Complete (U) AF RDT&E (U) Other APPN (U) Aircraft Procurement, AF PE 103,950 46,832 22,851 34.230 40,240 44,641 75.343 76,928 Continuing Continuing 27442F, War Consumable (RF towed decoys), BP-17 (U) Aircraft Procurement, AF PE 0 0 0 0 0 0 0 0 Continuing Continuing 27442F, Mods (B-1B), BP-11 (U) Aircraft Procurement, AF PE 0 0 0 0 0 0 22,873 23,358 Continuing Continuing 27442F, Mods (F-15), BP-11 Project 3945 Page 21 of 33 Pages Exhibit R-2A (PE 0604270F)

us ince			D TITLE <b>EW D</b> e	velop	ment					PRO. <b>394</b>	
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	RDT&E PROG	RAM ELE	MENT/P	ROJECT C	COST BI	REAKDO	WN (R-3)	)	DATE	June 200	01
	GET ACTIVITY  Engineering and Mai	nufacturing	Developm	ent		er and title <b>70F EW D</b> e	evelopmer	nt	•		PROJECT <b>3945</b>
(U)	A. Project Cost Breakdown	(\$ in Thousand	ds)								
(U) (U) (U) (U)	Integrated Defensive Electron IDECM F-15 Mission and Test Support Total	nic Countermeas	sures (IDECM)	Common			8, 4, 2,	2000 403 423 547 373	FY 20 8,5 14,1 3,2 25,9	99 50 19	FY 2002 2,438 27,939 4,551 34,928
( <b>U</b> )	B. Budget Acquisition History	ory and Plannin	g Information	(\$ in Thousan	<u>ds</u> )						
(U)	Performing Organizations: Contractor or Government	Contract Method/Type	Award or	Performing	<u>Project</u>						
	Performing	or Funding	Obligation	Activity	Office	Total Prior	<b>Budget</b>	<b>Budget</b>	<u>Budget</u>	Budget to	
	Activity	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	to FY 2000	<u>FY 2000</u>	FY 2001	FY 2002	Complete	<u>Program</u>
	Product Development Organi USAF IDECM: Development BAE		Nov 95	47,733	47,733	39,355	2,766	5,612	0	Continuing	TBD
	Development E-Systems, Goleta (ESGD)	CPIF	Jan 96	19,674	19,674	12,901	4,388	2,085	300	Continuing	TBD
	F-15 IDECM Integration- McAir/Northrop/Lockheed	CPFF	Aug 97	177,516	177,516	22,736	4,423	14,150	27,939	Continuing	TBD
	Martin IDECM Misc Development Contracts	Misc		6,509	6,509	4,036	1,249	902	2,138	Continuing	TBD
	Support and Management Or	ganizations									
	ASC/SM/YF - IDECM	Misc	As required	N/A		3,102	1,184	2,004	3,451	Continuing	TBD
	Test and Evaluation Organiza	ations				4	2		ē	a	
	AFOTEC			N/A		1,600	0 <b>5</b> 00	0	600	Continuing	
	Edwards			N/A N/A		156 0	500 752	846 339	600 500	Continuing Continuing	
	Eglin NRL			N/A N/A		0	111	339	0	Continuing	
l P	roject 3945			Page	e 23 of 33 Pa	iges			Exhil	oit R-3 (PE	0604270F)

#### DATE RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) June 2001 BUDGET ACTIVITY PE NUMBER AND TITLE **PROJECT** 05 - Engineering and Manufacturing Development 0604270F EW Development 3945 (U) Performing Organizations Continued: \* The funding prior to FY98 includes only FY97. The funding prior to FY97 was transferred from a classified PE. The total program and EACs include funding from FY97 and out because of the classified PE in FY96 and prior. **Total Prior** Budget to **Budget Budget Budget** <u>Total</u> to FY 2000 FY 2000 FY 2001 FY 2002 Complete **Subtotals Program** TBD Subtotal Product Development 79,028 12,826 22,749 30,377 TBD Subtotal Support and Management 2,004 3,102 1,184 3,451 **TBD** TBD Subtotal Test and Evaluation 1,756 1,363 1,215 1,100 **TBD** TBD **Total Project** 15,373 25,968 34,928 TBD 83,886 **TBD**

Project 3945 Page 24 of 33 Pages Exhibit R-3 (PE 0604270F)

	RDT&E BUDGET ITEM	DATE	June	2001							
	ET ACTIVITY  Engineering and Manufacturing De	ent		UMBER AND <b>4270F</b>			PROJECT <b>4832</b>				
	COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4832	Precision Location and Identification (PLAID)	10,947	13,376	1,827	0	0	0	0	0	0	30,320

#### (U) A. Mission Description

Precision Location and Identification (PLAID) will improve aircrew situational awareness by providing accurate ground emitter location and unambiguous identification. Threat systems can disrupt or negate operational missions, even without firing, by requiring aircrew reactions that affect mission objectives. Improved threat information from a modernized Radar Warning Receiver (RWR) will assist the aircrews in determining precise threat range/directions and provide option responses short of mission abort or violent aircraft maneuvering. Knowing threat location will help an aircrew respond 'real-time' to threats by providing accurate information to allow the aircrews to reroute around hostile areas. PLAID will utilize existing aircraft RWR antennas and wiring (Group A hardware). PLAID development is currently focused on the ALR-69 RWR but PLAID technology can also be applied to other RWRs. This project also contains funding for aircraft surviability enhancements not related to the PLAID program.

#### (U) FY 2000 (\$ in Thousands)

(U) \$10,565 Engineering and Manufacturing Devleopment (EMD), Hardware/Software design/development/test

(U) \$182 Program Office Support (U) \$200 System Engineering Support

(U) \$10,947 Total

### (U) FY 2001 (\$ in Thousands)

(U) \$9,426 Engineering and Manufacturing Devleopment (EMD), Hardware/Software design/development/test

(U) \$250 Program Office Support (U) \$200 System Engineering Support

(U) \$3,500 Survivability enhancements (non-PLAID projects): \$2.5M for ALR-56C processor upgrade, \$0.7M for Comet Pod force development evaluation,

and \$0.3M for contractor support efforts to host Pouncer 2 technology on a platform.

(U) \$13,376 Total

The following net transactions are not reflected in the FY01 program total: BTR= -421K, and SBIR= -416K. These transactions are not reflected in other sections of the R-Docs where an FY01 total is shown.

Project 4832 Page 25 of 33 Pages Exhibit R-2A (PE 0604270F)

	RDT&E BUI	DGET ITI	EM JUS	TIFICAT	ION SH	EET (R-2	2A Exhil	oit)	D	Jun	e 2001
	GET ACTIVITY  Engineering and Man	ufacturing	g Develop	oment		NUMBER AND <b>04270F</b>		opment			PROJECT <b>4832</b>
(U)	A. Mission Description Cont	tinued									
(U) (U) (U) (U) (U) (U) (U)	\$200 System \$366 SOF C-	m Office Supp Engineering -130 SPD Sup I and Flight To	Support port								
(U)	B. Project Change Summary Congress added \$4.5M in FY9 in FY01 for PLAID EMD and	99 and \$11.5M						0.			·
( <b>U</b> )	C. Other Program Funding S	Summary (\$ i FY 2000 Actual	n Thousand FY 2001 Estimate	<u>Is)</u> <u>FY 2002</u> <u>Estimate</u>	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	<u>Cost to</u> <u>Complete</u>	<u>Total Cost</u>
(U)	AF RDT&E	0	0	0	0	0	0	0	0	<u></u>	
(U)	PE44011F Special	0	1,109	0	0	0	0		0	0	1,109
(U)	Operations Forces PE27442F Common ECM Equipment				10,057	10,358	11,002	11,587	11,934	Continuing	TBD
(U)	<b>D.</b> Acquisition Strategy Acquisition will be accomplish July 2001.	ned through fu	ll and open o	competitive p	procedures us	ing source se	lection proce	sses for awa	rd of contract	. Contract awa	rd is scheduled for
(U)	E. Schedule Profile				1 3	<u>FY 2000</u>	4 1	<u>FY 2</u>	001 3 4	1 :	<u>FY 2002</u> 2 3 4
(U)	Program Management Directive	ve Approval			1 4		7 1	2	*	1 .	2 3 4
(U)	Milestone II Decision	11			*						
(U) (U)	Acquisition Strategy Approved Request for Proposal Release	d				*	*				
Р	roject 4832				Page 26 of	f 33 Pages				Exhibit R-2/	A (PE 0604270F)

	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit)										DATE June 2001				
	GET ACTIVITY  - Engineering and Manufacturing Development			MBER <i>F</i> 1270F			velop	ment					PRO- <b>483</b>	JECT <b>2</b>	
( <b>U</b> )	E. Schedule Profile Continued	1	<u>FY</u> 2	<u>2000</u>		4	1	<u>FY 2</u>		4	1		2002	4	
(U) (U) (U) (U)	Source Selection Process Complete Contract Award Design Review Integrated Defensive Avionics Lab Test Readiness Review C-130 Combined Development/Operational Test and Evaluation Start * - Denotes a completed event X - Denotes a planned event	1		3		4	1	2	3	4 X X	1 X	2 X	3 X	4 X	
P	Project 4832	Page	27 of 3	3 Pages							Exhibit I	R-2A (PI	E 06042	270F)	

	RDT&E PROG	DATE	June 200	1							
	ET ACTIVITY  Engineering and Mar	nufacturing	Developn	nent		ER AND TITLE <b>70F EW D</b> E	velopmer	nt			PROJECT <b>4832</b>
(U)	A. Project Cost Breakdown	(\$ in Thousand	ls)								
							FY?	<u> 2000</u>	FY 200	<u>)1</u>	FY 2002
(U)	Program Office Support							182	250	0	250
(U)	SOF C-130 Testing							0	(	0	1,011
(U)	SOF C-130 SPD Support							0	(	0	366
(U)	System Engineering Support							200	20	0	200
(U)	Engineering and Manufacturi	ng Developmen	t, Hardware/S	Software design/de	velopment/	test	10,	565	9,42	6	0
(U)	Other Survivability Enhancer	nents (ALR-560	C processor up	grade, Comet Pod	l, and contra	actor		0	3,50	0	0
	support)										
(U)	Total						10,	947	13,37	6	1,827
(U)	B. Budget Acquisition Histo	ry and Plannin	g Informatio	n (\$ in Thousand	<u>s</u> )						
(U)	Performing Organizations:										
	Contractor or	Contract									
	Government	Method/Type	Award or	<b>Performing</b>	<b>Project</b>						
	Performing	or Funding	<b>Obligation</b>	Activity	<u>Office</u>	<b>Total Prior</b>	<b>Budget</b>	<b>Budget</b>	<b>Budget</b>	Budget to	<u>Total</u>
	Activity	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<b>EAC</b>	to FY 2000	FY 2000	FY 2001	FY 2002	Complete	Program
	Product Development Organiz	zations									
	WR-ALC/LNRC/ Contractor	Full and open	TBD	TBD	TBD	4,170	10,565	9,426	0	0	24,161
	TBD	competition/									
		CPAF									
	Survivability Enhancement	WR-ALC/LN	TBD/May	TBD	TBD	0	0	3,500	0	0	3,500
	Organizations	for ALR-56C	01								
		processor									
		upgrade;									
		ASC/SMN for									
		Comet Pod									
Р	roject 4832			Page	28 of 33 Pa	nges			Exhib	it R-3 (PE 0	604270F)

	RDT&E PR	OGRAM EL	EMENT/F	ROJECT C	OST B	REAKDO	WN (R-3)		DATE	June 2001	
	GET ACTIVITY - Engineering and I	<b>Manufacturing</b>	g Developr	ment		BER AND TITLE 70F EW DE	evelopmer	nt			PROJECT 1832
(U)	Performing Organization	•									
	Engineering/McCauley B	Frown616	Sep 01	TBD	TBD	0	200	200	200	0	600
	Program Office Support/LNRC	TBD	Sep 01	TBD	TBD	0	182	250	250	0	682
	SOF C-130 SPD	616	Oct 01	TBD	TBD	0	0	0	366	0	366
	Test and Evaluation Orga					_	_	-		-	
	Western Test Range	616	Jun 01	TBD	TBD	0	0	0	261	0	261
	Eglin Test Range	616	Oct 01	TBD	TBD	0	0	0	750	0	750
(U)	Item Description Product Development Pro	Contract Method/Type or Funding Vehicle operty	Award or Obligation Date	<u>Delivery</u> <u>Date</u>		Total Prior to FY 2000	Budget FY 2000	Budget FY 2001	Budget FY 2002	Budget to Complete	<u>Total</u> <u>Program</u>
	Support and Managemen Test and Evaluation Prop  Subtotals Subtotal Product Develop Subtotal Support and Ma Subtotal Test and Evalua Total Project	erty oment nagement				Total Prior to FY 2000 4,170 0 0 4,170	Budget FY 2000 10,565 382 0 10,947	Budget FY 2001 12,926 450 0 13,376	Budget FY 2002 0 816 1,011 1,827	Budget to Complete 0 0 0 0	Total <u>Program</u> 27,661 1,648 1,011 30,320
P	<sup>2</sup> roject 4832			Page	e 29 of 33 Pa	ages			Exhib	it R-3 (PE 06	604270F)

RDT&E BUDGET ITEM	DATE	DATE June 2001								
BUDGET ACTIVITY  05 - Engineering and Manufacturing De		UMBER AND <b>4270F</b>				PROJECT <b>8462</b>				
COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
8462 MALD	0	5,152	0	0	0	0	0	0	0	5,152

FY03-FY07 budget numbers do not reflect the DoD strategic review results.

#### (U) A. Mission Description

The Miniature Air Launched Decoy (MALD) is a low-cost decoy to stimulate enemy integrated air defenses (IADS) for detection, location, and both lethal and non-lethal suppression activities. MALD transitioned from a DARPA ACTD to USAF program management in December 2000. The program element funds final corrective actions to the ACTD configuration to support ACC's 'Silver Bullet' production of approximately 100 MALD vehicles.

#### (U) FY 2000 (\$ in Thousands)

(U) \$0 No Activity

(U) \$0 Total

#### (U) FY 2001 (\$ in Thousands)

(U) \$1,200 To complete retrofit of ACTD assets

(U) \$200 AFMSS Upgrade

(U) \$3,066 To complete pre-production enhancements and aircraft certification

(U) \$686 Program Office Support

(U) \$5,152 Total

The following transactions are not reflected in the FY01 program total: SBIR= -\$163K and a BTR= -\$46K. These transactions are not reflected in other sections of the R-Docs where an FY01 total is shown

#### (U) FY 2002 (\$ in Thousands)

(U) \$0 No Activity

(U) \$0 Total

#### (U) B. Project Change Summary

Congressional add of \$1.2M in FY01 to aid transition from ACTD. FY01 RDT&E funding (\$5.152M) extended contract to correct engine deficiencies prior to the start of MALD 'Silver Bullet' production.

Project 8462 Page 30 of 33 Pages Exhibit R-2A (PE 0604270F)

	RDT&E BUD	GET IT	EM JUS	TIFICAT	ION SH	EET (R-	2A Exhil	bit)	D	ATE <b>Ju</b> i	ne 2001
	BET ACTIVITY  Engineering and Manu	ıfacturing	g Develor	oment		NUMBER AND <b>04270F</b>		opment			PROJECT <b>8462</b>
( <b>U</b> )	C. Other Program Funding St	ummary (\$ i FY 2000 Actual	in Thousand FY 2001 Estimate	<u>ls)</u> <u>FY 2002</u> <u>Estimate</u>	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to	
(U) (U) (U)	AF RDT&E Other APPN (PE 27442F, BP 17) USAF S&T (PE 63270F) OSD (PE 63750D) RDT&E DARPA (PE 62702E)	1,500 2,000 296	3,000	5,000						Continuing	g TBD
	RDT&E ACC has requested procuremen  D. Acquisition Strategy FY01 RDT&E funding will exterproduction of approximately 100	end developr	nental activit	ties from the	ACTD to ref	ine engine de	sign and red	uce GPS/SA	S interference		
	E. Schedule Profile	O WIALDS O	ing requeste	d by the con	ibat All Torc	es. The acq	distrion win	be a sole-sou	iree, fixed priv	ce meentive ie	SC.
						FY 2000	4 1	<u>FY 2</u>			FY 2002
(U) (U)	Complete Engine Fix Flight Tes SAS Phase 2	sting			1 2	2 3	4 1	2	3 4 X	1	2 3 4
(U) (U)	SAS Phase 3 SAS Flight Test Container Redesign Complete								X		X
(U)	AFMSS rehost on PFPS Pyro/Hazard/Disposal						*			X	
(U) (U)	F-16 Tech Orders Silver Bullet Request for Propos Silver Bullet Proposal Evaluation	on							X	X	X
(U) (U)	Silver Bullet Production Decision Silver Bullet Contract Award	on								X	X
Р	roject 8462				Page 31 of	33 Pages				Exhibit R-2	2A (PE 0604270F)

	RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)  June 20											
	GET ACTIVITY - Engineering and Ma	nufacturing	Developr	nent		ER AND TITLE 70F EW De	evelopmer	nt			PROJECT <b>3462</b>	
(U)	A. Project Cost Breakdown	n (\$ in Thousand	ds)				FY 2	2000	FY 200	<b>)</b> 1	FY 2002	
(U)	To complete retrofit of ACT	TD assets					1:1_2	0	1,20	_	$\frac{112002}{0}$	
(U)	To complete AFMSS upgrad							0	20		0	
(U)	To complete production enhance		ircraft certific	ation				0	3,06		0	
(U)	Program Office Support			ation .				0	68		0	
(U)	Total							0	5,15		0	
(U)	B. Budget Acquisition Histo	orv and Plannin	g Informatio	on (\$ in Thousand	s)			,	2,22	_		
(U)	Performing Organizations:			,								
	Contractor or	Contract										
	Government	Method/Type	Award or	Performing	Project							
	Performing	or Funding	Obligation	Activity	Office	Total Prior	Budget	<b>Budget</b>	Budget	Budget to	<u>Total</u>	
	Activity	Vehicle	<u>Date</u>	EAC	EAC	to FY 2000	FY 2000	FY 2001	FY 2002	Complete	<b>Program</b>	
	Product Development Organ	izations										
	Northop Grumman - Ryan	CPFF	1 Nov 96	TBD	TBD	0	0	2,890	0	0	2,890	
	Aeronautical Center											
	Support and Management Or	ganizations										
	AAC/WMG					0	0	686	0	0	686	
	Test and Evaluation Organization	ations										
	Eglin AFB					0	0	1,576	0	0	1,576	
(U)	<b>Government Furnished Pro</b>	Contract	A solar									
	Itam	Method/Type	Award or	Doliver		Total Daire	D,. J4	D. 4	Dandons	Dudgette	T-4-1	
	Item Description	<u>or Funding</u> <u>Vehicle</u>	Obligation Data	<u>Delivery</u>		Total Prior	Budget FY 2000	Budget FY 2001	Budget	Budget to	Total Program	
	<u>Description</u> Product Development Proper	·	<u>Date</u>	<u>Date</u>		to FY 2000	<u>r i 2000</u>	<u>rı 2001</u>	FY 2002	Complete	<u>Program</u>	
	Support and Management Proper											
	Test and Evaluation Property											
	105t and Evaluation 1 Topolty											
F	Project 8462			Page	32 of 33 Pa	nges			Exhib	it R-3 (PE 06	604270F)	

RDT&E PROGRAM ELEMENT/PROJEC	DATE	June 2001				
UDGET ACTIVITY  5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604270F EW De	evelopmer	nt	•		ROJECT <b>8462</b>
	Total Prior	Budget	Budget	Budget	Budget to	<u>Total</u>
Subtotals	<u>to FY 2000</u>	FY 2000	FY 2001	FY 2002	<b>Complete</b>	<u>Progran</u>
Subtotal Product Development	0	0	2,890	0	0	2,890
Subtotal Support and Management	0	0	686	0	0	686
Subtotal Test and Evaluation	0	0	1,576	0	0	1,576
Total Project	0	0	5,152	0	0	5,152
Project 8462	Page 33 of 33 Pages			Exhib	it R-3 (PE 06	04270F)