### Department of Defense Fiscal Year (FY) 2012 Budget Estimates

February 2011



### **Air Force**

Justification Book

Missile Procurement, Air Force - 3020

**UNCLASSIFIED** 

# UNCLASSIFIED TABLE OF CONTENTS

# FY 2012 Budget Estimates MISSILE PROCUREMENT, AIR FORCE (3020)

SECTION 1 ~ SUMMARY MATERIAL	1
Exhibit P-1 Missile Procurement, Air Force	F - 12
SECTION 2 ~ BUDGET APPENDIX EXTRACT LANGUAGE	2
Missile Procurement, Air Force – Appendix Language	3
SECTION 3 ~ P-1 LINE ITEM DETAIL	6
BUDGET ACTIVITY 1: Ballistic Missiles	
P-1 Line Item No. 1 - MISSILE REPLACEMENT EQUIPMENT	1 – 1
BUDGET ACTIVITY 2: Other Missiles	
TACTICAL P-1 Line Item No. 2-Joint Air-to-Surface Standoff Missile (JASSM)	2-1
P-1 Line Item No. 3-Sidewinder (AIM-9X)	2 - 17
P-1 Line Item No. 4-Advanced Medium Range Air-to-Air Missile (AMRAAM)	2 - 29
i	

**UNCLASSIFIED** 

### **UNCLASSIFIED** TABLE OF CONTENTS

### **FY 2012 Budget Estimates**

### MISSILE PROCUREMENT, AIR FORCE (3020)

P-1 Line Item No. 5-Predator Hellfire Missile	2 - 41
P-1 Line Item No. 6-Small Diameter Bomb	2 - 49
INDUSTRIAL FACILITIES	
P-1 Line Item No. 7-Industrial Preparedness	2-1
<b>BUDGET ACTIVITY 3: Missile Modifications</b>	
Section 1: P-1M Modification Summary	3 - 1
P-1 Line Item No. 8 - AGM129 Advanced Cruise Missile	3 - 7
P-1 Line Item No. 9 - LGM-30 Minuteman II/III Mods	3 - 9
P-1 Line Item No. 10 -AGM-65 Maverick Mods	3 - 27
P-1 Line Item No. 11 -AGM-88 HARM Mods	3 - 29
P-1 Line Item No. 12 -AGM-86 Mods (ALCM)	3 - 35
BUDGET ACTIVITY 4: Spares and Repair Parts	
P-1 Line Item No. 13 -Missile Initial/Replenishment Spares	4 – 1
ii	

## UNCLASSIFIED TABLE OF CONTENTS

### **FY 2012 Budget Estimates**

### MISSILE PROCUREMENT, AIR FORCE (3020)

# **BUDGET ACTIVITY 5: Other Support SPACE PROGRAMS**

P-1 Line Item No. 14-Advanced EHF	5 - 1
P-1 Line Item No. 15-Advanced EHF Advance Procurement	5 - 13
P-1 Line Item No. 16-Wideband Gapfiller Satellites (Space)	5 - 17
P-1 Line Item No. 17-Wideband Gapfiller Satellites (Space) Advance Procurement	5 - 27
P-1 Line Item No. 18-GPS III Space Segment	5 - 31
P-1 Line Item No. 19-GPS III Space Segment Advance Procurement	5 - 43
P-1 Line Item No. 20-Spaceborne Equipment (COMSEC)	5 - 47
P-1 Line Item No. 21-Global Positioning System	5 - 51
P-1 Line Item No. 22-Defense Meteorological Satellite Program (DMSP)	5 - 61
P-1 Line Item No. 23-Evolved Expendable Launch Vehicle (EELV)	5 - 67
P-1 Line Item No. 24-Spaced Based Infrared System (SBIRS) High	5 - 77
P-1 Line Item No. 25-Space Based Infrared System (SBIRS) High Advance Procurement	5 - 93
P-1 Line Item No. 26-National Polar-Orbiting Op Env Satellite	5 - 99

iii

### **UNCLASSIFIED**

### THIS PAGE INTENTIONALLY LEFT BLANK

### FY 2012 BUDGET ESTIMATES

FEBRUARY 2011

### **SECTION 1:**

### **EXHIBIT P-1 MISSILE PROCUREMENT**

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: Missile Procurement, Air Force

Budget Activity	FY 2010 (Base & OCO)	FY 2011 Base Request with CR Adj*	FY 2011 OCO Request with CR Adj*	FY 2011 Total Request with CR Adj*
01. Ballistic Missiles	57,973	60,647		60,647
02. Other Missiles	632,909	815,993	41,621	857,614
03. Modification of Inservice Missiles	223,395	138,560	15,000	153,560
04. Spares and Repair Parts	63,884	43,192		43,192
05. Other Support	5,138,911	4,404,880		4,404,880
20. Undistributed		444,087	-19,996	424,091
Total Missile Procurement, Air Force	6,117,072	5,907,359	36,625	5,943,984

<sup>\*</sup> Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: Missile Procurement, Air Force

Budget Activity	FY 2011 Annualized CR Base**	FY 2011 Annualized CR OCO**	FY 2011 Annualized CR Total**
01. Ballistic Missiles	65,577		65,577
02. Other Missiles	882,323	26,922	909,245
03. Modification of Inservice Missiles	149,823	9,703	159,526
04. Spares and Repair Parts	46,703		46,703
05. Other Support	4,762,933		4,762,933
20. Undistributed			
Total Missile Procurement, Air Force	5,907,359	36,625	5,943,984

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*\*</sup> Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: Missile Procurement, Air Force

Budget Activity	FY 2012 Base	FY 2012 OCO	FY 2012 Total
01. Ballistic Missiles	67,745		67,745
02. Other Missiles	689,602	28,420	718,022
03. Modification of Inservice Missiles	166,887		166,887
04. Spares and Repair Parts	43,241		43,241
05. Other Support	5,106,542		5,106,542
20. Undistributed			
Total Missile Procurement, Air Force	6,074,017	28,420	6,102,437

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Line No Item Nomenclature	Ident Code	(Bas Quantit	·	Base with Quantit	A STATE OF THE STA	Quantity	quest R Adj* Cost	Total with Quantit		e c
Budget Activity 01: Ballistic Missiles										-
Missile Replacement Equipment - Ballistic										
1 Missile Replacement Eq-Ballistic	А		57,973		60,647				60,647	U
Total Ballistic Missiles			57,973		60,647	- T			60,647	3.0
Budget Activity 02: Other Missiles										
Tactical										
2 JASSM	Α		52,515	171	215,825			171	215,825	U
3 Sidewinder (AIM-9X)	A	219	78,527	178	64,523	ke		178	64,523	U
4 AMRAAM	Α	170	272,714	246	355,358			246	355,358	U
5 Predator Hellfire Missile	A	1175	86,621	460	44,570	431	41,621	891	86,191	U
6 Small Diameter Bomb	A	2694	141,694	2985	134,884			2985	134,884	U
Industrial Facilities										
7 Industr'l Preparedns/Pol Prevention	A		838		833				833	
Total Other Missiles			632,909		815,993		41,621		857,614	
Budget Activity 03: Modification of Inservice Missiles	5									
Class IV										
8 Advanced Cruise Missile	A		32		48				48	U
9 MM III Modifications	A		198,913		123,378				123,378	U

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*</sup> Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Producement, Air Force					
Line No Item Nomenclature	Ident Code	FY 2011 Annualized CR Base** Quantity Cost	FY 2011 Annualized CR OCO** Quantity Cost	FY 2011 Annualized CR Total** Quantity Cost	
Budget Activity 01: Ballistic Missiles					
Missile Replacement Equipment - Ballistic					
1 Missile Replacement Eq-Ballistic	A	65,577		65,577	U
Total Ballistic Missiles		65,577		65,577	ß
Budget Activity 02: Other Missiles					
Tactical					
2 JASSM	А	233,369		233,369	U
3 Sidewinder (AIM-9X)	А	69,768		69,768	U
4 AMRAAM	A	384,244		384,244	U
5 Predator Hellfire Missile	А	48,193	26,922	75,115	U
6 Small Diameter Bomb	A	145,848		145,848	U
Industrial Facilities					
7 Industr'l Preparedns/Pol Prevention	А	901	022022222	901	
Total Other Missiles		882,323	26,922	909,245	
Budget Activity 03: Modification of Inservice Miss:	iles				
Class IV					
8 Advanced Cruise Missile	A	52		52	U
9 MM III Modifications	А	133,407		133,407	U

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

Appropriation: 3020F Missile Procurement, Air Force

<sup>\*\*</sup> Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

	Ident Code	Quantit	•	Quantit			7.00	s e c
Budget Activity 01: Ballistic Missiles			.a				35 355.3.3	
Missile Replacement Equipment - Ballistic								
1 Missile Replacement Eq-Ballistic	A		67,745				67,745	U
Total Ballistic Missiles			67,745				67,745	8
Budget Activity 02: Other Missiles								
Tactical								
2 JASSM	Α	142	236,193			142	236,193	U
3 Sidewinder (AIM-9X)	Α	240	88,769			240	88,769	U
4 AMRAAM	A	218	309,561			218	309,561	U
5 Predator Hellfire Missile	A	416	46,830	154	16,120	570	62,950	U
6 Small Diameter Bomb	A		7,523	100	12,300	100	19,823	U
Industrial Facilities								
7 Industr'l Preparedns/Pol Prevention	A		726				726	
Total Other Missiles			689,602		28,420		718,022	
Budget Activity 03: Modification of Inservice Missiles	3							
Class IV								
8 Advanced Cruise Missile	A		39				39	U
9 MM III Modifications	Α		125,953				125,953	U

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Line No Item Nomenclature	Ident Code	FY 2010 (Base & OCO) Quantity Cost	FY 2011  Base Request  with CR Adj*  Quantity Cost	FY 2011 OCO Request with CR Adj* Quantity Cost	FY 2011 Total Request with CR Adj* Quantity Cost	S e c
10 AGM-65D Maverick	А	257	260	15,000	15,260	U
11 AGM-88A Harm	A	24,193	4,079		4,079	U
12 Air Launch Cruise Missile (ALCM)	A		10,795		10,795	
Total Modification of Inservice Missiles		223,395	138,560	15,000	153,560	3
Budget Activity 04: Spares and Repair Parts						
Missile Spares + Repair Parts						
13 Initial Spares/Repair Parts	А	63,884	43,192	*	43,192	
Total Spares and Repair Parts		63,884	43,192		43,192	
Budget Activity 05: Other Support						
Space Programs						
14 Advanced EHF Less: Advance Procurement (PY)	A	1 (2,143,899) (-307,212)	(38,078)		(38,078)	U
		1,836,687	38,078		38,078	28
15 Advanced EHF Advance Procurement (CY)			208,520		208,520	U
16 Wideband Gapfiller Satellites(Space) Less: Advance Procurement (PY)	A	(150,217)	1 (579,802) (-62,201)		1 (579,802) (-62,201)	U
		150,217	517,601		517,601	S
17 Wideband Gapfiller Satellites(Space) Advance Procurement (CY)		62,201	58,110		58,110	U

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*</sup> Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Line No Item Nomenclature	Ident Code	FY 2011 Annualized CR Base** Quantity Cost	FY 2011 Annualized CR OCO** Quantity Cost	FY 2011 Annualized S CR Total** e Quantity Cost c	
10 AGM-65D Maverick	А	281	9,703	9,984 U	
11 AGM-88A Harm	A	4,411		4,411 U	
12 Air Launch Cruise Missile (ALCM)	A	11,672		11,672 U	
Total Modification of Inservice Missiles		149,823	9,703	159,526	
Budget Activity 04: Spares and Repair Parts					
Missile Spares + Repair Parts					
13 Initial Spares/Repair Parts	A	46,703		46,703 U	
Total Spares and Repair Parts		46,703		46,703	
Budget Activity 05: Other Support					
Space Programs					
14 Advanced EHF Less: Advance Procurement (PY)	A	(58,123)		(58,123) U U	
		58,123		58,123	
15 Advanced EHF					
Advance Procurement (CY)		208,520		208,520 U	
<pre>16 Wideband Gapfiller Satellites(Space)   Less: Advance Procurement (PY)</pre>	А	(626,599) (-62,201)		(626,599) U (-62,201) U	
		564,398		564,398	
17 Wideband Gapfiller Satellites(Space) Advance Procurement (CY)		58,110		58,110 U	95

<sup>\*\*</sup> Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Line No Item Nomenclature	Ident Code	FY 2012 Base Quantity Cost	FY 2012 OCO Quantity Cost	FY 2012 Total Quantity Cost	s e c
10 AGM-65D Maverick	A	266		266	U
11 AGM-88A Harm	A	25,642		25,642	U
12 Air Launch Cruise Missile (ALCM)	A	14,987		14,987	U
Total Modification of Inservice Missiles		166,887		166,887	
Budget Activity 04: Spares and Repair Parts					
Missile Spares + Repair Parts					
13 Initial Spares/Repair Parts	A	43,241		43,241	U
Total Spares and Repair Parts		43,241		43,241	701
Budget Activity 05: Other Support					
Space Programs					
14 Advanced EHF Less: Advance Procurement (PY)	А	2 (761,353) (-208,520)		2 (761,353) (-208,520)	) U
		552,833		552,833	
15 Advanced EHF Advance Procurement (CY)					U
16 Wideband Gapfiller Satellites(Space) Less: Advance Procurement (PY)	A	1 (526,855) (-58,110)		1 (526,855) (-58,110)	) U
		468,745		468,745	
17 Wideband Gapfiller Satellites(Space) Advance Procurement (CY)					U

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Line No Item Nomenclature	Ident Code	FY 2010 (Base & OCO) Quantity Cost	FY 2011  Base Request  with CR Adj*  Quantity Cost	FY 2011 OCO Request with CR Adj* Quantity Cost	FY 2011 Total Request S with CR Adj* e Quantity Cost c	2
18 GPS III Space Segment Less: Advance Procurement (PY)	A			2222222	υ υ	
19 GPS III Space Segment Advance Procurement (CY)			122,490		122,490 U	j
20 Spaceborne Equip (Comsec)	A	5,368	14,894		14,894 U	J
21 Global Positioning (Space)	A	124,194	64,609		64,609 U	Į
22 Def Meteorological Sat Prog(Space)	A	96,555	88,719		88,719 U	ı
23 Evolved Expendable Launch Veh(Space)	A	3 1,094,787	3 1,153,976		3 1,153,976 U	į
24 SBIR High (Space) Less: Advance Procurement (PY)	А	1 (359,191 (-53,841	(-278,545)		1 (979,249) U (-278,545) U	
		305,350			700,704	
25 SBIR High (Space)		to the same of the				
Advance Procurement (CY)		158,545	270,000		270,000 U	,
26 Natl Polar-Orbiting Op Env Satellite	A	3,889	26,308		26,308 U	ĺ
Special Programs						
29 DEFENSE SPACE RECONN PROGRAM	A	104,851			U	j
31 Special Update Programs	A	308,862	247,584		247,584 U	l
999 Classified Programs		887,405			893,287 U	1
Total Other Support		5,138,911			4,404,880	

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*</sup> Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Line No Item Nomenclature	Ident Code	FY 2011 Annualized CR Base** Quantity Cost	FY 2011 Annualized CR OCO** Quantity Cost	FY 2011 Annualized CR Total** Quantity Cost	S e c
18 GPS III Space Segment Less: Advance Procurement (PY)	A	(9,957)		(9,957)	U
		9,957		9,957	
19 GPS III Space Segment Advance Procurement (CY)		122,490		122,490	U
20 Spaceborne Equip (Comsec)	A	16,105		16,105	U
21 Global Positioning (Space)	A	69,861		69,861	U
22 Def Meteorological Sat Prog(Space)	A	95,931		95,931	U
23 Evolved Expendable Launch Veh(Space)	A	1,247,778		1,247,778	U
24 SBIR High (Space) Less: Advance Procurement (PY)	А	(1,058,154) (-278,545)		(1,058,154) (-278,545)	
		779,609		779,609	
25 SBIR High (Space) Advance Procurement (CY)		270,000		270,000	U
26 Natl Polar-Orbiting Op Env Satellite	A	28,446		28,446	U
Special Programs					
29 DEFENSE SPACE RECONN PROGRAM	A				U
31 Special Update Programs	A	267,706		267,706	U
999 Classified Programs		965,899		965,899	U
Total Other Support		4,762,933		4,762,933	

<sup>\*\*</sup> Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Line No Item Nomenclature	Ident Code	FY 2012 Base Quantity Cost	FY 2012 OCO Quantity Cost	FY 2012 Total Quantity Cost	s e c
					-
18 GPS III Space Segment Less: Advance Procurement (PY)	A	2 (556,016) (-122,490)	2222222	2 (556,016) (-122,490)	U
		433,526		433,526	
19 GPS III Space Segment Advance Procurement (CY)		81,811		81,811	U
20 Spaceborne Equip (Comsec)	A	21,568		21,568	U
21 Global Positioning (Space)	A	67,689		67,689	U
22 Def Meteorological Sat Prog(Space)	A	101,397		101,397	U
23 Evolved Expendable Launch Veh(Space)	А	4 1,740,222		4 1,740,222	U
24 SBIR High (Space) Less: Advance Procurement (PY)	А	(351,389) (-270,000)		(351,389) (-270,000)	U
		81,389		81,389	
25 SBIR High (Space) Advance Procurement (CY)		243,500		243,500	U
26 Natl Polar-Orbiting Op Env Satellite	А				U
Special Programs					
29 DEFENSE SPACE RECONN PROGRAM	A				U
31 Special Update Programs	А	154,727		154,727	U
999 Classified Programs		1,159,135		1,159,135	U
Total Other Support		5,106,542		5,106,542	

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force						
Line No Item Nomenclature	Ident Code	FY 2010 (Base & OCO) Quantity Cost	FY 2011 Base Request with CR Adj* Quantity Cost	FY 2011 OCO Request with CR Adj* Quantity Cost	FY 2011 Total Request with CR Adj* Quantity Cost	S e c
Budget Activity 20: Undistributed				8		-
Undistributed						
32 Adj to Match Continuing Resolution	A		444,087	-19,996	424,091	U
Total Undistributed			444,087	-19,996	424,091	
Total Missile Procurement, Air Force		6,117,072	5,907,359	36,625	5,943,984	

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*</sup> Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force								
Line	Ident	Annual	FY 2011 Annualized CR Base**		11 ized 0**	Annual	FY 2011 Annualized CR Total**	
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
Budget Activity 20: Undistributed								
32 Adj to Match Continuing Resolution	А					25.5		U
Total Undistributed								
Total Missile Procurement, Air Force		5,9	07,359		36,625	5,9	43,984	

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*\*</sup> Adjusts each budget line included in the FY 2011 President's Budget request proportionally to match the Annualized Continuing Resolution funding level for each appropriation. Quantities - TBD

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: 3020F Missile Procurement, Air Force

Ident	FY 2012 nt Base				S e		
Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
							-
A							U
	6,0	74,017		28,420	6,1	02,437	
	Code	Ident Base Code Quantity  A	Ident Base Code Quantity Cost	Ident Base OCO Code Quantity Cost Quantity	Ident Base OCO Code Quantity Cost Quantity Cost	Ident Base OCO Total Code Quantity Cost Quantity  A	Ident Base OCO Total Code Quantity Cost Quantity Cost  A

#### Department of the Air Force FY 2012 President's Budget Exhibit P-1 FY 2012 President's Budget Total Obligational Authority (Dollars in Thousands)

28 Jan 2011

Appropriation: Procurement of Ammunition, Air Force

	FY 2010	FY 2011 Base Request	FY 2011 OCO Request	FY 2011 Total Request
Budget Activity	(Base & OCO)	with CR Adj*	with CR Adj*	with CR Adj*
01. Procurement of Ammo, Air Force	1,056,506	660,357	277,452	937,809
02. Weapons	27,734	7,063	15,507	22,570
20. Undistributed		131,658	-36,140	95,518
Total Procurement of Ammunition, Air Force	1,084,240	799,078	256,819	1,055,897

P-1P: FY 2012 President's Budget (With FY 2011 CR Adjustments), as of January 28, 2011 at 13:49:27

<sup>\*</sup> Reflects the FY 2011 President's Budget with an undistributed adjustment to match the Annualized Continuing Resolution funding level by appropriation.

### THIS PAGE INTENTIONALLY LEFT BLANK

### FY 2012 BUDGET ESTIMATES

FEBRUARY 2011

### **SECTION 2**

### **BUDGET APPENDIX EXTRACT LANGUAGE**

### THIS PAGE INTENTIONALLY LEFT BLANK

### Budget Appendix Extract Language Fiscal Year 2012 Budget Estimates Missile Procurement, Air Force

For construction, procurement, and modification of missiles, spacecraft, rockets, and related equipment, including spare parts and accessories therefore, ground handling equipment, and training devices; expansion of public and private plants, Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things; \$6,102,437,000 to remain available for obligations until September 30, 2014.

### THIS PAGE INTENTIONALLY LEFT BLANK

# FY 2012 BUDGET ESTIMATES FEBRUARY 2011

### **SECTION 3:**

### P-1 LINE ITEM DETAIL

### THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature MISSILE REPLACEMENT EQUIPMENT- BALLISTIC/TACTICAL (OVERVIEW)

Program Element for Code B Items		Other Related Program Elements											
						FY	FY						
		Prior	FY	FY	FY	2012	2012	FY	FY	FY	FY	To	
	ID Code	Years	2010	2011	2012	OCO	Total	2013	2014	2015	2016	Comp	Total
Proc Qty		N/A					0					N/A	N/A
Total Proc Cost(\$ M)		N/A	57.973	60.647	67.745	0.000	67.745	58.406	84.419	141.983	28.392	N/A	N/A

#### **Description**

This program funds replacement organizational and intermediate level support equipment for all out-of-production missile systems, including ballistic, tactical and other missile weapon systems. Equipment procured is used for missile weapon systems maintenance and testing at organizational/intermediate (base/field) launch control facilities, as well as missile testing facilities.

PEs associated with this P-1 Line are: 0101122F, 0101213F, 0202834F, 0207163F

#### **FY 2012 Program Justification**

FY12 funding provides replacement support equipment items for an aging inventory of equipment which has become increasingly more costly to maintain. These items will increase ballistic and tactical missile system reliability and maintainability by providing state-of-the-art maintenance repair and testing capability. The program supports missile weapon systems such as the Minuteman (LGM-30), Advanced Medium Range Air-to-Air Missile (AIM-120), Air Launched Cruise Missile (AGM-86A), and High-Speed Anti-Radiation Missile (AGM-88A). Requirements are jointly determined by Headquarters United States Air Force (HQ USAF), Air Force Materiel Command (AFMC), Air Combat Command (ACC) and Air Force Space Command (AFSPC) and are based on established allowance standards.

Items requested in FY12 are displayed on the attached P-40A. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

P-1 Shopping List Item No. 1

Budget Item Justification Exhibit P-40, page 1 of 3

Exhibit P-40A, Budget Item Justification for Aggreg	gated Items	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number		P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Ac	ctivity 01, Ballistic Missiles, Item No. 1	MISSILE REPLACEMENT EQUIPMENT- BALLISTIC/TACTICAL (OVERVIEW)

Weapon System	Ident					Total	Cost in Mi	illions of	Dollars					
Cost Elements	Code		Prior Years			FY 2010			FY 2011			FY 2012		
									1					
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
BALLISTIC ITEMS LESS THAN 5 MILLION	A						10.532			1.528			4.075	
DOLLARS														
TACTICAL/OTHER ITEMS LESS THE 5 MILLION	A						7.441			2.209			1.718	
DOLLARS														
ALIGNMENT SET TEST SET (ASTS)	A				2	13.750	27.500			0.000			0.000	
REPLACEMENT														
MM POWER PANELS	A						12.500			11.700			12.000	
INTEGRATED DISSECT SYSTEM (IDS)	A						0.000	1	0.000	5.210			0.000	
FACILITY EQUIPMENT REPLACEMENT														
LAUNCH SUPPORT SYSTEM (LSS)	A						0.000	1	8.300	8.300	1	16.102	16.102	
LFIC/RFIC REFURBISHMENT PROGRAM	A						0.000	7	3.429	24.000	5	4.800	24.000	
RADIO FREQUENCY TEST SET (RFTS)	A							1	7.700	7.700	1	9.850	9.850	
REPLACEMENT PROGRAM														
TOTAL PROGRAM:				0.000			57.973			60.647			67.745	

#### Remarks

P-1 Shopping List Item No. 1

Budget Item Justification for Aggregated Items
Exhibit P-40A, page 2 of 3

Exhibit P-40A, Budget Item Justification for Aggregated Items

Appropriation (Treasury) Code/CC/BA/BSA/Item Control Missile Procurement, Air Force, Bu	P-1 Line Item Nomenclature  MISSILE REPLACEMENT EQUIPMEN  BALLISTIC/TACTICAL (OVERVIEW)										
								•			
Weapon System Cost Elements	Ident Code	Total Cost in Millions of Dollars									
		FY 2012 OCO			Co	ost to Comp	olete				
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost				
BALLISTIC ITEMS LESS THAN 5 MILLION DOLLARS	A										
TACTICAL/OTHER ITEMS LESS THE 5 MILLION DOLLARS	A										
ALIGNMENT SET TEST SET (ASTS) REPLACEMENT	A										
MM POWER PANELS	A										
INTEGRATED DISSECT SYSTEM (IDS) FACILITY EQUIPMENT REPLACEMENT	A										
LAUNCH SUPPORT SYSTEM (LSS)	A										
LFIC/RFIC REFURBISHMENT PROGRAM	A										
RADIO FREQUENCY TEST SET (RFTS) REPLACEMENT PROGRAM	A										
TOTAL PROGRAM:		_		0.000			0.000				
			1	I		1	ļ				

P-1 Shopping List Item No. 1

Budget Item Justification for Aggregated Items
Exhibit P-40A, page 3 of 3

Date: February 2011

### THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature BALLISTIC MISSILE ITEMS LESS THAN \$5 MILLION

Program Element for Code B Items	Other Related Program Elements N/A												
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	N/A					0					N/A	N/A
Total Proc Cost(\$ M)		N/A	10.532	1.528	4.075	0.000	4.075	0.000	0.000	0.000	0.000	N/A	N/A

#### **Description**

Ballistic Missile Items Less Than \$5 Million funds replacement support equipment for the Minuteman (LGM-30) missile weapon system. Equipment procured is used for missile weapon systems maintenance and testing at organizational/intermediate levels, launch and launch control facilities, and missile testing facilities. Procurement of the items will reduce downtime and delays due to scheduling and non-availability of critical test equipment. These items will also ensure Air Force personnel accomplish cost effective maintenance on schedule and will increase missile readiness. Requirements are jointly determined by Headquarters United States Air Force (HQ USAF), Air Force Materiel Command (AFMC), and Air Force Space Command (AFSPC), based on established allowance standards. No individual procurement item in this category exceeds \$5 million.

#### **FY 2012 Program Justification**

Procurement of the items will reduce downtime and delays due to scheduling and non-availability of critical test equipment. These items will also ensure Air Force personnel accomplish cost effective maintenance on schedule and will increase missile readiness.

Items requested in FY12 are identified on the following P-40A and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

P-1 Shopping List Item No. 1

Budget Item Justification Exhibit P-40, page 1 of 3

Exhibit P-40A, Budget Item Justification for Aggregated Items									Date: February 2011							
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1										P-1 Line Item Nomenclature						
Missile Procurement, Air Force, Bu		BALLISTIC MISSILE ITEMS LESS THAN \$5 MILLION														
Weapon System Cost Elements	Ident Code	Total Cost in Millions of Dollars														
			Prior Yea	ırs	FY 2010			FY 2011			FY 2012					
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost			
Locking Tool, Release TLV/403/E	A				13	0.001	0.018	<del></del>								
Adapter Set, Test	A				1	0.494	0.494									
Explosive Set Circuitry Test Set (ESCTS)	A				1	2.347	2.347									
Ground Test Missile (GTM)	A				1	3.500	3.500									
MK12A Service STAR Test Complex	A				1	2.000	2.000									
Dynamic Brake for TE Hoist Test Stand (Spares)	A	Ī			1	0.275	0.275									
PAH Safety Barrier	A				125	0.001	0.180									
Personnel Alarm System (PAS) Replacement Program	A	Ī			160	0.011	1.718	90	0.011	0.972						
Simulated Electronic Launch Minuteman (SELM)	A							2	0.278	0.556						
MM Depot Emergency Response Team Remote Broadcasting Camera	A										1	0.160	0.160			
SELM Test Equipment Replacement	A		T								1	0.115	0.115			
Electrical Electronic Equipment Test Station (EEETS/V) Replacement Program	A										1	3.800	3.800			
TOTAL PROGRAM:		1		0.000			10.532	 		1.528	ŀ		4.075			

P-1 Shopping List Item No. 1

Budget Item Justification for Aggregated Items Exhibit P-40A, page 2 of 3

Exhibit P-40A, Budget Item Justification for	or Aggre	egated	Items					Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Contro	l Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force, Bu	idget A	ctivit	y 01, Ba	llistic Mi	ssiles	, Item N	o. 1	BALLISTIC MISSILE ITEMS LESS THAN \$5 MILLION
Weapon System Cost Elements	Ident Code					Total	Cost in Mill	ions of Dollars
			FY 2012 O	CO	ost to Com	plete		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Locking Tool, Release TLV/403/E	A							
Adapter Set, Test	A							
Explosive Set Circuitry Test Set (ESCTS)	A							
Ground Test Missile (GTM)	A							
MK12A Service STAR Test Complex	A							
Dynamic Brake for TE Hoist Test Stand (Spares)	A							
PAH Safety Barrier	A							
Personnel Alarm System (PAS) Replacement Program	A							
Simulated Electronic Launch Minuteman (SELM)	A							
MM Depot Emergency Response Team Remote Broadcasting Camera	A							
SELM Test Equipment Replacement	A							
Electrical Electronic Equipment Test Station (EEETS/V) Replacement Program	A							
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 1

Budget Item Justification for Aggregated Items
Exhibit P-40A, page 3 of 3

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature TACTICAL MISSILE ITEMS LESS THAN \$5 MILLION

Program Element for Code B Items		Other Related Program Elements													
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total		
Proc Qty	A	N/A					0					N/A	N/A		
Total Proc Cost(\$ M)		N/A	7.441	2.209	1.718	0.000	1.718	1.900	1.970	1.886	2.103	N/A	N/A		

## **Description**

The Tactical Missile Items Less Than \$5 Million line procures replacement (common and peculiar) support equipment for tactical missiles. Common items (used on more than one weapon system) and peculiar items (unique to one weapon system) directly support tactical missile maintenance and servicing requirements. These replacement items ensure continuation of serviceable equipment over the life of a weapon system.

### **FY 2012 Program Justification**

FY 12 funding procures replacement support equipment for tactical missile systems. The program supports missile weapons systems such as the High-Speed Anti-Radiation Missile (AGM-88 HARM), Air Interceptor Missile (AIM-9M) and Air-Launched Cruise Missile (AGM-88 ALCM).

All items have an annual value of less than \$5M. Items requested in FY12 are identified on the following P- 40A and are representative of items being procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

P-1 Shopping List Item No. 1

Appropriation (Treasury) Code/CC/BA/BSA/Item Control Missile Procurement, Air Force, Bu	TA	P-1 Line Item Nomenclature TACTICAL MISSILE ITEMS LESS THAN \$5 MILLION													
Weapon System Cost Elements	Ident Code		Total Cost in Millions of Dollars												
			Prior Yea	rs		FY 2010			FY 201	1		FY 2012	2		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
AGM-88 GUIDED MISSILE LAUNCH TEST SET	A		2 1.000 2.000						1.000	2.000	1	1.000	1.000		
AGM-88 SUPPORT EQUIPMENT <sup>1</sup>	A												0.488		

0.000

0.067

0.110

5.264

7.441

#### Remarks

TOTAL PROGRAM:

ALCM SUPPORT EQUIPMENT 1

AIM-9 SUPPORT EQUIPMENT <sup>1</sup>

AMRAAM SUPPORT EQUIPMENT 1,2

Exhibit P-40A, Budget Item Justification for Aggregated Items

Α

Α

Α

Date: February 2011

0.131

0.078

2.209

0.130

0.100

1.718

<sup>(1)</sup> Multiple items with an annual value of less than \$5M.

<sup>(2)</sup> AMRAMM Support Equipment funds for FY08-FY10 were previously footnoted in FY09 PB in the P-1 line for spares/repair parts.

Exhibit P-40A, Budget Item Justification f	hibit P-40A, Budget Item Justification for Aggregated Items										
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Missile Procurement, Air Force, Bu	o. 1	P-1 Line Item Nomenclature TACTICAL MISSILE ITEMS LESS THAN \$5 MILLION									
Weapon System Cost Elements	Ident Code	Total	Cost in Mill	lions of Dollars							
2000 21011101110		Qty	FY 2012 O	CO Total Cost	Co Qty	st to Comp	olete Total Cost				
AGM-88 GUIDED MISSILE LAUNCH TEST SET	A	Q1)	Cint Cost	Total Cost	Qty	Cint Cost	Total Cost				
AGM-88 SUPPORT EQUIPMENT <sup>1</sup>	A										
ALCM SUPPORT EQUIPMENT 1	A										
AIM-9 SUPPORT EQUIPMENT <sup>1</sup>	A										
AMRAAM SUPPORT EQUIPMENT 1,2	A										
TOTAL PROGRAM:				0.000			0.000				

P-1 Shopping List Item No. 1

Budget Item Justification for Aggregated Items
Exhibit P-40A, page 3 of 3

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature ALIGNMENT SET TEST SET (ASTS) REPLACEMENT

Program Element for Code B Items					Other	Related Pr	ogram Ele	ments					
		Prior	FY	FY	FY	FY 2012	FY 2012	FY	FY	FY	FY	To	
	ID Code	Years	2010	2011	2012	OCO	Total	2013	2014	2015	2016	Comp	Total
Proc Qty	A	0					0					2	2
Total Proc Cost(\$ M)		0.000	27.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.500	55.000

### **Description**

The Alignment Set Test Set (ASTS) is used to test and calibrate the alignment set on a Minuteman III Guidance System platform. The alignment set is a complex assembly of the Gyro Stabilized Platform on the Missile Guidance Set and provides the precise orientation information to the Flight Program needed for the strict accuracy of the Minuteman III system. The ASTS performs automatic acceptance testing of the Minuteman alignment sets. The ASTS can perform operator-selected elements of the acceptance test singly or in an operator-selected order. The ASTS also performs limited automatic station self-test and self-calibration. Actual Minuteman III hardware is used in the ASTS interface circuitry to create the most accurate conditions for the Alignment Set being tested. This station is experiencing several obsolescence issues and the Boeing Guidance Repair Center is experiencing difficulty repairing the station back to serviceable condition. There are custom assemblies on this station that have no spares and the vendors are no longer supporting.

Lack of requested funding will cause failures to increase and availability will decrease. It is estimated that 30% of the custom electronics are obsolete or unobtainable and failures of these custom components will be catastrophic.

## **FY 2012 Program Justification**

This program does not require any FY12 procurement and/or OCO funding.

P-1 Shopping List Item No. 1

Exhibit P-5, Weapon System Cost	Analysis									Date: Fel	oruary 2	2011			
Appropriation (Treasury) Code/CC/BA/BSA/Ite	em Control Number							P-	1 Line Item No	menclature					
Missile Procurement, Air For	rce, Budget A	Ctivit	y 01, Ba	llistic Mi	ssiles	, Item N	o. 1		LIGNMEN EPLACE		ΓEST	SET (AS	STS)		
Weapon System Cost Elements	Ident Code			Total Cost in Millions of Dollars											
			Prior Yea	rs		FY 2010	)		FY 2011			FY 2012			
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cos		
ASTS	A				2	13.750	27.500								
OTAL PROGRAM:				0.000			27.500			0.000			0.00		

Exhibit P-5, Weapon System Cost A	nalysis							Date: February 2011				
Appropriation (Treasury) Code/CC/BA/BSA/Iten	n Control Number							P-1 Line Item Nomenclature				
Missile Procurement, Air Ford	e, Budget A	ctivit	y 01, Ba	llistic Mi	ssile	s, Item N	o. 1	ALIGNMENT SET TEST SET (ASTS) REPLACEMENT				
Weapon System Cost Elements	Ident Code		Total Cost in Millions of Dollars									
			FY 2012 O	CO	(	Cost to Com	plete					
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost					
ASTS	A											
TOTAL PROGRAM:				0.000			0.000					

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 3 of 4

Exhibit P-5A, Procure	ement His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) Co Missile Procurem				vity 01, Ba	Illistic Mis	ssiles, Ite	em No. 1	ALIC	ENMENT S	SET TEST	_
Weapon System					Subline Ite	m					
ALIGNMENT SET TEST	SET (ASTS)	REPLACEME	ENT								
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
ASTS							/				
(2010)	2	13.750	AFMC/OO- ALC		SS	CPAF	BOEING / HEATH, OH	Sep-10	Oct-13	Y	
Remarks	1					<u>'</u>	•	1	· ·		
Initial spares requireme	ents (\$360,0	00) will be pr	rocured in BP2	26 in FY11/12	under contra	ct F42610-9	99-D-0006.				

P-1 Shopping List Item No. 1

Procurement History and Planning Exhibit P-5A, page 4 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature  MM POWER PANELS

Program Element for Code B Items	Other Related Program Elements													
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total	
Proc Qty							0						0	
Total Proc Cost(\$ M)			12.500	11.700	12.000	0.000	12.000	12.200	12.500	12.700	0.000		73.600	

### **Description**

This program funds replacement of mission systems power distribution panels at Intercontinental Balistic Missile (ICBM) Launch Facilities (LFs) and below ground Missile Alert Facilities (MAFs).

This project protects against Near Neighbor nuclear strike effects; ensures breakers are available for new and existing mission needs; and increases safety, egress, and accessibility. This is the first project of several to modernize the electrical distribution system. The current breakers are 40 years old, well past the expected lifetime and spare breakers are unavailable either in supply or commercially. The Source Region Electromagnetic Pulse Electrical Surge Arrestor (SREMP ESA) and power panels are installed in the same project to save money and obtain the best equipment layout. The existing breakers are degraded by age and are not sufficient to power new equipment requirements. Improperly tested and poorly fitting breakers have been used without proper upstream coordination. The system is currently unprotected from SREMP effects.

If not replaced, breakers will continue to degrade. New mission requirements require additional circuits and power. Safety risks will increase as replacement breakers will have to be adapted/modified and will not securely fit into the panel, as required by codes. Under fault conditions, breakers may tear lose and cause damage to the panel and adjacent breakers, reducing mission readiness. Breakers used as switches have caused further degradation, which will be corrected in the new design with breakers designed to be used as switches. This project will also replace old power filters.

#### **FY 2012 Program Justification**

FY12 funding procures equipment for replacement of power panels and circuit breakers and installs the Source Region Electromagnetic Pulse Electrical Surge Arrestor (SREMP ESA) at Launch Facilities (LFs) and below ground Missile Alert Facilities (MAFs).

P-1 Shopping List Item No. 1

Exhibit P-5, Weapon System Cost Analysis										Date: February 2011					
Appropriation (Treasury) Code/CC/BA/BSA/Item Contro	l Number							P-1	P-1 Line Item Nomenclature						
Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1									MM POWER PANELS						
Weapon System Ident Total Cost in Millions of Dollars															
Weapon System	Ident					Total	Cost in Mi	llions of	Dollars						
Cost Elements	Code														
			Prior Year	rs		FY 2010	)		FY 2011			FY 2012	2		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
LAUNCH FACILITIES (LF) KITS	A				75	0.150	11.242	75	0.149	11.144	75	0.149	11.160		
MISSILE ALERT FACILITIES (MAF) KITS	A				9	0.140	1.258	4	0.139	0.556	6	0.140	0.840		
TOTAL PROGRAM:				0.000			12.500			11.700			12.000		
Remarks															

Kits include custom built filters and Source Region Electromagentic Pulse Electrical Surge Arrestors (SREMP ESA)

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 2 of 5

Exhibit P-5, Weapon System Cost Analy	ysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Cor	ntrol Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force,	Budget A	Activit	y 01, Ba	llistic Mi	ssiles	s, Item N	lo. 1	MM POWER PANELS
Weapon System Cost Elements	Ident Code					Total	l Cost in Mil	lions of Dollars
Cost Elements	Code		FY 2012 O	CO	C	ost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
LAUNCH FACILITIES (LF) KITS	A							
MISSILE ALERT FACILITIES (MAF) KITS	A							
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 3 of 5

Exhibit P-5A, Procure	ment His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) Coo				/ity 01, Ba	allistic Mis	siles, Ite	em No. 1		e Item Nomeno		
Weapon System					Subline Ite	m					
MM POWER PANELS			T	T	1	1	T	1		Ι α	
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available
LAUNCH FACILITIES (LF) KITS							/				
(2010)	75	0.150	AFMC/OO- ALC		С	FFP W/OPT	TRANSTECTOR SYSTEMS, INC / HAYDEN, ID	Nov-10	Dec-10	Y	
(2011)	75	0.149	AFMC/OO- ALC		OPT		Unknown / Unknown	Sep-11	Nov-11	Y	
(2012)	75	0.149	AFMC/OO- ALC		OPT		Unknown / Unknown	Sep-12	Nov-12	Y	
(2012 OCO)							/				
(2013)							/				
(2014)							/				
(2015)							/				
(2016)							1				
MISSILE ALERT FACILITIES (MAF) KITS							/				
(2010)	9	0.140	AFMC/OO- ALC		С	FFP W/OPT	Unknown / Unknown	Mar-11	Sep-11	Y	
(2011)	4	0.139	AFMC/OO- ALC		OPT		Unknown / Unknown	Sep-11	Nov-11	Y	
(2012)	6	0.140	AFMC/OO- ALC		OPT		Unknown / Unknown	Sep-12	Nov-12	Y	

Exhibit P-5A, page 4 of 5

Exhibit P-5A, Procur	ement His	tory and PI	anning						Date: F	ebruary 201	1
Appropriation (Treasury) Co	de/CC/BA/Bs	s/Item Control N	Number:					P-1 Line	Item Nomeno	lature:	
Missile Procurem	ent, Air	Force, Bu	ıdget Activ	ity 01, Bal	listic Mis	siles, Ite	em No. 1	MM F	OWER P	<b>ANELS</b>	
Weapon System					Subline Ite	m		•			
MM POWER PANELS											
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
(2012 OCO)											
(2013)							/				
(2014)							/				
(2015)							/				
(2016)							/				
Remarks			1			1		1			l
(1) Basic Contract: FA4	1626-11-C-000	1									
				Р	-1 Shoppin	g List Item	No. 1	Pro		History and oit P-5A, pa	

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature INTEGRATED DISSECT SYSTEM (IDS) FACILITY EQUIPMENT REPLACEMENT

Program Element for Code B Items		Other Related Program Elements											
		Prior	FY	FY	FY	FY 2012	FY 2012	FY	FY	FY	FY	To	
	ID Code	Years	2010	2011	2012	OCO	Total	2013	2014	2015	2016	Comp	Total
Proc Qty	A	0					0					0	0
Total Proc Cost(\$ M)		0.000	0.000	5.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.210	10.420

### **Description**

The Integrated Dissect Facility is located at the Utah Test and Training Range site in Oasis, Utah. The facility is the only one of its kind capable of supporting requirements unique to obtaining pristine samples of Minuteman III propellant. This equipment is critical to the ongoing support of the Minuteman III Aging and Surveillance program for the fielded assets. The current equipment is facing serious aging and obsolescence issues, mean time between failure has severely degraded, and the equipment is becoming increasingly unsupportable. If not funded, the quality of Minuteman III booster propellant will not be assured, impacting the ability to guarantee proper performance of the booster in its assigned mission.

### **FY 2012 Program Justification**

No FY12 funding requested.

P-1 Shopping List Item No. 1

									Date: Feb	ruary 2	2011	
mber							P-1	Line Item No	menclature			
get A	ctivity	y 01, Bal	llistic Mi	ssiles	s, Item N	o. 1						
dent					Total	Cost in Mi	llions of	Dollars				
Code		Prior Year	rs		FY 2010	)		FY 2011			FY 2012	<u> </u>
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
A							1		5.210			0.000
			0.000			0.000			5.210			0.000
d:'c	lent ode	lent ode Qty	lent ode Prior Year Qty Unit Cost	lent ode  Prior Years  Qty Unit Cost Total Cost  A	lent ode  Prior Years  Qty Unit Cost Total Cost Qty  A	Content   Cont	lent ode  Prior Years FY 2010  Qty Unit Cost   Total Cost   Qty   Unit Cost   Total	lent ode  Prior Years FY 2010  Qty Unit Cost   Total Cost   Qty   Unit Cost   Total Cost   Qty   Unit Cost   Qty   Qty   Unit Cost   Qty   Qty	Integrate	tent ode  Prior Years FY 2010 FY 2011  Qty Unit Cost Total Cost Qty Unit Cost Total Cost Qty Unit Cost Total Cost A 1 5.210	tent ode  Prior Years FY 2010 FY 2011  Qty Unit Cost Total Cost Qty Unit Cost Total Cost Qty  A 1 5.210  INTEGRATED DISSECT FACILITY EQUIPMENTR  Total Cost in Millions of Dollars  FY 2011  Qty Unit Cost Total Cost Qty Unit Cost Total Cost Qty  1 5.210	tent code  Prior Years FY 2010 FY 2011 FY 2012  Qty Unit Cost Total Cost Qty Unit Cost Qty Uni

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 2 of 4

Exhibit P-5, Weapon System Cost Ana	lvsis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Co								P-1 Line Item Nomenclature
Missile Procurement, Air Force,		ctivit	y 01, Ba	llistic Mi	ssiles	s, Item N	lo. 1	INTEGRATED DISSECT SYSTEM (IDS) FACILITY EQUIPMENTREPLACEMENT
Weapon System Cost Elements	Ident Code					Total	l Cost in Milli	ions of Dollars
			FY 2012 O			Cost to Com		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
INTERGRATED DISSECT SYSTEM (IDS)	A							
ГОТAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 3 of 4

Exhibit P-5A, Procur	ement His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) Co				vity 01, Ba	allistic Mis	siles, Ite	em No. 1	INTE SYST	TEM (IDS)	lature: DISSECT FACILIT REPLACE	Υ
Weapon System					Subline Ite	m		•			
INTEGRATED DISSECT	SYSTEM (II	OS) FACILITY	Y EQUIPMENT	REPLACEMI	ENT						
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
INTERGRATED DISSECT SYSTEM (IDS)							/				
(2010)							/				
(2011)	1	5.210	AFMC/OO- ALC		SS	FFP W/OPT	NORTHROP GRUMMAN / CLEARFIELD, UT	Jun-11	Jun-13	Y	
(2012)							/				
(2012 OCO)							/				
IDS							1				
Remarks											
					P-1 Shoppin	g List Item	No. 1	Pro	curement l Exhib	History and oit P-5A, pa	Planning ge 4 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature  LAUNCH SUPPORT SYSTEM (LSS)

Program Element for Code B Items		Other Related Program Elements											
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	N/A					0					N/A	N/A
Total Proc Cost(\$ M)		N/A	0.000	8.300	16.102	0.000	16.102	0.000	0.000	0.000	0.000	N/A	N/A

### **Description**

The Minuteman III (MM III) Intercontinental Ballistic Missile (ICBM) Launch Support System (LSS) provides command and control of the MOD-7 instrumentation wafer (MOD-7) used during MM III Force Development Evaluation (FDE) program. The LSS also provides the pre-flight status of the three MOD-7 subsystems: Command Destruct System, Global Positioning System (GPS) Full Signal Translator (FST) analog GPS Translator, and S-Band Telemetry System. The Command Destruct subsystem provides the capability to destroy the missile in flight should it deviate from the expected flight path. The GPS FST subsystem is used to obtain accurate GPS position information for tracking the missile throughout the flight. The Telemetry subsystem collects and processes critical flight performance data that is used to assess the reliability and performance of the missile subsystems. All subsystems are essential for flight. Collection of this FDE performance data is validates the readiness, reliability and accuracy of the MM III ICBM force.

The LSS also operates the Launch Environment Protection System (LEPS). These functions include monitoring missile silo power, autocollimator slot (closure of a slot to re-vent blast contamination/damage to the Launcher Enclosure Room), launch cable power continuity, launch articulating arms and silo door operation.

This Vandenberg AFB-unique equipment is located in the Integrated Launch Support Center (ILSC) and also includes a LSS trainer.

There is only one MM III LSS in existence. Because of the age of the equipment, components are no longer procurable. Integrated circuit cards are no longer supportable due to parts obsolescence and spares are unavailable. Control and monitoring consoles are experiencing intermittent failures of due to wear and tear of wiring assemblies associated with replacing circuit cards and other workarounds. No commercial off-the-shelf (COTS) items are compatible as drop-in replacements for these aging, obsolete components. Proprietary equipment software is cumbersome and inflexible for workarounds. Individual components cannot be updated without affecting total system software. When remaining spares and/or repair capabilities are exhausted LSS will be unsupportable and non-operational.

Risk of not accomplishing the FDE flights increases the longer this equipment goes without replacement; once funded, it is estimated four years will be required to accomplish replacement. If LSS replacement is not funded, FDE flights will have to be discontinued. This will highly degrade confidence in the flight performance reliability and accuracy of the MM III weapon system.

#### **FY 2012 Program Justification**

FY12 funding continues to procure items of a suite of essential equipment that is part of the Minuteman III infrastructure critical of sustaining the weapon system to 2030.

P-1 Shopping List Item No. 1

Exhibit P-5, Weapon System Cost Analy	sis									Date: Fe	bruary 2	2011	
Appropriation (Treasury) Code/CC/BA/BSA/Item Cont	rol Number							P-1	Line Item No	menclature			
Missile Procurement, Air Force, E	Budget A	Activity	y 01, Ba	llistic Mi	issiles	, Item N	lo. 1	LA	UNCHS	SUPPOR	T SYS	STEM (L	SS)
Weapon System Cost Elements	Ident Code					Total	l Cost in Mi	llions of	Dollars				
			Prior Yea	rs		FY 2010	)		FY 2011	1		FY 2012	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
REMOTE ENVIRONMENTAL MONITORING SYSTEM	A							1		2.000	1		4.200
ENGINEERING	A									1.700			3.152
PRODUCTION SUPPORT SERVICES	A									2.200			4.000
DATA	A									0.600			0.750
GOVERNMENT COSTS	A									1.800			4.000
LAUNCH SUPPORT SYSTEM (LSS)		[0]		[0.000]	[0]		[0.000]	[1]		[8.300]	[1]		[16.102]
TOTAL PROGRAM:				0.000			0.000			8.300			16.102

Remarks

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 2 of 4

Exhibit P-5, Weapon System Cost Analy	sis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Conf								P-1 Line Item Nomenclature
Missile Procurement, Air Force, E	Budget A	ctivity	/ 01, Ba	llistic Mi	ssiles	, Item N	o. 1	LAUNCH SUPPORT SYSTEM (LSS)
Weapon System Cost Elements	Ident Code					Total	Cost in Milli	ions of Dollars
		]	FY 2012 O	СО	C	ost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
REMOTE ENVIRONMENTAL MONITORING SYSTEM	A							
ENGINEERING	A							
PRODUCTION SUPPORT SERVICES	A							
DATA	A							
GOVERNMENT COSTS	A							
LAUNCH SUPPORT SYSTEM (LSS)		[0]		[0.000]	[0]		[0.000]	
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 3 of 4

Exhibit P-5A, Procure	ement His	tory and Pl	anning						Date: Fo	ebruary 201	1
Appropriation (Treasury) Co Missile Procurem				vity 01, Ba	Illistic Mis	ssiles, Ite	em No. 1			elature: PORT SY	STEM
Weapon System					Subline Ite	m					
LAUNCH SUPPORT SYS	TEM (LSS)										
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
LAUNCH SUPPORT SYSTEM (LSS)							/				
(2011)	1	8.300	AFMC/OO- ALC		SS	CPAF	BOEING / ANAHEIM, CA	Apr-11	Apr-14	Y	
(2012)	1	16.102	AFMC/OO- ALC		SS	CPAF	BOEING / ANAHEIM, CA	Dec-11	Apr-14	Y	
Remarks											
The program is structur	ed to procu	re the longest	t lead items firs	st in order to	deliver and in	corporate al	1 the equipment at one time				

P-1 Shopping List Item No. 1

Procurement History and Planning Exhibit P-5A, page 4 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature  LFIC/RFIC REFURBISHMENT PROGRAM

Program Element for Code B Items		Other Related Program Elements											
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty							0						0
Total Proc Cost(\$ M)		0.000	0.000	24.000	24.000	0.000	24.000	0.000	0.000	0.000	0.000	0.000	48.000

### **Description**

The Minuteman III (MM III) Intercontinental Ballistic Missile (ICBM) Low Frequency Instrumentation Console (LFIC) and the Radio Frequency Instrumentation Console (RFIC) are automated test equipment consoles used to test MM III MK12A and MK21 Reentry Vehicle (RV) subassemblies. The LFIC and RFIC consoles are also vital for the collection of MM III RV aging & surveillance, Service Star Testing, and reliability data.

The MM III RV ATE system is comprised of a Test Control System (TCS), an LFIC or RFIC, and several Interface Adapter Units (IAUs). The LFIC and RFIC contain electronic equipment (power supplies, meters, analog and digital interfaces) that provide electrical stimulus to a Unit Under Test (UUT) to simulate the MK12A/MK21 Fuze and its operating conditions. During test, the LFIC/RFIC captures information from a UUT in the form of measurements and relays the information back to the Test Control Station (TCS). The LFIC/RFIC console assembly connects to UUTs through an Interface Adapter Unit (IAU). This collection of ATE has been in use and supported for approximately 30 years.

Both consoles are experiencing a growing number of intermittent failures of due to wear and tear associated with replacing circuit cards, power adapters and other workarounds.

A complete system-level alignment is required every 90 days or following a repair resulting in increased downtime for the ATE system. Calibration of ATE instruments is the responsibility of the base Precision Measurement Equipment Lab (PMEL). The system alignment program primarily checks the accuracy of analog signals, permitting adjustments to bring the system within specifications.

Most of the electronic subassemblies (power supplies, computer system, interface cards, etc) are no longer supported by the original vendors, thus the availability of re-furbished or used equipment has ceased. No commercial off-the-shelf (COTS) items are compatible as drop-in replacements for these aging, obsolete components.

The Programmable Event Monitor Event Timer System Replacement (PEMETS-R) is a subassembly of LFIC. The PEMETS-R provides analog voltage event monitoring, digital event monitoring, targeting controls and monitors, square waves and pulses when the LFIC is used with multiple interface adapter units for the Mk12A/Mk21 Arming and Fuzing Assemblies (AFAs). Provides precision time tagging of multiple output events from a Unit Under Test.

If the LFIC and RFIC console refurbishment is not funded, MM III MK12A and MK21 RV will not be tested and certified for deployment. With state-of-the-art technology, replacement LFICs and RFICs will be more reliable, easier to calibrate and align, and parts supportable. The Air Force must maintain the capability to support the MK12A and MK21 RV programs to the year 2030.

P-1 Shopping List Item No. 1

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature  LFIC/RFIC REFURBISHMENT PROGRAM
<u>Description Continued</u>	
<b>FY 2012 Program Justification</b> FY12 funding continues the procurement of items of a suite of essential pieces of support equipment that is part of the system to 2030.	e MM III infrastructure critical to sustaining the weapon
P-1 Shopping List Item No. 1	Budget Item Justification Exhibit P-40, page 2 of 5

									Date: Feb	ruary 2	011	
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Numb	er						P-1	Line Item No	menclature			
Missile Procurement, Air Force, Budge	Activi	ty 01, Ba	llistic Mi	ssiles	s, Item N	o. 1		IC/RFIC	REFURE 1	BISHN	IENT	
Wasness Contains					Т-4-1	Castin Mil	11: £	Dallana				
Weapon System Ider Cost Elements Cod	-				1 otai	Cost in Mil	liions of	Dollars				
		Prior Years FY 2010				)		FY 2011	1	FY 2012		
	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
FIC A							6		14.000			
RFIC A							1		10.000			
PEMETS-R A										5	4.800	24.000
OTAL PROGRAM:			0.000			0.000			24.000			24.000
Remarks Programmable Event Monitor Event Timer System Rep	lacament	DEMETS E	2)									

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 3 of 5

Exhibit P-5, Weapon System Cost A	nalysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Iten	P-1 Line Item Nomenclature							
Missile Procurement, Air Ford	e, Budget A	ctivit	y 01, Ba	llistic Mi	ssiles	s, Item N	lo. 1	LFIC/RFIC REFURBISHMENT PROGRAM
Weapon System Cost Elements	Ident Code					Total	l Cost in Mil	lions of Dollars
			FY 2012 OCO Cost to Complete					
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
LFIC	A							
RFIC	A							
PEMETS-R	A							
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 4 of 5

Exhibit P-5A, Procu	rement His	tory and Pl	anning							Date: F	ebruary 201	1
Appropriation (Treasury) C Missile Procuren				vity 01, Ba	ıllistic Mis	ssiles, Ite	em No. 1		LFIC/	RFIC REGRAM	elature: FURBISH	MENT
Weapon System					Subline Ite	m						
LFIC/RFIC REFURBISH	MENT PROC	GRAM										
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Awai	rd Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
LFIC							/					
(2011)	6	2.333	AFMC/OO- ALC		SS	CPFF	LOCKHEED MARTIN / VALLEY FORGE, PA	Feb-1	.1	Feb-16	Y	
RFIC							/					
(2011)	1	10.000	AFMC/OO- ALC		SS	CPFF	LOCKHEED MARTIN / VALLEY FORGE, PA	Feb-1	.1	Jun-14	Y	
PEMETS-R							/					
(2012)	5	4.800	AFMC/OO- ALC		SS	CPFF	LOCKHEED MARTIN / VALLEY FORGE, PA	Feb-1	2	Jan-18	Y	
Remarks	1	•				•				l		

P-1 Shopping List Item No. 1

Procurement History and Planning Exhibit P-5A, page 5 of 5

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1	P-1 Line Item Nomenclature REPLACEMENT PROGRAM, RADIO FREQUENCY TEST SET (RFTS)

Program Element for Code B Items		Other Related Program Elements											
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty							0					•	0
Total Proc Cost(\$ M)			0.000	7.700	9.850	0.000	9.850	0.000	0.000	0.000	0.000		17.550

## **Description**

The Minuteman III (MM III) Intercontinental Ballistic Missile (ICBM) Radio Frequency Test Set (RFTS) provides excitation and measurement to verify the operation and monitor the radio transmission outputs of the MOD-7 instrumentation wafer (MOD-7) used during MM III Force Development Evaluation (FDE) program. The MOD-7 contains three subsystems: Command Destruct System, Global Positioning System (GPS) Full Signal Translator (FST) analog GPS Translator, and S-Band Telemetry System. The Command Destruct subsystem provides the capability to destroy the missile in flight should it deviate from the expected flight path. The GPS FST subsystem is used to obtain accurate GPS position information for tracking the missile throughout the flight. The Telemetry subsystem collects and processes critical flight performance data that is used to assess the reliability and performance of the missile subsystems. All subsystems are essential for flight.

There are two existing RFTS units to be replaced; one is at the Boeing Guidance and Repair Center (BGRC) at Heath, OH (Air Force acceptance testing of MOD-7) and the other is at Vandenberg AFB, CA (telemetry operation verification of the MOD-7 before missile flight test). Tech data requires that each Mod 7 wafer be tested by the Vandenberg RFTS for radio frequency outputs within 60 days of an FDE mission for FDE mission assurance, as shipping and handling and storage between BGRC and Vandenberg could result in damage to a wafer.

The RFTS was designed and built in the early 1980's. Many of its components are custom electronics (e.g. Generator Calibrator, Telemetry Receiver) that are obsolete and no longer supported by any vendors. Original Equipment Manufacturer (OEM) did not submit a bid to provide additional assets and declared several of components obsolete. No commercial off-the-shelf (COTS) items are compatible as drop-in replacements for these aging, obsolete RFTS components. When remaining spares and/or repair capabilities are exhausted RFTS will be unsupportable and non-operational,

Risk of not accomplishing the FDE flights increases the longer this equipment goes without replacement. If RFTS replacement is not funded, FDE flights will have to be discontinued. This will highly degrade confidence in the flight performance reliability and accuracy of the MM III weapon system.

#### **FY 2012 Program Justification**

 $FY12\ funding\ will\ complete\ the\ procurement\ of\ this\ MM\ III\ essential\ support\ equipment.$ 

P-1 Shopping List Item No. 1

Exhibit P-5, Weapon System Cost Ana	llysis	hibit P-5, Weapon System Cost Analysis											
Appropriation (Treasury) Code/CC/BA/BSA/Item Co	ontrol Number							P-1	Line Item No	menclature			
Missile Procurement, Air Force,	Budget A	ctivity	y 01, Ba	llistic Mi	ssiles	, Item N	lo. 1			MENT P		•	
Weapon System Cost Elements	Ident Code					Total	l Cost in Mi	llions of	Dollars				
			Prior Yea	rs		FY 2010	)		FY 2011		FY 2012		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
RFTS SYSTEM	A							1		2.600	1		2.600
DATA	A									0.650			0.650
GOVERNMENT COSTS	A									1.000			3.150
PRODUCTION SUPPORT SERVICES	A									2.000			2.000
ENGINEERING	A									1.450			1.450
RADIO FREQUENCY TEST SET (RFTS)		[0]		[0.000]	[0]		[0.000]	[1]	7.700	[7.700]	[1]	9.850	[9.850]
TOTAL PROGRAM:		0.000 0.000 7.700							9.850				

Remarks

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 2 of 4

Exhibit P-5, Weapon System Cost Ana	alysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item C	ontrol Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force	lo. 1	REPLACEMENT PROGRAM, RADIO FREQUENCY TEST SET (RFTS)						
Weapon System Cost Elements	Ident Code					Tota	l Cost in Milli	ions of Dollars
	FY 2012 OCO Cost to Complete					plete		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
RFTS SYSTEM	A							
DATA	A							
GOVERNMENT COSTS	A							
PRODUCTION SUPPORT SERVICES	A							
ENGINEERING	A							
RADIO FREQUENCY TEST SET (RFTS)		[0]		[0.000]	[0]		[0.000]	
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 1

Weapon System Cost Analysis Exhibit P-5, page 3 of 4

Exhibit P-5A, Procurement History and Planning									Date: February 2011					
Appropriation (Treasury) Code/CC/BA/Bs/Item Control Number:  Missile Procurement, Air Force, Budget Activity 01, Ballistic Missiles, Item No. 1									P-1 Line Item Nomenclature:  REPLACEMENT PROGRAM,  RADIO FREQUENCY TEST SET  (RFTS)					
						Subline Item								
REPLACEMENT PROGRAM, RADIO FREQUENCY TEST SET (RFTS)														
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?			
RADIO FREQUENCY TEST SET (RFTS)							/							
(2011)	1	7.700	AFMC/OO- ALC		SS	CPAF	BOEING / ANAHEIM, CA	Apr-11	Apr-14	Y				
(2012)	1	9.850	AFMC/OO- ALC		SS	CPAF	BOEING / ANAHEIM, CA	Dec-11	Sep-14	Y				
<u>Remarks</u>				•		•								

P-1 Shopping List Item No. 1

Procurement History and Planning Exhibit P-5A, page 4 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011					
	P-1 Line Item Nomenclature  Joint Air-to-Surface Standoff Missile  (JASSM)					

Program Element for Code B Items	N/A	Other Related Program Elements 0207325F											
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	1,173	0	171	142	0	142	157	163	204	326	2,564	4,900
Cost(\$ M)		894.055	52.515	215.825	236.193		236.193	237.315	267.222	316.329	552.148	4013.261	6784.863
Advance Proc Cost(\$ M)		0.000					0.000					0.000	0.000
Weapon System Cost(\$ M)		894.055	52.515	215.825	236.193	0.000	236.193	237.315	267.222	316.329	552.148	4013.261	6784.863
Initial Spares(\$ M)		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000
Total Proc Cost(\$ M)		894.055	52.515	215.825	236.193	0.000	236.193	237.315	267.222	316.329	552.148	4013.261	6784.863
Flyaway Unit Cost(\$ M)		0.718	0.000	1.223	1.616	·	1.616	1.468	1.597	1.516	1.672	1.528	11.338
Wpn Sys Unit Cost(\$ M)		0.762	0.000	1.262	1.663		1.663	1.512	1.639	1.551	1.694	1.565	11.648

#### **Description**

Totals include funding for PRCP Program Number (PNO) 555, JASSM.

The Joint Air-to-Surface Standoff Missile (JASSM) is an ACAT 1D program. This program provides a long range, conventional air-to-surface, autonomous, precision guided, standoff cruise missile compatible with fighter and bomber aircraft able to attack a variety of fixed or relocatable targets. There are 2 variants of the JASSM missile: Baseline JASSM and an extended range JASSM (JASSM-ER). Aircraft integration for the baseline missile is complete on the B-52H, F-16 (Block 50), B-1, and B-2. Objective aircraft include the F-15E, F-16 (Block 40), F-35, and F/A-18E/F. Aircraft integration for JASSM-ER is complete on the B-1B. Objective aircraft are the B-52H, F16C/D (Block 50/52), B-2, F-16C/D (Block 25-42), F15E, and the F-35. The government is buying the JASSM system based on a contractor developed, government-approved System Performance Specification (SPS). This SPS is on contract. The contractor assumes total system performance responsibility (TSPR) for Lots 1-6 (FY 02-07) as defined in the SPS; for Lot 7 (FY08) and beyond, the Government has approval authority of Class I configuration changes. There are no requirements for initial spares as JASSM includes a 15 year system performance warranty. Procurement quantities are estimates only and fall within a range of quantities based on negotiations for each specific lot contract. JASSM-Baseline and JASSM-Extended Range (ER) total procurement costs include 4,900 missiles, 2,400 Baseline and 2,500 ER missiles.

The JASSM program consist of two separable increments, the JASSM baseline and the JASSM-Extended Range (ER) - both with separate milestone decision points. Each version is broken out in separate P-5, P-5A, and P-21 in this document. The Quantity, Flyaway Unit Cost and Weapon System Unit Cost lines reflect JASSM PE (0207325F) only.

 $This \ program \ has \ associated \ Research \ Development \ Test \ and \ Evaluation \ (RDT\&E) \ funding \ in \ PE \ 0207325F.$ 

The program funding includes reduction for overhead cost efficiencies that are not intended to impact program content. The efficiencies reductions total \$0.795M in FY12.

## **FY 2012 Program Justification**

Award production contract for 142 JASSM missiles: 112 JASSM baseline, 30 JASSM-ER missiles. Continue reliability initiatives (such as for Electronic Safe and Armed Fuze

P-1 Shopping List Item No. 2

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 2	P-1 Line Item Nomenclature  Joint Air-to-Surface Standoff Missile (JASSM)
(ESAF) and Test Instrumentation Kit (TIK) improvements) including flight testing of current production missiles.	(JASSINI)
P-1 Shopping List Item No. 2	Budget Item Justification Exhibit P-40, page 2 of 16

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 2	Joint Air-to-Surface Standoff Missile (JASSM)

Weapon System Cost Elements	Ident Code					Total	Cost in Mi	llions of	Dollars				
			Prior Year	rs		FY 2010	)		FY 201	1		FY 2012	!
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
JASSM Baseline													
Quanity	A	1,173			0			141			112		
All-UP-Round	A			650.058			0.000			110.401			116.659
Engineering Chang Orders	A			1.401	0		0.452			5.935			6.528
JPO Technical Support	A			29.879			3.300			0.000			0.000
Program Management Administration (PMA)	A			8.478			1.767			0.886			0.898
Test Support/Reliability/Affordability Program	A			152.044			46.996			26.840			30.167
TOTAL BASELINE MISSILE FLYAWAY COST		[1,173]	0.718	[841.860]	[0]		[52.515]	[141]	1.022	[144.062]	[112]	1.377	[154.252]
Contractor Support	A			52.195			0.000			3.314			3.369
TOTAL BASELINE WEAPON SYSTEM COST		[1,173]	0.762	[894.055]	[0]		[52.515]	[141]	1.045	[147.376]	[112]	1.407	[157.621]
	-												
LACCME (1D(ED)													
JASSM Extend Range (ER)		0			0			20			20		
Quanity	A	0		0.000	0		0.000	30		56.550	30		55.056
All-Up-Round	A			0.000			0.000			56.579			55.256
Engineering Change Orders	A			0.000			0.000			5.935			6.117
JPO Technical Support	A			0.000			0.000			0.000			0.000
PMA	A			0.000			0.000			0.498			0.481
Test Support/Reliability/Affordability Program	A			0.000			0.000			2.124			13.349
TOTAL ER MISSILE FLYAWAY COST		[0]		[0.000]	[0]		[0.000]	[30]	2.171	[65.136]	[30]	2.507	[75.203]
Contractor Support	A			0.000			0.000			3.313			3.369
TOTAL ER WEAPON SYSTEM COST		[0]		[0.000]	[0]		[0.000]	[30]	2.282	[68.449]	[30]	2.619	[78.572]
Total Program	A	[1,173]	0.762	[	[0]		[52.515]	[171]	1.262	[215.825]	[142]	1.663	
TOTAL PROGRAM:				894.055			52.515			215.825			236.193

# Remarks

In FY10, there was no JASSM missile production - funds appropriated for reliability enhancement activities and missile retrofits. Production of missiles will resume in FY 11. FY11 is the first year of JASSM-ER production.

P-1 Shopping List Item No. 2

Weapon System Cost Analysis Exhibit P-5, page 3 of 16

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 2	Joint Air-to-Surface Standoff Missile (JASSM)
	•
P-1 Shopping List Item No. 2	Weapon System Cost Analysis Exhibit P-5, page 4 of 16

Exhibit P-5, Weapon System Cost Analys	sis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Contro	ol Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force, B	udget A	Activity	y 02, Otl	ner Miss	iles, It	em No.	2	Joint Air-to-Surface Standoff Missile (JASSM)
Weapon System Cost Elements	Ident Code							ons of Dollars
		Qty [	FY 2012 O	CO Total Cost	Otv	Ost to Com	plete Total Cost	
JASSM Baseline		Qiy	Onit Cost	Total Cost	Qty	Olit Cost	Total Cost	
Quanity	A				574			
All-UP-Round	A						647.606	
Engineering Chang Orders	A						46.912	
JPO Technical Support	A						0.000	
Program Management Administration (PMA)	A						11.362	
Test Support/Reliability/Affordability Program	A						172.873	
TOTAL BASELINE MISSILE FLYAWAY COST		[0]		[0.000]	[574]	1.431	[878.753]	
Contractor Support	A						20.951	
TOTAL BASELINE WEAPON SYSTEM COST		[0]		[0.000]	[574]	1.465	[899.704]	
	-							
JASSM Extend Range (ER)								
Quanity	A				1990			
All-Up-Round	A						2614.392	
Engineering Change Orders	A						163.900	
JPO Technical Support	A							
PMA	A						24.987	
Test Support/Reliability/Affordability Program	A						234.566	
TOTAL ER MISSILE FLYAWAY COST		[0]		[0.000]	[1990]	1.527	[3037.845]	
Contractor Support	A						75.712	
TOTAL ER WEAPON SYSTEM COST		[0]		[0.000]	[1990]	1.565	[3113.557]	
Total Program	A				[2564]	1.447	[4013.261]	
TOTAL PROGRAM:				0.000			4013.261	

P-1 Shopping List Item No. 2

Weapon System Cost Analysis Exhibit P-5, page 5 of 16

## Date: February 2011 Exhibit P-5A, Procurement History and Planning Appropriation (Treasury) Code/CC/BA/Bs/Item Control Number: P-1 Line Item Nomenclature: Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 2 Joint Air-to-Surface Standoff Missile (JASSM) Subline Item Weapon System JASSM Date of Date Specs RFP Issue Contract Contract Location of First Available Revision WBS Cost Elements Qty. Unit Cost **PCO** Date Method Type Contractor and Location Award Date Delivery Now? Available? JASSM BASELINE 0.000 N/A SS FFP N/A / N/A Ν (2010)Jan-11 Jul-10 Lockeed Martin / Troy, (2011)141 1.045 308th SS **FFP** Feb-11 Mar-12 Ν Feb-11 ARSG/PK Alabama Eglin AFB, FL Jul-11 Lockheed Martin / Troy, (2012) 1.407 308th SS Jan-12 112 **FFP** Mar-13 Ν Jan-12 ARSG/PK Alabama Eglin AFB, FĹ Lockheed Martin / Troy, (2013)117 1.334 308th Jul-12 SS FFP Jan-13 Mar-14 Jan-13 ARSG/PK Alabama Eglin AFB, FL Lockheed Martin / Troy, 103 1.375 308th Jul-13 SS FFP Jan-14 Ν (2014)Mar-15 Jan-14 ARSG/PK Alabama Eglin AFB, FĹ 1.235 308th Jul-14 Lockheed Martin / Troy, (2015)104 SS FFP Jan-15 Mar-16 Ν Jan-15 ARSG/PK Alabama Eglin AFB, FL 308th Jul-15 SS Lockheed Martin / Troy, (2016) 76 1.144 FFP Jan-16 Mar-17 Ν Jan-16 ARSG/PK Alabama Eglin AFB, FĹ JASSM Extended Range P-1 Shopping List Item No. 2 Procurence philistogy apadelanting

UNCLASSIFIED PAGE 02 -

Exhibit P-5A, Procurement History and Planning Date: February 2011 Appropriation (Treasury) Code/CC/BA/Bs/Item Control Number: P-1 Line Item Nomenclature: Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 2 Joint Air-to-Surface Standoff Missile (JASSM) Subline Item Weapon System JASSM Date of Date Specs Location of RFP Issue Contract Contract First Available Revision WBS Cost Elements Qty. Unit Cost **PCO** Date Method Type Contractor and Location Award Date Delivery Now? Available? (2010)0.000 N/A SS FFP N/A / N/A Ν Jan-11 Lockheed Martin / Troy, (2011) 30 2.282 308th Jul-10 SS FFP Feb-11 Oct-12 Ν Feb-11 ARSG/PK Alabama Eglin AFB, FĽ Lockheed Martin / Troy, (2012)30 2.619 308th Jul-11 SS FFP Jan-12 Mar-13 Ν Jan-12 ARSG/PK Alabama Eglin AFB, FLSS Lockheed Martin / Troy, (2013) 40 2.030 308th Jul-12 FFP Jan-13 Mar-14 Ν Jan-13 ARSG/PK Alabama Eglin AFB, FĹ 308th Jul-13 Lockheed Martin / Troy, (2014)60 2.093 SS FFP Jan-14 Mar-15 Ν Jan-14 ARSG/PK Alabama Eglin AFB, FL 308th Lockheed Martin / Troy, 1.879 Jul-14 SS FFP (2015)100 Jan-15 Mar-16 Ν Jan-15 ARSG/PK Alabama Eglin AFB, FL Jul-15 Lockheed Martin / Troy, 250 308th FFP Jan-16 (2016)1.861 Mar-17 Jan-16

Remarks

No missile production in FY10

ARSG/PK

Eglin AFB, FL

P-1 Shopping List Item No. 2

Alabama

Procurement History and Planning Exhibit P-5A, page 7 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Febi	uary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em Noi	mencla	ture					
Mis	sile F	Procu	ırem	ent, A	Air F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	issil	es, l	tem	No.	2			int A ASSI		-Su	rface	Sta	ndo	ff Mi	ssil	е
			ACCEP.	BALAN					F	SCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.	GEDIA	PROC.	-	CE DUE		2009						CAI	ENDAR	YEAR	2010							(	CALENI	OAR YE	AR 201	1			A
YEAR	SERV. OTY. TO AS OF 1 OCT. 2009 TO TO V C O E A E A E A P A U U U U E C O E A E A P A P T V C N B R R T T V C N B R R T T T V C N B R R T T T T T T T T T T T T T T T T T															M A Y	J U N	J U L	A U G	S E P	E R								
2008	USAF	USAF 111 18 93 8 40 32 13 USAF 120 0 120																								0			
2009	USAF	SAF 111 18 93 8 40 32 13 SAF 120 0 120																							10	110			
TO	ΓAL	AF 111 18 93 8 40 32 13 AF 120 0 120 8 40 32 13 231 18 213 0 0 0 0 0 0 0 0 0 0 8 40 32 13															0	0	0	0	0	0	0	0	10	110			
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PR	ODUCT	ON RA	ΓES						•		PRC	CURE	/ENT LI	EAD TI	ИE	•		•			•
ITE	M/MANU	IFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	4Χ				ADMI	N LEAD	TIME											
Lockhee	ed Martin (J		Baseline)		Troy, A	labama	1	5	3	0	4	0			PRI 1 C			AFTER 1 OCT		MF Pl		10	TAL AF 1 OCT	IER					
													INITIAL			)													
REMAI		1 710	CMI		<u> </u>		2011	D 1 1'	L		. 0		REORE	JEK	(	)	<u> </u>												

This P-21 gives the JASSM baseline deliveries only. JASSM-ER deliveries in the next set of P-21.

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 8 of 16

Exhi	bit P-	21, Pr	oducti	ion Sc	chedu	ıle																	Date	: Feb	ruary	2011			
			ury) Cod I <b>rem</b> é							vity	- 02,	Oth	er M	issil	es, I	tem	No.	2		Jo	Line Ite int A ASSI	ir-to			e Sta	ındo	ff Mi	ssile	е
				BALAN					F	SCAL Y	EAR 20	12									FI		EAR 20						L
PROC.	anner	PROC.	-	CE DUE		2011						CAI	ENDAR	YEAR	2012							(	CALENI	DAR YE	AR 2013	3			A
PROC. YEAR	SERV.	QTY.	TO 1 OCT. 2011	AS OF 1 OCT 2011	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
2009	09 USAF 120 10 110 15 15 15 15 10 10 10 10 10 10 10 10 10 10 11 USAF 141 0 141																												
2011	V   V   V   V   V   V   V   V   V   V																												
2012	USAF	112	0	112																		5	7	10	10	10	10	10	50
TO	ΓAL	373	10	363	15	15	15	15	10	21	21	21	22	12	12	12	12	12	12	12	12	5	7	10	10	10	10	10	50
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ION RA	TES								PRC	CURE	IENT L	EAD TI	ME	•					
ITE	M/MANU	IFACTUF	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME			,								
Lockhee		IASSM B	aseline)		Troy, A	labama	1	5	3	0	4	.0			PR 1 C	IOR OCT		AFTER 1 OCT		MF Pl		10	TAL AF 1 OCT						
													INITIAL		(	0									1				
							, The state of the	, and the second				, and the second	REORE	DER		0		, and the second	, and the second		·	·							
REMAI	RKS		~~~				~~																						

This P-21 gives the JASSM baseline deliveries only. JASSM-ER deliveries in the next set of P-21.

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 9 of 16

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	le																	Date:	: Febr	uary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol I	Numbe	r											P-1	Line Ite	em Nor	nencla	ture					
Mis	sile F	Procu	ırem	ent, A	Air Fo	orce	, Bud	dget	Acti	vity	- 02,	Oth	er M	issil	es, l	tem	No.	2			int A ASSI		-Sur	face	Sta	ndo	ff Mi	ssile	,
			ACCEP	BALAN					FI	SCAL Y	EAR 20	14									FI	SCAL Y	EAR 201	15					T
DDOC		PROC.		CE DUE		2013						CAL	ENDAR	YEAR 2	2014							(	CALEND	OAR YE	AR 2015	;			A
PROC. YEAR	Total   Total   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   E   E   E   E   E   E														T E R														
2012	Total Form   Total C   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   E   E   E   E   E   E														0														
2013	2 USAF 112 62 50 10 10 10 10 10 10 10 10 10 10 10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0														0														
2014	2013   2013   T   V   C   N   B   R   R   Y   N   L   G   P   T   V   C   N   B   R   R   Y   N   L   G   P   R														40														
TO	AL	332	62	270	10	10	10	10	10	9	9	9	9	10	10	10	10	10	10	10	11	3	10	10	10	10	10	10	40
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						•		PRO	DDUCTI	ON RA	ΓES							•	PRC	CURE	/ENT LI	EAD TIN	ИE.						
ITE	M/MANU	IFACTUF	RER'S N	AME	LOCA	ATION	MS	SR	EC	ON	MA	λX				ADMI	N LEAD	TIME											
Lockhee	d Martin (J	IASSM B	Baseline)		Troy, A	labama	1	5	3	0	4	0			PRI 1 O			AFTER 1 OCT		MF PI	-		TAL AFT 1 OCT	ER					
													INITIAL		(	)													
													REORE	ER	(	)													
REMAI	RKS																												
This P-	1 gives	the JAS	SM base	line delix	eries o	nly IA	SSM-E	R delive	eries in 1	he next	set of I	P-21																	

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 10 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
				de/CC/B ent, <b>A</b>						ivitv	- 02.	Oth	er M	lissil	es. I	tem	No.	2					mencla		• Sta	ndo	ff Mi	ssil	e
																		_			\SSI								
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	16									FI	SCAL Y	EAR 20	17					L
PROC.		PROC.	PRIOR	CE DUE		2015						CAI	ENDAR	YEAR	2016								CALENI	DAR YE	AR 2017	7			Α
YEAR	SERV.	The data of the da															J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R			
2014	2015 2015 T V C N B R R Y N L G P T V C N B R R P P R  014 USAF 103 63 40 10 10 10 10 10														0														
2015	2015 2015 T V C N B R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P R  014 USAF 103 63 40 10 10 10 10 10 10 10 10 10 10 10 10 10														0														
2016	014 USAF 103 63 40 10 10 10 10 0														41														
TO	ΓAL	283	63	220	10	10	10	10	0	5	5	5	9	10	10	10	10	10	10	10	10	5	5	5	5	5	5	5	41
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ION RA	TES								PRO	CURE	IENT LI	EAD TII	ME						
ITE	M/MANU	IFACTUF	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME			_								
Lockhee	ed Martin (J	IASSM B	aseline)		Troy, A	labama	1	5	3	30	4	.0			PR 1 C	IOR OCT		AFTER 1 OCT	l	MF Pl		10	TAL AF						
													INITIAL REORI			0													
REMAI			~~.	1: 1.1:			~~~				-						•								•				

This P-21 gives the JASSM baseline deliveries only. JASSM-ER deliveries in the next set of P-21.

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

**Production Schedule** Exhibit P-21, page 11 of 16

Exh	ibit P-2	21, Pro	oducti	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	priation	(Treasu	ıry) Coc	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	Procu	ireme	ent, A	Air F	orce	, Bud	dget	Acti	vity	- 02,	Oth	er M	issil	es, I	tem	No.	2			int A ASSI		Su	rface	Sta	ndo	ff Mi	ssil	e
			ACCEP.	BALAN					Fl	SCAL Y	EAR 20	18									FI	SCAL Y	EAR 20	19					L
PROC.		PROC.				2017						CAL	ENDAR	YEAR	2018								CALENI	DAR YE	AR 2019	)			A
PROC. YEAR	SERV.	QTY.	TO AS OF 1 OCT 2017 T V C N B R R Y N L G P T V C N 76 35 41 5 5 10 10 11 1															J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R		
2016	USAF	2017   2017   T   V   C   N   B   R   R   Y   N   L   G   P   T   V   C   N   T   T   T   T   T   T   T   T   T																								0			
TC	TAL	76	2017   2017   T   V   C   N   B   R   R   Y   N   L   G   P   T   V   C   N     76															0	0	0	0	0	0	0	0	0	0		
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DUCT	ION RA	TES								PRO	CURE	/IENT LI	EAD TII	ME						
ITE	M/MANU	IFACTUF	RER'S NA	AME	LOCA	ATION	MS	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME											
Lockhe	ed Martin (J	IASSM B	aseline)		Troy, A	labama	1	5	3	0	4	.0			PR 1 C	IOR OCT		AFTER 1 OCT	l	MF PI		10	TAL AF						
													INITIAL		(	0													
													REORE	DER	(	0													
REMA	RKS						, i							·										·		·			Ü

This P-21 gives the JASSM baseline deliveries only. JASSM-ER deliveries in the next set of P-21.

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 12 of 16

																				_									
Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	VItem C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	ature					
Mis	sile F	Procu	uremo	ent, A	Air F	orce	, Bu	dget	Acti	ivity	- 02,	Oth	ner M	lissil	es, I	tem	No.	2			int A		o-Su	rface	Sta	ndo	ff Mi	ssile	е
			ACCEP	BALAN					F	ISCAL Y	EAR 20	11									FI	SCAL Y	EAR 20	12					L
PROC.		PROC	PRIOR	CE DUE		2010						CAl	LENDAR	YEAR	2011								CALENI	DAR YE	AR 2012	2			A
YEAR	SERV.	PROC. OTY. TO AS OF 1 OCT. 2010 TO TO VOLUME TO THE PROC. OTH TO STATE															D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R		
2011	USAF	OTY.         1 OCT.         1 OCT.         C O E A E A E A P A U U U E C O E A E A P A U U U G P T V C           30         0         30         0																						5	25				
TO	TAL	2010   2010   T   V   C   N   B   R   R   Y   N   L   G   P   T   V   C     USAF   30   0   30   0   0   0   0   0   0														0	0	0	0	0	0	0	0	5	25				
		OTY. 1 OCT. 1 OCT. 2010															J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
	SERV. QTY. TO AS OF 1 OCT 2010 TO TO V C O E A E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U U E C O E A E A E A P A U U U U U U U U U U U U U U U U U																												
ITE	M/MANL	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	AX				ADMI	N LEAD	TIME											
Lockhe	ed Martin	) (JASSN	M-ER)		Troy, A	Alabama	1	15	3	30	4	10			PR 1 C			AFTER 1 OCT	2	MF Pl		TO <sup>1</sup>	TAL AF	TER					
													INITIAL																
													REORI																
REMA	RKS												•																
This P-	21 gives	only JA	SSM-ER	deliveri	es. JAS	SSM bas	seline d	leliverie	s are giv	ven in th	e previ	ous set	of P-21																

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 13 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	ature					
Mis	sile F	Procu	ırem	ent, A	Air F	orce	, Bu	dget	Act	ivity	- 02,	Oth	ner M	lissi	les, l	tem	No.	2			int A ASSI		o-Su	rface	e Sta	ndo	ff Mi	ssil	е
			ACCEP	BALAN					F	ISCAL Y	EAR 20	13									FI	SCAL Y	EAR 20	14					L
PROC.		PROC.	PRIOR	CE DUE		2012						CAI	LENDAR	R YEAR	2013								CALEN	DAR YE	EAR 2014	4			A
YEAR	SERV.	QTY.	TO 1 OCT. 2012	AS OF 1 OCT 2012	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2011	USAF	30	5	25	5	5	5	5	5																				0
2012	USAF	30     0     30       40     0     40																								0			
2013	USAF		30     0     30     5     5     5     5     5     5       40     0     40       100     5     95     5     5     5     5     5     5     5     5     5     0     0     0																5	5	5	5	5	5	5	5			
TO	ΓAL	100	30															0	0	5	5	5	5	5	5	5	5		
					O C T		E	J A N	E	I .	P	Α	U N	U L	U		O C T	0	D E C	J A N	F E B	M A R	A P R	M A Y	U N	J U L	A U G	S E P	
								PR	DDUCT	ION RA	TES								PRO	CURE	/ENT L	EAD TII	ME						
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	М	SR	EC	ON	M	ΑX				ADMII	N LEAD	TIME											
Lockhe	ed Martin	) (JASSN	Л-ER)		Troy, A	labama	1	15	3	30	4	.0				IOR OCT		AFTER 1 OCT	1	MF Pi		10	TAL AF	IER					ļ
													<b>-</b>  ∓												-				
													INITIAL REORI		<del>                                     </del>										1				
REMA	RKS																												
		only JA	SSM-ER	deliveri	es. JAS	SSM bas	seline d	eliverie	s are gi	ven in tl	ne previ	ous set	of P-21																

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 14 of 16

Exhi	bit P-2	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	le/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	Procu	ireme	ent, A	Air F	orce	, Bu	dget	Act	ivity	- 02,	Oth	er M	lissil	es, I	tem	No.	2			int A ASSI		-Su	rface	Sta	ndo	ff Mi	ssile	Đ
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	15									FI	SCAL Y	EAR 20	16					I.
PROC		PROC.	PRIOR	CE DUE		2014						CAI	LENDAR	YEAR	2015							(	CALENI	DAR YE	AR 2016	6			A
PROC. YEAR	SERV.	2014 2014 T V C N B R R Y N L G P T V C N E 40 35 5 5															F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R				
2013	Column   C														0														
2014	13 USAF 40 35 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5														0														
2015	3 USAF 40 35 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5															8		44											
TO	TAL	SAF 40 35 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5														8	8	8	8	8	44								
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PR	ODUCT	ION RA	TES			•					PRO	CURE	/ENT LI	EAD TII	ME.						
ITE	M/MANU	IFACTUF	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME											
Lockhee	ed Martin	JASSN	1-ER)		Troy, A	labama	1	5	3	30	4	.0			PR 1 C	IOR OCT		AFTER 1 OCT	1	MF PI		10	TAL AF						
													INITIAL																
REMAI	RKS												J. 12011				I			I									
		only JA	SSM-ER	deliveri	es. JAS	SSM bas	seline d	eliverie	s are gi	ven in tl	ne previ	ous set	of P-21																

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

Production Schedule Exhibit P-21, page 15 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Febi	uary	2011			
Appro	priation	(Treası	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	Procu	ırem	ent, A	Air F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	issil	es, l	tem	No.	2			int A ASSI		-Su	rface	Sta	ndo	ff Mi	ssile	<b>e</b>
			ACCEP	BALAN					F	SCAL Y	EAR 20	17									FI	SCAL Y	EAR 20	18					L
PROC.	anner	PROC.	-	CE DUE		2016						CAI	ENDAR	YEAR	2017							. (	CALENI	OAR YE	AR 2018	3			A
YEAR	SERV.	QTY.	TO 1 OCT. 2016	AS OF 1 OCT 2016	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
2015	USAF	100	56	44	8	9	9	9	9																				0
2016	USAF	250	0	250						21	21	21	21	21	21	21	21	22	20	20	20								0
TO	ΓAL	350	56	294	8	9	9	9	9	21	21	21	21	21	21	21	21	22	20	20	20	0	0	0	0	0	0	0	0
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ON RA	ΓES						•	•	PRC	CURE	IENT LI	EAD TII	ME	•			•		
ITE	M/MANU	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME											
Lockhee	ed Martin	) (JASSN	И-ER)		Troy, A	Nabama	1	5	3	0	4	0			PRI 1 O			AFTER 1 OCT		MF Pl		10	TAL AF	IER					
													INITIAL REORE																
REMAI	RKS						-																						
This D	11 airean	omler IA	COM ED	dalirrani	aa TAG	COM has	alina d	alizzania		ran in th		our cot	of D 21																

This P-21 gives only JASSM-ER deliveries. JASSM baseline deliveries are given in the previous set of P-21.

JASSM and JASSM-ER are manufactured on the same production line. The max monthly rate of 30 is for the total JASSM and JASSM-ER production, based on the current production infastructure w/o further capital investment in equipment, facility, and overtime. A capital investment in infastructure would increase production to 40 JASSM and JASSM-ER missiles per month.

P-1 Shopping List Item No. 2

**Production Schedule** Exhibit P-21, page 16 of 16

Exhibit P-40, Budget Item Justif	ication									Date: Fe	bruary 20	)11		
Appropriation (Treasury) Code/CC/BA/BS/ Missile Procurement, Air F			e Item Nome winder (		)									
rogram Element for Code B Items 0207161F Other Related Program Elements 0207161N														
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total	
Proc Qty	A	1,613	219	178	240	0	240	240	240	240	240	1,820	5,030	
Cost(\$ M)		409.600	78.527	64.523	88.769		88.769	87.785	82.729	83.212	83.626	520.300	1499.071	
Advance Proc Cost(\$ M)		0.000					0.000					0.000	0.000	
Weapon System Cost(\$ M)		409.600	78.527	64.523	88.769	0.000	88.769	87.785	82.729	83.212	83.626	520.300	1499.071	
Initial Spares(\$ M)		12.500	1.571	1.558	1.662	0.000	1.662	1.650	1.653	1.739	1.770	11.261	35.364	
Total Proc Cost(\$ M)		422.100	80.098	66.081	90.431	0.000	90.431	89.435	84.382	84.951	85.396	531.561	1534.435	
Flyaway Unit Cost(\$ M)			1.127	0.354	0.362	0.000	0.362	0.358	0.337	0.339	0.340	0.275	3.492	
Wpn Sys Unit Cost(\$ M)		0.262	0.359	0.362	0.371	0.000	0.371	0.366	0.345	0.347	0.349	0.329	3.090	

# **Description**

The AIM-9X Sidewinder short-range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile (AMRAAM). Air superiority in the short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M (fuse, rocket motor, and warhead). Anti-Tamper features have been incorporated to protect improvements inherent in this design. AIM-9X is a Post Milestone III, Acquisition Category IC (ACAT-IC) joint-service program with Navy lead. The Navy is procuring a total of 4,937 missiles of which 1,085 are Captive Air Training Missiles (CATMs). The Air Force is procuring a total of 5,097 missiles of which 1,100 are CATMs.

FY10 provided funding to procure AIM-9X Block I All Up Rounds (AUR) for fleet use, Block II test articles, and non-recurring engineering to address critical obsolescence issues/updates. FY11 provides funding to procure Block I missiles (AIM-9X-2) that includes some Block II hardware, i.e. processors, ESAD, and battery (the full Block II configuration will include the new fuze and software).

The program is pending Milestone C (MS C) approval for Block II production. Upon approval, the program will enter into Low-Rate Initial Production (LRIP) contracts for Block II AUR missiles in FY2011, FY2012 and FY2013, followed by Block II Full Rate Production (FRP) in FY2014 and beyond. In the event that a Block II program is not approved, the services will continue to procure the Block I (AIM-9X-2) equipped missile in Lot 11.

NOTE: Production units have been delivered to the Government ahead of the contract schedule. This program has associated RDT&E funding in PE 0207161F.

Totals include funding for PRCP Program Number 581, Tactical Air Intercept/AIM-9X.

# **FY 2012 Program Justification**

Lot 12 is the 8th FRP buy of AIM-9X and will occur in FY12. This continues the procurement of AUR's/CATMs for the Air Force and Navy. The FY12 procurement of 240 missiles (192 AURs and 48 CATMs) includes associated missile containers, special tooling/special test equipment (ST/STE), training equipment and technical data. The program

P-1 Shopping List Item No. 3

Budget Item Justification Exhibit P-40, page 1 of 11

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 3	P-1 Line Item Nomenclature Sidewinder (AIM-9X)
also includes funding for field activity support, government Systems Engineering/Program Management (SE/PM) are	nd production technical support.
P-1 Shopping List Item No. 3	Budget Item Justification Exhibit P-40, page 2 of 11
	Exilibit F-40, paye 2 01 11

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 3 Date: February 2011 P-1 Line Item Nomenclature Sidewinder (AIM-9X)

Weapon System Cost Elements	Ident Code					Total	Cost in Mi	llions of	Dollars				
			Prior Yea	rs		FY 2010	)		FY 201			FY 2012	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Missile Procurement Quantity	A	[1,613]			[219]			[178]			[240]		
Flyaway Cost	A												
Missile Hardware Recurring	A												
All Up Round (AUR)	A				[166]		[20.325]	[136]		[45.073]	[192]		[65.108]
Captive Air Training Missile (CATM)	A				[53]		[0.000]	[42]		[9.642]	[48]		[11.136]
Engineering Change Orders	A			[6.516]			[1.444]			[1.658]			[0.250]
Engineering & Tech Services (Non-FFRDC)	A			[18.355]			[13.593]			[3.379]			[5.857]
Govt In-House System Eng	A			[15.917]			[6.122]			[2.494]			[3.434]
Subtotal Missile Hardware		[1,613]	0.025	[40.788]	[438]	0.175	[41.484]	[356]	0.175	[62.246]	[480]	0.179	[85.785]
Nonrecurring & Ancillary Equipment	A												
Special Test/Special Tooling Equipment	A			[0.802]			[1.759]			[0.239]			[0.244]
Missile Containers	A			[4.216]	[61]		[0.666]	[50]		[0.539]	[67]		[0.736]
Non-Recurring Eng	A			[3.368]			[29.340]			[0.000]			[0.000]
Total Missile Flyaway Cost	A	1,613	0.346	409.600	219	0.353	73.248	178	0.354	63.024	240	0.362	86.765
Support Costs	A						[0.000]						
Peculiar Support Equipment	A						0.063						
Training	A						2.858						
Total Procurement Cost	A			[78.230]			[80.098]			[66.103]			[90.431]
Data	A						0.157			0.157			0.155
Production Management (Tech Support)	A						2.201			1.342			1.849
Subtotal Support		[1,613]	0.308	[496.216]	[83]	2.301	[190.390]	[228]	0.576	[131.404]	[307]	0.587	[180.180]
Total Weapons System Cost	A	[1,613]	[0.346]	[409.600]	[219]	[0.359]	[78.527]	[178]	[0.362]	[64.523]	[240]	[0.371]	[88.769]
Initial Spares	A			[12.500]			[1.571]			[1.558]			[1.659]
Other Costs	A												
SEEK EAGLE (PE:0207590F)	A												
TOTAL PROGRAM:				409.600			78.527			64.523			88.769

# Remarks

P-1 Shopping List Item No. 3

Weapon System Cost Analysis Exhibit P-5, page 3 of 11

<sup>1.</sup> Unit cost calculations assume Navy procurement quantities remain constant, as depicted in the attached P-21.

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 3	Sidewinder (AIM-9X)
Remarks Continued	
2. SEEK EAGLE funding was sourced from PE0207590F, and procured 24 missiles and associated Airborne Test Equipm 3. Test articles procured in FY08-FY10 are identified in the non-recurring engineering line above.	ent.
5. Test underes produced in 1 100 1 110 are identified in the non-recuiring engineering line decide.	
P-1 Shopping List Item No. 3	Weapon System Cost Analysis Exhibit P-5, page 4 of 11

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 3 Date: February 2011 P-1 Line Item Nomenclature Sidewinder (AIM-9X)

Weapon System Cost Elements	Ident Code					Total	Cost in M
		F	FY 2012 O	СО	C	ost to Com	plete
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Missile Procurement Quantity	A				[1820]		
Flyaway Cost	A						
Missile Hardware Recurring	A						
All Up Round (AUR)	A	[0]		[0.000]	[1601]		[433.168]
Captive Air Training Missile (CATM)	A	[0]		[0.000]	[219]		[44.891]
Engineering Change Orders	A			[0.000]			[1.875]
Engineering & Tech Services (Non-FFRDC)	A			[0.000]			[34.707]
Govt In-House System Eng	A			[0.000]			[16.407]
Subtotal Missile Hardware		[0]		[0.000]	[1746]	0.353	[531.048]
Ionrecurring & Ancillary Equipment	A						
pecial Test/Special Tooling Equipment	A			[0.000]			[0.751]
Missile Containers	A	[0]		[0.000]	[550]		[11.989]
on-Recurring Eng	A			[0.000]			[0.000]
otal Missile Flyaway Cost	A	0		0.000	1974	0.323	510.722
upport Costs	A						
eculiar Support Equipment	A						
raining	A						
Total Procurement Cost	A	[0]		[0.000]			[564.627]
Data	A			0.000			0.744
Production Management (Tech Support)	A			0.000			8.834
Subtotal Support		[0]		[0.000]	[2087]	0.509	[1097.667]
Total Weapons System Cost	A	[0]		[0.000]	[1580]	[0.329]	[520.300]
nitial Spares	A			[0.000]			[11.261]
Other Costs	A						
SEEK EAGLE (PE:0207590F)	A						
TOTAL PROGRAM:		_		0.000		_	520.300

P-1 Shopping List Item No. 3

Weapon System Cost Analysis Exhibit P-5, page 5 of 11

## Exhibit P-5A, Procurement History and Planning Date: February 2011 Appropriation (Treasury) Code/CC/BA/Bs/Item Control Number: P-1 Line Item Nomenclature: Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 3 Sidewinder (AIM-9X) Weapon System Subline Item AIM-9 Date of Specs Date Location of RFP Issue Contract Contract Available Revision First PCO Method WBS Cost Elements Qty. Unit Cost Date Type Contractor and Location Award Date Delivery. Now? Available? Lot 9 157 0.498 NAVAIR Feb-08 SS FFP Raytheon Systems Jun-09 Y (2009)Sep-10 Company: Tucson / AZ Lot 10 (2010) 219 0.359 NAVAIR Jan-09 SS FFP Raytheon Systems Jun-10 Y Sep-11 Company: Tucson / AZ Lot 11 178 0.362 NAVAIR Jan-10 SS FFP Mar-11 Y (2011)Raytheon Systems Sep-12 Company: Tucson / AZ Lot 12 (2012) 240 0.371 NAVAIR Jan-11 SS FFP Raytheon Systems Jan-12 Sep-12 Company: Tucson / AZ Remarks

from Dec to Jan each year due to contractor production planning and scheduling.

1. The award date of the Lot 11 (FY11) contract has been revised to Mar 11, pending successful MS C approval. The award dates for Lots 12-15 (FY12-FY15) have been revised

P-1 Shopping List Item No. 3

Procurement History and Planning Exhibit P-5A, page 6 of 11

## **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 3 Sidewinder (AIM-9X) FISCAL YEAR 2010 FISCAL YEAR 2011 ACCEP. BALAN PRIOR CE DUE 2009 CALENDAR YEAR 2010 CALENDAR YEAR 2011 Α PROC. PROC. SERV. TO AS OF T О N D D YEAR 1 OCT 1 OCT Ε Е U U C О Е Е U Α Е Α Α 2009 R 2009 Т V C Ν В R N G $\mathbf{C}$ В Y N USAF 149 32 94 55 USN 170 120 50 48 0 **FMS** 169 67 102 22 40 40 2009 USAF 157 0 157 8 18 8 8 43 4 16 46 0 26 17 0 USN 114 0 114 8 30 12 **FMS** 256 0 256 20 20 24 20 20 24 20 20 24 20 20 24 0 USAF 219 0 219 219 45 45 USN 0 45 83 83 FMS 0 83 USAF 178 0 178 178 155 USN 155 0 155 TOTAL 1,695 281 1,414 56 34 22 40 40 20 20 24 20 32 28 28 68 28 32 69 16 17 63 8 26 36 N М F М Μ 0 D F Α M J O N D Α J Α S Α U U C 0 Е Α Ε Α Α U U Ε C О Е Α Е Α Α U U Е T G G PRODUCTION RATES PROCUREMENT LEAD TIME ITEM/MANUFACTURER'S NAME LOCATION MSR **ECON** MAX ADMIN LEAD TIME MFG. TOTAL AFTER ΑZ 300 Raytheon Systems Company: Tucson 800 **PRIOR AFTER** PLT 1 OCT 1 OCT 1 OCT 9 13 INITIAL REORDER REMARKS

The gap from May 10 through Aug 10 will be used to procure and deliver Block I missiles to FMS customers. Due to the long-lead time of the new obsolescence replacement components, the delivery schedule has been adjusted to begin in Sep 10. Program of Record (POR) is 600 units.

P-1 Shopping List Item No. 3

Production Schedule Exhibit P-21, page 7 of 11

## **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 3 Sidewinder (AIM-9X) FISCAL YEAR 2012 FISCAL YEAR 2013 ACCEP. BALAN PRIOR CE DUE 2011 CALENDAR YEAR 2012 CALENDAR YEAR 2013 Α PROC. PROC. SERV. TO AS OF Τ О N D M D YEAR Α 1 OCT 1 OCT Ε E Е U U C О Е Е U Α Α Α Α 2011 R 2011 Т V C N В R R Y N L G $\mathbf{C}$ В Y N 25 USAF 219 4 32 25 25 25 25 29 0 219 0 16 13 2010 USN 45 0 45 0 0 16 17 4 0 0 **FMS** 19 0 12 16 20 16 0 2011 USAF 178 0 178 16 16 16 16 16 16 16 16 14 12 12 12 0 13 2011 USN 155 0 155 12 12 12 14 12 12 12 12 16 16 12 0 220 2012 USAF 240 0 240 20 2012 USN 144 0 144 12 132 2013 USAF 240 240 240 0 145 2013 USN 145 0 145 TOTAL 1,449 0 1,449 19 4 16 32 21 41 42 41 41 45 45 28 28 28 30 28 28 28 28 30 28 24 25 32 737 N O D J M Α M J J Α O N D F M Α M J Α S C O Е Α Α Α U U U Ε C О Ε Е Α Α U U U Ε T V N N G P В R N G P PROCUREMENT LEAD TIME PRODUCTION RATES ITEM/MANUFACTURER'S NAME LOCATION MSR **ECON** MAX ADMIN LEAD TIME MFG. TOTAL AFTER Raytheon Systems Company: Tucson ΑZ 300 800 PLT 1 OCT **PRIOR** AFTER 1 OCT 1 OCT 13 INITIAL 4 9 REORDER REMARKS

The gap from May 10 through Aug 10 will be used to procure and deliver Block I missiles to FMS customers. Due to the long-lead time of the new obsolescence replacement components, the delivery schedule has been adjusted to begin in Sep 10. Program of Record (POR) is 600 units.

P-1 Shopping List Item No. 3

Production Schedule Exhibit P-21, page 8 of 11

## **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 3 Sidewinder (AIM-9X) FISCAL YEAR 2014 FISCAL YEAR 2015 ACCEP. BALAN PRIOR CE DUE 2013 CALENDAR YEAR 2014 CALENDAR YEAR 2015 Α PROC. PROC. SERV. TO AS OF T О N D M D YEAR 1 OCT 1 OCT Ε E Е U U C О Е Е U Α Α Α 2013 R 2013 V C N В R R Y N L G $\mathbf{C}$ В Y N USAF 240 20 20 20 20 20 20 2012 220 20 20 20 20 20 20 2012 USN 144 12 132 12 12 12 15 12 12 12 12 12 0 USAF 240 20 20 20 20 20 20 20 20 20 20 0 12 2013 USN 145 0 145 12 12 12 16 15 12 12 12 12 12 0 220 2014 USAF 240 0 240 20 16 2014 USN 185 0 185 169 USAF 240 0 240 240 2015 USN 188 188 188 0 32 32 32 32 32 32 29 32 32 32 32 32 32 36 817 TOTAL 1.622 1,590 32 35 32 32 32 32 32 32 36 35 26 O D M O D M M Α N Е U U Α T V Ν N G PRODUCTION RATES PROCUREMENT LEAD TIME ITEM/MANUFACTURER'S NAME LOCATION MSR **ECON** MAX ADMIN LEAD TIME MFG. TOTAL AFTER ΑZ 300 Raytheon Systems Company: Tucson 800 **PRIOR AFTER** PLT 1 OCT 1 OCT 1 OCT 9 13 INITIAL REORDER REMARKS

The gap from May 10 through Aug 10 will be used to procure and deliver Block I missiles to FMS customers. Due to the long-lead time of the new obsolescence replacement components, the delivery schedule has been adjusted to begin in Sep 10. Program of Record (POR) is 600 units.

P-1 Shopping List Item No. 3

Production Schedule Exhibit P-21, page 9 of 11

## **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 3 Sidewinder (AIM-9X) FISCAL YEAR 2016 FISCAL YEAR 2017 ACCEP. BALAN PRIOR CE DUE 2015 CALENDAR YEAR 2016 CALENDAR YEAR 2017 Α PROC. PROC. SERV. TO AS OF Τ О N D M D YEAR OTY. 1 OCT 1 OCT Ε О E U U C О Е Е U Α Е Α Α 2015 R 2015 V Т C Ν В R R Y N L G $\mathbf{C}$ В N USAF 219 219 0 2014 USAF 240 20 220 20 20 20 20 20 20 20 20 20 20 20 0 USN 185 16 169 15 16 15 15 16 16 15 16 15 2015 USAF 240 0 240 20 20 20 20 20 20 20 20 20 20 20 20 0 15 19 15 15 2015 USN 188 0 188 15 19 15 15 15 15 15 15 0 220 2016 USAF 240 0 240 20 2016 USN 179 0 179 16 163 1.491 255 1.236 35 39 39 35 35 35 36 383 TOTAL 35 36 35 35 35 36 35 36 36 35 35 35 35 35 35 35 35 O Ν D M Α M Α O N D F M Α M Α $\mathbf{S}$ C O Е U U U Е C О Е Е U U U Е Е Α Α Α Α V Ν В Ν G В G P PRODUCTION RATES PROCUREMENT LEAD TIME ITEM/MANUFACTURER'S NAME LOCATION MSR **ECON** MAX ADMIN LEAD TIME MFG. TOTAL AFTER Raytheon Systems Company: Tucson ΑZ 300 800 PLT 1 OCT **PRIOR AFTER** 1 OCT 1 OCT 9 13 INITIAL REORDER REMARKS

The gap from May 10 through Aug 10 will be used to procure and deliver Block I missiles to FMS customers. Due to the long-lead time of the new obsolescence replacement components, the delivery schedule has been adjusted to begin in Sep 10. Program of Record (POR) is 600 units.

P-1 Shopping List Item No. 3

Production Schedule Exhibit P-21, page 10 of 11

Exhi	bit P-	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treası	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	rocu	ıreme	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	lissi	es, I	tem	No.	3		Sic	dewi	nde	r (Al	M-9)	<b>(</b> )				
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	18									FI	SCAL Y	EAR 20	)19					L
PROC.		PROC.		CE DUE		2017						CAI	LENDAR	YEAR	2018								CALEN	DAR YE	EAR 2019	9			Α
YEAR	SERV.	QTY.	TO 1 OCT. 2017	AS OF 1 OCT 2017	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
2010	USAF	219	219	0																									0
2016	USAF	240	20	220	20	20	20	20	20	20	20	20	20	20	20														0
2016	USN	179	16	163	16	16	16	16	16	16	16	17	17	17															0
2017	USAF	249	0	249																									249
2017	USN	185	0	185																								<u> </u>	185
TO	ΓAL	1,072	255	817	36	36	36	36	36	36	36	37	37	37	20	0	0	0	0	0	0	0	0	0	0	0	0	0	434
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	ODUCT	ION RA	TES								PRC	CURE	ΛΕΝΤ L	EAD TII	ME						
ITE	M/MANL	JFACTUF	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	-G	TO.	TAL AF	TFR					
Rayth						AFTER 1 OCT		Pl			1 OCT																		
													INITIAL REORDER		4		Ş	9		13		-							
REMA	RKS												•																

P-1 Shopping List Item No. 3

Production Schedule Exhibit P-21, page 11 of 11

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 4	P-1 Line Item Nomenclature Advanced Medium Range Air-to-Air Missile (AMRAAM)

Program Element for Code B Items	020716	63F			Other	Related Pr	ogram Ele	ments	N	Ī/A			
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	8,103	170	246	218	0	218	363	341	364	279	2,190	12,274
Cost(\$ M)		7094.300	272.714	355.358	309.561		309.561	464.837	450.844	448.775	367.163	3171.156	12934.708
Advance Proc Cost(\$ M)		0.000					0.000					0.000	0.000
Weapon System Cost(\$ M)		7094.300	272.714	355.358	309.561	0.000	309.561	464.837	450.844	448.775	367.163	3171.156	12934.708
Initial Spares(\$ M)		67.900	2.335	0.079	0.082	0.000	0.082	0.082	0.084	0.085	0.087	0.751	71.485
Total Proc Cost(\$ M)		7162.200	275.049	355.437	309.643	0.000	309.643	464.919	450.928	448.860	367.250	3171.907	13006.193
Flyaway Unit Cost(\$ M)		0.836	1.466	1.300	1.262	0.000	1.262	1.197	1.232	1.138	1.189	1.304	10.924
Wpn Sys Unit Cost(\$ M)		0.876	1.604	1.445	1.420	0.000	1.420	1.281	1.322	1.233	1.316	1.448	11.945

# **Description**

Totals include funding for PRCP Program Number 185, AMRAAM.

Advanced Medium Range Air-to-Air Missile (AMRAAM) is the premier all-weather, all environment radar guided missile developed jointly by the Air Force and Navy. The AF is the lead service. AMRAAM is small, fast, light, and has improved capabilities against very-low and high-altitude high-speed targets in an electronic attack (EA) environment as compared to previously fielded radar guided missiles. The next version, AIM-120D, completed Engineering and Manufacturing Development (EMD) Sep 09. Procurement of limited quantities to support Air Force and Navy operational test and Initial Operational Capability (IOC) requirements began in FY06. The AIM-120D provides improved performance from GPS-aided navigation, a two way data link to enhance aircrew survivability and network compatibility, and new guidance software which improves kinematic and weapon effectiveness performance. The "To Complete" column reflects missile production through 2024.

The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$1.356M in FY12. The program has been funded to latest cost estimate, less efficiencies. Acquisition affordability efficiencies in the amounts of \$6.5M/FY15 and \$95.7M/FY16 have also been applied to this program.

This program has associated Research, Development, Test and Evaluation(RDT&E) funding in 0207163F.

# **FY 2012 Program Justification**

Continue the procurement and support of AMRAAM for the AF and Navy in Lot 26. Procure 218 AIM-120D missiles for the AF and 161 for the Navy. Build additional and modify existing tooling and test equipment to increase production rates to support the production of the AIM-120D. Continue to develop second source suppliers for critical items and resolve production related issues through studies, bridge buys, life of type buys, and life time buys as necessary. FMS participants will continue to procure AIM-120C-7 missiles at the projected rate of 250 per year (FY12-FY16). Continue to procure Telemetry (TM) Instrumentation Units for Weapon System Evaluation Program (WSEP).

P-1 Shopping List Item No. 4

Budget Item Justification Exhibit P-40, page 1 of 12

Exhibit P-5, Weapon System Cost A	nalysis									Date: Fel	oruary 2	:011	
Appropriation (Treasury) Code/CC/BA/BSA/Item	Control Number							P-1 l	ine Item No	menclature			
Missile Procurement, Air Forc	e. Budaet A	Activity	02. Oth	ner Miss	iles. It	em No.	4	Ad	vanced	Medium	Rang	e Air-to	-Air
			,		,					MRAAM	_		
		1											
Weapon System Cost Elements	Ident Code					Total	Cost in Mi	llions of	Dollars				
			Prior Year	rs		FY 2010	)		FY 2011	l		FY 2012	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Quantity	A	[8,103]			[170]			[246]			[218]		
Flyaway Cost	A												
Missile Hardware-Recurring	A												
1. AIM-120 Missile AUR	A				[96]	[1.100]	[105.603]	[242]	[1.042]	[252.149]	[139]	1.278	[177.609]
2. AIM-120 Missile CATM	A				[74]	[0.651]	[48.152]	[4]	[0.756]	[3.023]	[79]	0.807	[63.771]
3. Warranty	A						[13.045]			[11.701]			[15.799]
4. DMS	A						[53.404]			[27.702]			[0.000]
5. Tooling and Test Equipment	A						[15.114]			[7.214]			[0.000]
6. Engineering Change Orders	A						[0.020]			[2.371]			[5.063]
Subtotal Missile Hardware							[235.338]			[304.160]			[262.242]
Nonrecurring and Ancillary Equipment	A												
Special Tooling and Test Equipment	A						[0.000]			[0.000]			[0.000]
2. Containers and Cables	A						[0.666]			[0.837]			[1.202]
Subtotal Ancillary Equipment							[0.666]			[0.837]			[1.202]
Production Support	A												
1. Production Test/Support	A						[11.619]			[12.028]			[10.022]
2. Program Management Adm	A						[1.033]			[1.976]			[1.527]
3. Advisory and Assistance Services	A						[0.623]			[0.741]			[0.082]
Subtotal Production Support							[13.275]			[14.745]			[11.631]
Total Missile Flyaway Cost	A	8,103	0.836	6776.400	170	1.466	249.279	246	1.300	319.742	218	1.262	275.075
Support Cost	A												
Peculiar Support Equipment							[0.000]			[0.000]			[0.000]
2. Training Equipment	A						[22.293]			[34.396]			[33.141]
3. Logistics Support	A						[1.142]			[1.220]			[1.345]
Subtotal Support Cost				317.900			23.435			35.616			34.486
Total Weapon System Cost	A	[8,103]	[0.876]	[7094.300]	[170]	[1.604]	[272.714]	[246]	[1.445]	[355.358]	[218]	[1.420]	[309.561]
Other Weapon Systems Costs	A												

P-1 Shopping List Item No. 4

Weapon System Cost Analysis Exhibit P-5, page 2 of 12

Appropriation (Treasury) Code/CC/BA/BSA/Item Control  Missile Procurement, Air Force, Bu		Activity	y 02, Otl	ner Miss	iles, l	tem No.	4	Ad			•	ge Air-to	-Air
Weapon System Cost Elements	Ident Code					Total	l Cost in Mi	illions of	Dollars				
			Prior Yea	rs		FY 2010	)		FY 201	1		FY 2012	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Initial Spares (Non-add)	A			[67.900]			[2.335]			[0.079]			[0.082]
AMRAAM Reprogramming Equip (CMBRE) BP-22 (Non-add)	A			[11.455]			[5.249]			[0.000]			[0.000]
Replenishment Spares (Non-add)	A			[61.327]			[0.801]			[0.798]			[0.804]
TOTAL PROGRAM:				7094.300			272.714			355.358			309.561

# Remarks

1) Unit cost calculations based on 250 AIM-120C-7 FMS missiles per year in FY12-FY16.

Exhibit P-5, Weapon System Cost Analysis

- 2) Unit cost calculations include Diminishing Manufacturing Sources (DMS) and Tooling and Test Equipment beginning in FY12.
- 3) AF buys warranty for All Up Round (AUR) and Captive Air Training Missiles (CATMs). USN buys warranty for CATMs only.
- 4) Training equipment funding required to buy TM units to support WSEP and modify TM components to maintain compatibility with F-22 and test range infrastructure.
- 5) Advisory and Assistance Services (A&AS) cost represents one Full-Time Contractor Employee (FTE) for FY12 and beyond.

P-1 Shopping List Item No. 4

Weapon System Cost Analysis Exhibit P-5, page 3 of 12

Date: February 2011

Exhibit P-5, Weapon System Cost Ar	nalysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item	Control Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force	e, Budget A	ctivit	y 02, Otł	ner Miss	iles, l	tem No.	4	Advanced Medium Range Air-to-Air Missile (AMRAAM)
Weapon System	Ident					Total	Cost in Mill	ions of Dollars
Cost Elements	Code							
			FY 2012 O			ost to Com	•	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Quantity	A				[2190]			
Flyaway Cost	A							
Missile Hardware-Recurring	A							
1. AIM-120 Missile AUR	A				[2190]	1.186	[2596.343]	
2. AIM-120 Missile CATM	A				[0]		[0.000]	
3. Warranty	A						[141.124]	
4. DMS	A						[0.000]	
5. Tooling and Test Equipment	A						[0.000]	
6. Engineering Change Orders	A						[40.862]	
Subtotal Missile Hardware							[2778.329]	
Nonrecurring and Ancillary Equipment	A							
1. Special Tooling and Test Equipment	A						[0.000]	
2. Containers and Cables	A						[0.396]	
Subtotal Ancillary Equipment							[0.396]	
Production Support	A							
1. Production Test/Support	A						[60.922]	
2. Program Management Adm	A						[14.678]	
3. Advisory and Assistance Services	A						[0.854]	
Subtotal Production Support							[76.454]	
Total Missile Flyaway Cost	A				2190	1.304	2855.179	
Support Cost	A							
Peculiar Support Equipment							[0.000]	
2. Training Equipment	A						[315.881]	
3. Logistics Support	A						[0.096]	
Subtotal Support Cost							315.977	
Total Weapon System Cost	A				[2190]	1.448	[3171.156]	
Other Weapon Systems Costs	A							
			P-	1 Shoppin	g List It	em No. 4		Weapon System Cost Analysis Exhibit P-5, page 4 of 12

Exhibit P-5, Weapon System Cost Analys	is							Date: February 2011						
Appropriation (Treasury) Code/CC/BA/BSA/Item Contro	l Number							P-1 Line Item Nomenclature						
Missile Procurement, Air Force, Bเ	lissile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 4													
Weapon System Ident Total Cost in Millions of Dollars Cost Elements Code														
			FY 2012 O	CO	C	Cost to Com	plete							
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost							
Initial Spares (Non-add)	A						[0.751]							
AMRAAM Reprogramming Equip (CMBRE) BP-22 (Non-add)	A						[0.000]							
Replenishment Spares (Non-add)	A						[7.455]							
TOTAL PROGRAM:				0.000			3171.156							

P-1 Shopping List Item No. 4

Weapon System Cost Analysis Exhibit P-5, page 5 of 12

Exhibit P-5A, Procu	rement His		Date: February 2011													
Appropriation (Treasury) C Missile Procuren				vity 02, Ot	ther Missi	les, Item	No. 4	A	P-1 Line Item Nomenclature:  Advanced Medium Range Air-fair Missile (AMRAAM)							
Weapon System					Subline Ite	m		<u> </u>								
AMRAAM																
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award	Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?				
Lot 24							/									
(2010)	170	1.604	AFMC/AAC	Sep-09	SS	FP	Raytheon: Tucson / AZ	Aug-10	)	Apr-12	Y					
Lot 25							/									
(2011)	246	1.445	AFMC/AAC	May-10	SS	FP	Raytheon: Tucson / AZ	Apr-11		Mar-13	Y					
Lot 26							/									
(2012)	218	1.420	AFMC/AAC	Feb-11	SS	FP	Raytheon: Tucson / AZ	Mar-12		Feb-14	Y					
Remarks		l NI	1 1 .	1	1 250 411 6	120G 7 F	I	10 EV/16			1	l				
1) Unit Cost calculation	ons for Air Fo	orce, Navy, a	na other requii	rements based	a on 250 AIM	-120C-7 FN	IS missiles per year for FY	12-FY 16								

P-1 Shopping List Item No. 4

**Procurement History and Planning** Exhibit P-5A, page 6 of 12

<sup>2)</sup> Unit cost reflects total weapon system cost. Note: See P-5 for breakout of AUR/CATM unit cost.

## **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 4 **Advanced Medium Range Air-to-Air** Missile (AMRAAM) FISCAL YEAR 2009 FISCAL YEAR 2010 ACCEP. BALAN PRIOR CE DUE 2008 CALENDAR YEAR 2009 CALENDAR YEAR 2010 PROC PROC. SERV TO AS OF D M D YEAR OTY. 1 OCT 1 OCT O Ü U Ċ C Е U Е О Е Е U U Е Α Е Α Α 2008 2008 R C V C N В R N G V N В R R Y N G 2007 USAF 59 59 2 0 6 38 2007 USAF 10 0 10 8 2 2007 USN 42 42 4 3 15 2007 FMS 472 47 425 22 11 11 31 21 36 44 32 48 63 25 0 62 19 0 0 119 2008 USAF 133 0 133 3 3 2 6 2008 USAF 10 0 10 10 41 USN 52 52 168 2008 **FMS** 351 0 351 41 40 20 11 0 21 24 26 2009 FMS 498 498 497 1,627 47 1,580 22 11 31 21 44 44 32 48 63 27 43 27 22 15 27 37 32 888 TOTAL 0 0 0 11 66 66 О D M О D M M Α C O E U U U Е C О Е U U U Ε Α Α Т Ν G В G PROCUREMENT LEAD TIME PRODUCTION RATES LOCATION ITEM/MANUFACTURER'S NAME MSR **ECON** MAX ADMIN LEAD TIME MFG. **TOTAL AFTER** Raytheon: Tucson 400 960 PLT 1 OCT **PRIOR** AFTER 1 OCT 1 OCT 6 24 30 INITIAL REORDER REMARKS

For FY12 the MSR is 100 for FMS (AIM-120C-7) plus 300 AIM-120D (Total 400). The Economic Production Rate (EPR) is 800 units.

P-1 Shopping List Item No. 4

Production Schedule Exhibit P-21, page 7 of 12

Annro		Exhibit P-21, Production Schedule													Date: February 2011														
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 4														P-1 Line Item Nomenclature  Advanced Medium Range Air-to-Air  Missile (AMRAAM)															
		ACCEP. PRIOR	BALAN		2010			Fl	SCAL Y	EAR 20		ALENDAR YEAR 2011							FISCAL YEAR 2012 CALENDAR YEAR 2012									L	
PROC. YEAR	SERV.	PROC. QTY.	TO 1 OCT. 2010	AS OF 1 OCT 2010	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	A T E R
2007	USAF	59	21	38	1	0	2	25	10																				0
2007	USN	42	27	15	1	0	6	8																					0
2008	USAF	133	14	119	3	0	0	7	22	32	32	23																	0
2008	USAF	10	0	10	2	0	0	0	2	2	2	2																	0
2008	USN	52	11	41																									41
2008	USN	52	11	41	3	0	4	7	6	6	6	9																	0
2008	FMS	351	183	168																									16
2008	FMS	351	183	168	36	0	30	30	30	30	12																		0
2009	USAF	133	0	133									14	18	18	18	16	16	16	17									0
2009	USAF	1	0	1																1									0
2009	USN	57	0	57									8	6	6	6	8	8	8	7									0
2009	FMS	498	1	497	2						49	48	48	52	48	48	51	50	49	52									0
2010	USAF	170	0	170																			23	1	22	25	1	22	76
2010	USN	71	0	71		<b>_</b>				<b>_</b>														20			20		31
2010	FMS	274	0	274	40		42		70	70	101	0.2	70	7.0	70	70	7.5		72	77			26	28	28	28	27	27	110
101	0 C					0 N O V	42 D E C	77 J A N	70 F E B	70 M A R	101 A P R	82 M A Y	70 J U N	76 J U L	72 A U G	72 S E P	75 O C T	74 N O V	73 D E C	77 J A N	0 F E B	M A R	49 A P R	49 M A Y	50 J U N	53 J U L	48 A U G	49 S E P	420
										ION RA									PRC	CURE	MENT L	EAD TII	ME						
ITEI	M/MANU	JFACTUI	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	G.	TO <sup>-</sup>	TAL AF	TER					
Raytheon: Tucson				Α	AZ		00			960				PR 1 C	IOR ICT	AFTER 1 OCT			PL	_T		1 OCT							
												INITIAL REORDER			0		6			24		30							
REMAR	RKS										I				· '														
		ICD is 10	00 for FM	IC (ATM	1200	7) mlu - 1	200 ATA	4 120D	(Total	400) T	ha Est	nomic T	)nadust:	on Det	(EDD)	ia 900 -	.mita												

P-1 Shopping List Item No. 4

Production Schedule Exhibit P-21, page 8 of 12

## **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 4 **Advanced Medium Range Air-to-Air** Missile (AMRAAM) FISCAL YEAR 2013 FISCAL YEAR 2014 ACCEP. BALAN PRIOR CE DUE 2012 CALENDAR YEAR 2013 CALENDAR YEAR 2014 PROC. PROC. SERV TO AS OF D D YEAR QTY. 1 OCT 1 OCT O Ü U Ċ Е C Ε U Е О Е Е U U Е Е Α Α R 2012 2012 V C Y C N В R N G N В N 2008 USN 52 11 41 41 168 FMS 351 183 168 2010 USAF 170 94 24 22 14 13 0 2010 USN 71 40 31 0 19 0 6 0 2010 **FMS** 274 164 110 28 28 28 24 2011 USAF 246 246 22 22 22 22 22 22 22 23 23 23 23 0 USN 101 101 10 2011 **FMS** 122 0 122 11 11 11 11 11 11 11 11 11 11 12 2012 USAF 218 218 18 18 18 18 18 74 0 18 2012 USN 13 13 13 13 13 13 13 14 56 161 0 161 2012 FMS 250 0 250 20 20 21 21 21 21 21 21 84 52 53 423 TOTAL 2,016 492 1,524 52 50 44 21 42 42 42 42 42 42 42 43 43 44 45 51 51 52 52 52 52 50 O N D M Α O N D F M U U C O Е Ε C О Е Ε U U U Е Α Α Α T G G PRODUCTION RATES PROCUREMENT LEAD TIME LOCATION ITEM/MANUFACTURER'S NAME MSR **ECON** MAX ADMIN LEAD TIME MFG. **TOTAL AFTER** Raytheon: Tucson 400 1 OCT **PRIOR** AFTER PLT 1 OCT 1 OCT 24 30 INITIAL REORDER REMARKS

For FY12 the MSR is 100 for FMS (AIM-120C-7) plus 300 AIM-120D (Total 400). The Economic Production Rate (EPR) is 800 units.

P-1 Shopping List Item No. 4

**Production Schedule** Exhibit P-21, page 9 of 12

Exhibit P-21, Production Schedule													Date: February 2011																	
Appro	priation	(Treası	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1 Line Item Nomenclature										
Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 4											Advanced Medium Range Air-to-Air Missile (AMRAAM)																			
			ACCEP.	BALAN		FISCAL YEAR 2015													-	FISCAL YEAR 2016										
PROC.		PROC.	PRIOR	CE DUE		2014		CALENDAR YEAR 2015							2015					CALENDAR YEAR 2016									A	
YEAR	SERV.	QTY.	TO 1 OCT. 2014	AS OF 1 OCT 2014	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R	
2008	USN	52	11	41																									41	
2008	FMS	351	183	168																									168	
2012	USAF	218	144	74	18	18	19	19																					0	
2012	USN	161	105	56	14	14	14	14																					0	
2012	FMS	250	166	84	21	21	21	21																					0	
2013	USAF	363	0	363					30	30	30	30	30	30	30	30	30	31	31	31									0	
2013	USN	210	0	210					17	17	17	17	17	17	18	18	18	18	18	18									0	
2013	FMS	250	0	250					20	20	21	21	21	21	21	21	21	21	21	21									0	
2014	USAF	341	0	341																	28	28	28	28	28	28	28	29	116	
2014	USN	216	0	216																	18	18	18	18	18	18	18	18	72	
2014	FMS	250	0	250																	20	20	21	21	21	21	21	21	84	
TO	ΓAL	2,662	609	2,053	53	53	54	54	67	67	68	68	68	68	69	69	69	70	70	70	66	66	67	67	67	67	67	68	481	
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
						•		PR	DDUCT	ION RA	TES	•		-					PRO	CURE	ΛΕΝΤ L	EAD TI	ИE	-	•					
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	М	AX				ADMI	N LEAD	TIME		MF	-G	TO	TAL AF	TFR						
	Raytheon: Tucson				AZ		41	400			9	60			PRIOR 1 OCT		AFTER 1 OCT			Pl			1 OCT							
													INITIAI	_			6			24			30		1					
													REOR	DER		0														
REMA	RKS																													
For FY	12 the M	ISR is 10	0 for FN	IS (AIM	-120C-	7) plus ?	300 AIN	И-120D	(Total	400) T	he Eco	nomic l	Producti	on Rate	(EPR)	is 800 ı	units													

For FY12 the MSR is 100 for FMS (AIM-120C-7) plus 300 AIM-120D (Total 400). The Economic Production Rate (EPR) is 800 units.

P-1 Shopping List Item No. 4

Production Schedule Exhibit P-21, page 10 of 12

#### **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 4 **Advanced Medium Range Air-to-Air** Missile (AMRAAM) FISCAL YEAR 2017 FISCAL YEAR 2018 ACCEP. BALAN PRIOR CE DUE 2016 CALENDAR YEAR 2017 CALENDAR YEAR 2018 PROC. PROC. SERV TO AS OF D D YEAR QTY. 1 OCT 1 OCT O Ü U Ċ Е C Ε U Е О Е Е U U Е Α Е Α Α R 2016 2016 V C Y C N В R N G N В N 2008 USN 52 41 41 11 FMS 351 183 168 168 2014 USAF 341 225 116 29 29 29 29 0 2014 USN 216 144 72 18 18 18 18 2014 **FMS** 250 166 84 21 21 21 21 2015 USAF 364 0 30 30 30 30 30 31 31 364 30 30 30 31 31 USN 244 244 20 20 20 20 20 21 21 21 2015 **FMS** 250 0 250 20 21 21 21 21 21 21 21 21 21 21 2016 USAF 279 279 24 24 23 23 23 23 92 2016 USN 232 232 19 19 19 19 19 19 19 19 80 0 2016 FMS 250 250 20 20 21 21 21 21 21 21 84 0 63 465 TOTAL 2,829 729 2,100 68 68 71 71 71 71 73 73 73 73 63 63 64 63 63 63 63 68 68 70 70 O N D M Α O N D F M U U U C O Е C О Е Ε U U U Е Α Α Α Α T G G PRODUCTION RATES PROCUREMENT LEAD TIME LOCATION ITEM/MANUFACTURER'S NAME MSR **ECON** MAX ADMIN LEAD TIME MFG. TOTAL AFTER Raytheon: Tucson 400 1 OCT **PRIOR** AFTER PLT 1 OCT 1 OCT 24 30 INITIAL REORDER REMARKS

For FY12 the MSR is 100 for FMS (AIM-120C-7) plus 300 AIM-120D (Total 400). The Economic Production Rate (EPR) is 800 units.

P-1 Shopping List Item No. 4

Production Schedule Exhibit P-21, page 11 of 12

Exh	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	ature					
Mis	sile F	rocu	ırem	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	issil	es, l	tem	No.	4							Ran	ge A	ir-to	-Air	
																				Mi	ssile	(AN	<u>/IRA</u>	AM)					
			ACCEP.	BALAN					Fl	SCAL Y	EAR 20	19									FI	SCAL Y	EAR 20	20					L
PROC.		PROC.	PRIOR	CE DUE		2018						CAL	ENDAR	YEAR	2019								CALEN.	DAR YE	AR 2020	0			A
YEAR	YEAR SERV. QTY. 10 AS OF O N D J F M A M J J A S O N D J F M A S O N D J F M A S I O N D J F M A S I O N D J F M A S I O N D D J F M A S I O N D D D D D D D D D D D D D D D D D D																												
2008	2008 USN 52 11 41 41 41 41 41 41 41 41 41															41													
2008	2008 FMS 351 183 168 168																												
2016	2016 USAF 279 187 92 23 23 23 23 23 0 0 0																												
2016	USN	232	152	80	20	20	20	20																					0
2016	FMS	250	166	84	21	21	21	21																					0
TO	ΓAL	1,164	699	465	64	64	64	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
					O C T	N O V	D E	J A N	F E B	M A R	A P R	M A V	J U N	J U I	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A V	U N	J U I	A U G	S E P	
					1			11	ODUCT	ON RA	TES	1	11	L	G				PRC	CUREN		EAD TII	10	1	11	L	0	-	1
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR		ON		ΑX				ADMI	N LEAD	TIME		MF			TAL AF	TFR					
	Ray	theon: Tu	ucson		Α	Z	41	00			96	60	]		PRI 1 C			AFTER 1 OCT		PL		. 0	1 OCT						
													INITIAL					6		2	4		30		1				
													REORE	DER	(	)													
REMA	RKS																												

For FY12 the MSR is 100 for FMS (AIM-120C-7) plus 300 AIM-120D (Total 400). The Economic Production Rate (EPR) is 800 units.

P-1 Shopping List Item No. 4

Production Schedule Exhibit P-21, page 12 of 12

Exhibit P-40, Budget Item Justifi	cation									Date: Fe	bruary 20	)11	
Appropriation (Treasury) Code/CC/BA/BSA  Missile Procurement, Air Fe			vity 02,	Other N	/lissiles	, Item N	o. 5		tem Nome ator Hel		ssile		
Program Element for Code B Items	020110	)9F			Other	Related Pr	ogram Ele	nents	0.	305219F			
		Prior	FY	FY	FY	FY 2012	FY 2012	FY	FY	FY	FY	To	
	ID Code	Years	2010	2011	2012	OCO	Total	2013	2014	2015	2016	Comp	Total
Proc Qty	A	4,136	1,175	891	416	146	562	456	452	449	449	TBD	TBD
Total Proc Cost(\$ M)		353.884	86.621	86.191	46.830	16.120	62.950	47.548	48.548	49.250	50.142	TBD	TBD

#### **Description**

FY2011 funding totals include \$41.621M requested for Overseas Contingency Operations.

Hellfire is an air-to-ground missile system that provides precision-kill capability and has become a key weapon in Overseas Contingency Operations. Laser Hellfire uses semi-active laser terminal guidance. The latest variant provides for point target precision strike and is effective against countermeasures. The Hellfire missiles are used by the MQ-1 Predator and MQ-9 Reaper aircraft. Hellfire missiles are procured through the Army's Redstone Arsenal. Unit cost may vary depending on lead Service, other Services and/or FMS procurement quantities. Prior to FY08, Hellfire missiles were procured under the Predator PE 0305219F.

Associated Research Development Test and Evaluation funding from prior years is in PE 0305219F.

#### **FY 2012 Program Justification**

Missile procurement funding for 416 AGM-114 Hellfire missiles, flight training missiles, telemetry measurement (TM) kits, load training missiles and production implementation for the Height of Burst capability for the new R-model variant, which incorporates a multi-purpose warhead and variable delay fuze. Multiple variants (K, M, N, P, R etc.) of the Hellfire missile may be procured based upon operational requirements for various warheads and the enhanced weapon engagement zone. Quantities are based on current estimated price for purchase through the Army. The Hellfire missiles are used for test, training and operations.

In 2012, OCO funds will procure an additional 146 Hellfire missiles, flight training missiles, telemetry measurement (TM) kits, load training missiles and production implementation for the Height of Burst capability for the new R-model variant. Overseas Contingency Operations funding is required to increase low Hellfire inventory levels resulting from the high expenditure rates of Hellfire weapons in current operations. The Hellfire weapon has been used extensively to provide close air support and engage time-sensitive targets such as improvised explosive device implacers, vehicles and personnel both in the open and in structures. Additional funding is required to support increased MQ-1 Predator and MQ-9 Reaper patrol missions which have created an even greater demand for Hellfire weapons against defined and targets of opportunity. Continued procurement of Hellfire weapons will enable the U.S. Air Force to meet their contingency requirements and ensure that Warfighter requirements are met.

P-1 Shopping List Item No. 5

Budget Item Justification Exhibit P-40, page 1 of 7

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 5 Date: February 2011 P-1 Line Item Nomenclature Predator Hellfire Missile

Weapon System Cost Elements	Ident Code					Total	Cost in M	illions of	Dollars				
			Prior Year	rs		FY 2010	)		FY 2011	1		FY 2012	,
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
AGM-114 - All-up-Rounds	A	4,136	0.074	307.879	1175	0.064	75.361	891	0.084	74.987	416	0.100	41.717
Program Management Administration	A			21.233			5.197			5.171			2.321
Production Engineering Support	A			24.772			6.063			6.033			2.792
AGM-114 Total		[4,136]		[353.884]	[1175]		[86.621]	[891]		[86.191]	[416]	·	[46.830]
TOTAL PROGRAM:				353.884			86.621			86.191			46.830

#### Remarks

Hellfire missiles will be procured through the Army. Unit cost may vary depending on lead Service and/or FMS procurement quantities. Prior to FY08, Hellfire missiles were procured under the Predator PE 0305219F. FY12 production unit cost and quantities are based on all Services Base and OCO budget requirements at the time of this submittal. The total costs from FY12-15 and FY16 include \$1.0M and \$1.050M, respectively, for telemetry kits which are not added to the unit cost. The FY12 OCO Supplemental Request of \$16.120M would procure 146 Hellfire missiles. The P-1 Exhibit FY12 OCO quantity incorrectly states 154.

(1) Costs for Telemetry Kits are included each year from FY12-15.

P-1 Shopping List Item No. 5

Weapon System Cost Analysis Exhibit P-5, page 2 of 7

Exhibit P-5, Weapon System Cost A	nalysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item	Control Number							P-1 Line Item Nomenclature
Missile Procurement, Air Forc	e, Budget A	ctivity	/ 02, Oth	ner Miss	iles, l	tem No.	5	Predator Hellfire Missile
Weapon System Cost Elements	Ident Code					Total	Cost in Mill	lions of Dollars
		F	FY 2012 O	CO	C	ost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
AGM-114 - All-up-Rounds	A	146	0.098	14.347	TBD	TBD	TBD	
Program Management Administration	A			0.806	TBD		TBD	
Production Engineering Support	A			0.967	TBD		TBD	
AGM-114 Total		[146]		[16.120]	TBD		TBD	
TOTAL PROGRAM:				16.120			TBD	

P-1 Shopping List Item No. 5

Weapon System Cost Analysis Exhibit P-5, page 3 of 7

Exhibit P-5A, Procu	rement His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) C				/ity 02, O1	ther Missil	les, Item	No. 5		e Item Nomeno ator Hellf	clature: ire Missil	e
Weapon System PRDTA2					Subline Iter	m		•			
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
AGM-114 Total							/				
(2010)	1,175	0.074	AFMC/OO- ALC		MIPR		Lockheed Martin / Troy, AL	Mar-10	Apr-12	Y	
(2011)	891	0.097	AFMC/OO- ALC		MIPR		Lockheed Martin / Troy, AL	Mar-11	Apr-13	Y	
(2012)	416	0.113	AFMC/OO- ALC		MIPR		Lockheed Martin / Troy, AL	Mar-12	Apr-14	Y	
(2012 OCO)	146	0.110	AFMC/OO- ALC		MIPR		Lockheed Martin / Troy, AL	Mar-12	Apr-14	Y	
Remarks				1		-	1	1		1	

Hellfire missiles are procured through the Army. Prior to FY08, Hellfire missiles were procured under the Predator PE 0305219F. FY12 production unit cost and quantities are based on all Services Base and OCO budget requirements at the time of this submittal; Unit costs also include Program Management Administration, Production Engineering Support and telemetry kits. The FY12 award date is based on approval and receipt of FY12 Base and OCO funds at the same time. The FY12 OCO Supplemental Request of \$16.120M would procure 146 Hellfire missiles.

P-1 Shopping List Item No. 5

**Procurement History and Planning** Exhibit P-5A, page 4 of 7

Fyhi	hit P-	21 Pr	oducti	ion Sc	hedi	ااد																	Date	· Feb	ruary	2011			
				le/CC/B			`antrol	Numbe	r											D 1	Lina It	om No	mencla		ruur y	2011			
												<b>~</b> 11						_											
MIS	sile F	rocu	ireme	ent, A	ur F	<u>orce</u>	<u>, Bu</u>	aget	Act	vity	- 02,	Oth	er M	ISSI	es, i	tem	NO.	<u>5</u>		Pr	edat	<u>or H</u>	elitii	re M	ssile	<u> </u>			
			ACCEP.	BALAN					Fl	SCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.		PROC.	PRIOR	CE DUE		2009						CAL	ENDAR	YEAR	2010							(	CALENI	DAR YE	AR 201				Α
YEAR	SERV.	QTY.	TO	AS OF	О	N	D	J	F	M	A	M	J	J	A	S	О	N	D	J	F	M	A	M	J	J	A	S	T
			1 OCT. 2009	1 OCT 2009	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	Е <b>Р</b>	C T	O V	E C	A N	E B	A R	P R	A	U N	U L	U G	Е <b>Р</b>	E R
FY2008 GWOT	USAF	770	0	770					_										466	304									0
2009	USAF	1,263	0	1,263																			10	175	200	191	156	55	476
2010	USAF	1,175		1,175																									1,175
2011	USAF	891		891																									891
2012	USAF	416	0	416																									416
2012 OCO	USAF	146		146																									146
TO	ΓAL	4,661	0	4,661	0	0	0	0	0	0	0	0	0	0	0	0	0	0	466	304	0	0	10	175	200	191	156	55	3,104
					O	N	D	J	F	M	Α	M	J	J	Α	S	О	N	D	J	F	M	A	M	J	J	A	S	
					С	O V	E	A N	E	A R	P	A V	U N	U	U G	E	C	O V	E	A	E B	A	P R	A	U N	U	U G	Е	
					1	_ ·		11	ODUCT		TES	1	11	L	G	1	1	· ·	PRC	CUREN		EAD TI	- 10	1	11	L	U	1	Ь
ITE	M/MANU	IFACTUF	RER'S NA	AME	LOCA	ATION	M	SR	EC		M	ΑX				ADMII	N LEAD	TIME	TIC	MF			TAL AF	TED					
	Loc	kheed M	artin		Trov	y, AL	12	200	40	80	72	00			PRI	OR		AFTER		PL		10	1 OCT	IER					
													1		1 C			1 OCT											
													INITIAL	_				6		2	6		32						
													REORI	DER															
REMA	RKS																												

Hellfire missiles will be purchased through the Army. Location and production details are contingent on lead Service contract.

P-1 Shopping List Item No. 5

Production Schedule Exhibit P-21, page 5 of 7

Exhi	bit P-2	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treası	ury) Coc	le/CC/B	A/BSA	/Item C	Control I	Numbe	r									·		P-1	Line Ite	em Nor	nencla	ture					
Mis	sile P	rocu	ıreme	ent, A	ir F	orce	, Buc	<b>dget</b>	Acti	vity	- 02,	Oth	er M	issil	es, l	tem	No.	5		Pr	edat	or H	<u>ellfir</u>	e Mi	issile	<u> </u>			
			ACCEP.	BALAN					FI	ISCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC.	CEDIA	PROC.		CE DUE		2011		<b></b>				CAL	ENDAR	YEAR ?	2012								CALENI	OAR YE	AR 2013	3			A
PROC. YEAR	SERV.	QTY.	TO 1 OCT.	AS OF 1 OCT	O C	N	D E	J	F	M	A	M	J	J U	A U	S E	0	N	D	J	F E	M	A	M	J U	J	A U	S	T
			2011	2011	T	O V	C	A N	B B	A R	R	A Y	N N	L	G	P P	T	O V	C	A N	B B	A R	R	A Y	N	L	G	E P	R
2009	USAF	1,263	787	476	37	110	70	70	80	109																			0
2010	USAF	1,175		1,175							69	119	129	114	114	149	81	80	80	80	80	80							0
2011	2011 USAF 891 891 74 74 74 74 74 74 74 74 74 74 74 74 74																												
2012	2012 USAF 416 0 416 416 416																												
2012 OCO	2012 OCO USAF 146 146 146 146 146 146																												
TO	AL	3,891	787	3,104	37	110	70	70	80	109	69	119	129	114	114	149	81	80	80	80	80	80	74	74	74	74	74	74	1,009
					О	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	
l					С	O V	E	A N	E	A	P	A V	U	U	U	E	C	O V	E	A N	E	A	P	A	U	U	U	E	
<u> </u>					1			PR	DUCT	ION RAT	IX.	1	IN	L		Г	1	V	PRC	CURE	/FNT I	EAD TIN	K ΛΕ	1	IN	L	<u> </u>	Г	
ITE	и/MANU	JFACTUR	RER'S NA	AME	LOCA	ATION	MS			ON		AX							1110	100.12.	/ILIV. L.								
			-					//\		U			ĺ			ADMIN	N LEAD	TIME		MF	:G.	TO	TAL AF1	TER	1				I
	Lock	kheed M	artin		Troy	y, AL	12	00	40	080	72	.00			PRI 1 O			AFTER 1 OCT	1	PI	-	-	1 OCT						
													INITIAL					6		2	6		32		1				I
													REORE	ER											1				
REMAR	≀KS																												

Hellfire missiles will be purchased through the Army. Location and production details are contingent on lead Service contract.

P-1 Shopping List Item No. 5

**Production Schedule** Exhibit P-21, page 6 of 7

Exhi	ibit P-	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	le/CC/B	A/BSA	/Item C	Control	Numbe	r											P-1	Line It	em No	mencla	ature					
Mis	sile F	Procu	ıreme	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	lissi	es, I	tem	No.	5		Pr	edat	or H	lellfi	re Mi	issil	Э			
			ACCEP.	BALAN					F	SCAL Y	EAR 20	14									FI	SCAL Y	YEAR 20	15					L
PROC.		PROC.		CE DUE		2013						CAI	LENDAR	YEAR	2014								CALEN	DAR YE	AR 201:	5			Α
YEAR	SERV.	QTY.	TO 1 OCT. 2013	AS OF 1 OCT 2013	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
2011	USAF	891	444	447	74	74	74	75	75	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2012	USAF	416	0	416	0	0	0	0	0	0	34	34	34	34	35	35	35	35	35	35	35	35	0	0	0	0	0	0	0
2012 OCO	USAF	146		146							12	12	12	12	12	12	12	12	12	12	13	13							0
TO	TAL	1,453	444	1,009	74	74	74	75	75	75	46	46	46	46	47	47	47	47	47	47	48	48	0	0	0	0	0	0	0
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	ODUCT	ION RA	TES								PRO	CURE	ΛΕΝΤ L	EAD TII	ME						
ITE	M/MANL	JFACTU	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	AX				ADMI	N LEAD	TIME		MF	•G.	то	TAL AF	TER					
	Loc	kheed M	lartin		Troy	, AL	12	00	40	80	72	200			PR 1 C			AFTER 1 OCT	-	PI	_T		1 OCT						
													INITIAL REORI					6		2	6		32		1				
REMAI	RKS												REORI										32						_

Hellfire missiles will be purchased through the Army. Location and production details are contingent on lead Service contract.

P-1 Shopping List Item No. 5

Production Schedule Exhibit P-21, page 7 of 7

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justifi	cation									Date: Fe	ebruary 20	011	
Appropriation (Treasury) Code/CC/BA/BSA  Missile Procurement, Air F			vity 02,	Other N	/lissiles	, Item N	o. 6		Item Nome	enclature eter Bon	nb		
Program Element for Code B Items	·				Other	Related Pr	ogram Eleı	nents					
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	7,021	2,694	2,985	0	100	100	144	250	390	460	10,756	24,800
Cost(\$ M)		424.273	141.694	134.884	7.523	12.300	19.823	50.940	88.006	130.602	136.320	2179.932	3306.474
Advance Proc Cost(\$ M)		0.000					0.000					0.000	0.000
Weapon System Cost(\$ M)		424.273	141.694	134.884	7.523	12.300	19.823	50.940	88.006	130.602	136.320	2179.932	3306.474
Initial Spares(\$ M)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Proc Cost(\$ M)		424.273	141.694	134.884	7.523	12.300	19.823	50.940	88.006	130.602	136.320	2179.932	3306.474
Flyaway Unit Cost(\$ M)		0.060	0.053	0.045		0.123	0.123	0.295	0.300	0.274	0.256	0.183	1.589
Wpn Sys Unit Cost(\$ M)		0.060	0.053	0.045		0.123	0.123	0.354	0.352	0.335	0.296	0.203	1.821

#### **Description**

FY2010 funding totals include \$7.3M appropriated for Overseas Contingency Operations (OCO).

- 1. Small Diameter Bomb Increment I (SDB I) is an Air Force ACAT II program providing increased kills per sortie on current and future aircraft platforms. SDB I addresses the following specific warfighter requirements: multiple kills per pass; multiple ordnance carriage; adverse weather, precision munitions capability; capability against fixed targets; reduced munitions footprint; increased weapons effectiveness; minimized potential for collateral damage; reduced susceptibility of munitions to countermeasures; and standoff or Close Air Support (CAS) operational capability. Threshold aircraft is the F-15E. Objective aircraft include the F-22, F-16, F-35A, B-1, A-10, B-52, and MQ-9. SDB I completed IOT&E in Jun 06 and commenced Full Rate Production (FRP) in Dec 06 with the last planned buy of SDB I weapons in FY11.
- 1a. Procurement quantities are estimates only and fall within a range of quantities based on price commitment curves on contract. SDB I total procurement costs include 12,600 weapons which include a combination of both SDB I and Focused Lethality Munition (FLM) weapons, 2,000 common four-place carriages, and associated production spares. The carriage cost is broken out separately on the P-5 exhibit. Procurement quantities also include two types of containers for the system (carriage and weapon) and Common Munitions BIT Reprogramming Equipment (CMBRE) units.
- 2. Small Diameter Bomb (SDB) FLM is an ACAT III program that successfully completed a Milestone C decision in Dec 09. SDB I FLM increases the near field blast while decreasing collateral damage, thus giving increased options to the warfighter extending access to targets restricted by collateral damage limitations. FLM has a carbon fiber warhead case which disintegrates upon fill detonation, minimizing fragmentation effects to personnel and property. The procurement mix of SDB I and FLM weapons may vary based on warfighter operational requirements. The FY12 OCO Request will allow for the procurement of 100+ FLM weapons.
- 3. Small Diameter Bomb Increment II (SDB II) is a joint program, with the Air Force (AF) as the lead, which provides the warfighter a capability to attack mobile targets from stand-off, in weather. SDB II addresses the following warfighter requirements: attack mobile targets, adverse weather operations, multiple kills per pass, multiple ordnance

P-1 Shopping List Item No. 6

Budget Item Justification Exhibit P-40, page 1 of 12

<sup>\*</sup>Totals include funding from PRCP Program Number 354, SDB I.

<sup>\*</sup>Totals include funding from PRCP Program Number 439, SDB II.

Exhibit P-40, Budget Item Justification	Date: February 2011
FF - F	P-1 Line Item Nomenclature Small Diameter Bomb

#### **Description Continued**

carriage, precision munitions capability, capability against fixed targets, reduced munitions footprint, increased weapons effectiveness, minimized potential for collateral damage, reduced susceptibility of munitions to countermeasures and provides a net-centric ops capability. The threshold aircraft for the AF is the F-15E, and the threshold aircrafts for the Navy are the F-35B and F-35C. SDB II will be compatible with the BRU-61/A miniature munitions carriage and the SDB I container systems.

3a. SDB II completed a 42-month competitive Risk Reduction phase in October 2009. Milestone B approval to enter the Engineering and Manufacturing Development (EMD) phase was received on 29 July 2010 and the subsequent Acquisition Program Baseline was signed on 08 October 2010. An EMD contract was awarded on 09 August 2010. Low Rate Initial Production will begin in FY 2013. Required Assets Available (RAA) on the F-15E is planned to be completed by January 2017. The Navy Initial Operating Capability (IOC) on the F-35B and F-35C is planned to be completed by June 2019. While the complete hardware and software for normal attack, Coordinate Attack (CA), and Semi-Active Laser (SAL) attack will be developed and in place, the normal attack capability will be verified and released first to accelerate capability to the warfighter. Full capability will be delivered in FY 2017 after verification of CA and SAL capability. Objective aircraft include the F-22, F-16, F-35A, B-2, A-10, MQ-9, B-1, B-52, and the F/A-18 E/F. SDB II will continue development to pursue network centric interoperability. SDB II is a key component of the Air Force's Global Strike Task Force CONOPs.

3b. The total SDB II procurement will be 17,000 weapons, 12,000 for the AF and 5,000 for the Navy. SDB II total procurement costs in this document include the 12,000 AF weapons, associated production spares and weapon containers.

The program funding includes reductions for overhead efficiencies that are not intended to impact program content. The efficiencies reductions total \$52,000 in FY12.

#### **FY 2012 Program Justification**

FY12 is the last year of SDB I production funding. FY12 funds will provide support in handling activities required to process delivery of weapons and carriages and the continuation of integration efforts with other program offices.

The FY12 OCO Request will procure 100+ SDB I FLM weapons needed to increase its low inventory levels. SDB I FLM provides the warfighter increased options in current operations by its extension of access to targets restricted by collateral damage limitations.

P-1 Shopping List Item No. 6

Budget Item Justification Exhibit P-40, page 2 of 12

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 6 Date: February 2011 P-1 Line Item Nomenclature Small Diameter Bomb

Weapon System Cost Elements	Ident Code					Total	Cost in Mi	illions of	Dollars				
			Prior Yea	rs		FY 2010	)		FY 201	1		FY 2012	!
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
All Up Round Weapon, Increment I unit cost only	A				[2594]	[0.024]	[61.055]	[2885]	[0.023]	[62.295]			
All Up Round Weapon, Increment II unit cost only	В												
All Up Round Carriage, Increment I unit cost only	A				[454]	[0.099]	[44.975]	[379]	[0.098]	[37.017]			
All Up Round Weapon, FLM unit cost only	A				[100]	[0.073]	[7.300]	[100]	0.064	[6.400]			
Production SDB I	A			374.593			134.633			127.354			
Dual Power/F-35	A			0.000									5.000
Production SDB II	В			0.000			0.000			0.000			0.000
ECO SDB I	A			1.414			0.915			0.309			0.048
ECO SDB II	В												
Incentive Fee SDB I	A			15.000									
Test - Gov't SDB I	A			6.006			2.003			0.843			0.921
Test - Gov't SDB II	В												
Operational Flight Program (OFP) SDB I	A			8.681			0.769			4.052			
Operational Flight Program (OFP) SDB II	В												
CMBRE SDB I	A			2.124									
Mission Support SDB I	Α			1.564			0.443			0.474			0.436
Mission Support SDB II	В												
Advisory and Assistance Services (A&AS) SDB I	A			12.281			2.039			1.075			0.444
Advisory and Assistance Services (A&AS) SDB II	В												
PMA SDB I	A			2.610			0.892			0.777			0.674
PMA SDB II	В												
Total Flyaway Cost Increment I	A				[2440]	[0.058]	[141.694]	[2985]	[0.045]	[134.884]			
Total Flyaway Cost Increment II	A												
TOTAL PROGRAM:				424.273			141.694			134.884			7.523

#### Remarks

\*SDB I & FLM are in production from FY05 to FY11; FY12 OCO approval will extend production for SDB I FLM into FY12. Production costs/estimates prior to FY12 include weapons and carriages. FY12 OCO is for SDB I FLM weapons only.

P-1 Shopping List Item No. 6

Weapon System Cost Analysis Exhibit P-5, page 3 of 12

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 02, Other Missiles, Item No. 6	Small Diameter Bomb
Remarks Continued	
*SDB II production starts in FY13. Production cost/estimates include weapons.	
P-1 Shopping List Item No. 6	Weapon System Cost Analysis
1 -1 Gropping List Rem No. 0	Exhibit P-5, page 4 of 12

Exhibit P-5, Weapon System Cost Analys	sis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Contr	ol Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force, B	udaet A	ctivity	, 02. Oth	ner Miss	iles. I	tem No.	6	Small Diameter Bomb
Weapon System	Ident					Total	Cost in Mill	ions of Dollars
Cost Elements	Code							
		F	Y 2012 O	CO	C	ost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
All Up Round Weapon, Increment I unit cost only	A							
All Up Round Weapon, Increment II unit cost only	В				[12000]	[0.158]	[1901.648]	
All Up Round Carriage, Increment I unit cost only	A							
All Up Round Weapon, FLM unit cost only	A	[100]	0.123	[12.300]				
Production SDB I	A			12.300				
Dual Power/F-35	A						17.000	
Production SDB II	В			0.000			2404.667	
ECO SDB I	A							
ECO SDB II	В						42.673	
ncentive Fee SDB I	A							
Гest - Gov't SDB I	A							
Гest - Gov't SDB II	В						67.761	
Operational Flight Program (OFP) SDB I	A							
Operational Flight Program (OFP) SDB II	В						34.122	
CMBRE SDB I	A							
Mission Support SDB I	A							
Mission Support SDB II	В						0.952	
Advisory and Assistance Services (A&AS) SDB I	A							
Advisory and Assistance Services (A&AS) SDB II	В						1.707	
PMA SDB I	A			0.000				
PMA SDB II	В						16.917	
Гotal Flyaway Cost Increment I	A	[100]	[0.123]	[12.300]				
Total Flyaway Cost Increment II	A				[12000]	[0.193]	[2310.451]	
TOTAL PROGRAM:				12.300			2585.800	

P-1 Shopping List Item No. 6

Weapon System Cost Analysis Exhibit P-5, page 5 of 12

Exhibit P-5A, Procui	rement His	tory and PI	anning						Date: F	ebruary 201	11
ppropriation (Treasury) C									Item Nomeno		
Missile Procuren	nent, Air	Force, Bu	idget Activ	vity 02, O	ther Missi	les, Item	No. 6	Smal	I Diamete	er Bomb	
<u>Veapon System</u>					Subline Ite	m		-			
DB											
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available
Increment I							1				
(2010)	2,594	0.052	Eglin AFB	Jun-03	SS	FFP	Boeing / St Charles MO	Dec-09	Jan-11	Y	Jan-01
(2010 OCO)	100	0.073	Eglin AFB	Jun-03	SS	FFP	Boeing / St Charles MO	Mar-10	May-11	Y	Jan-01
Increment I							/				
(2011)	2,885	0.048	Eglin AFB	Jun-03	SS	FFP	Boeing / St Charles MO	Nov-10	Jan-12	Y	
(2011)	100	0.064	Eglin AFB	Jun-03	SS	FFP	Boeing / St Charles MO	Jan-11	Apr-12	Y	Jan-01
Increment I							/				
(2012 OCO Request)	100	0.123	Eglin AFB	Jun-03	SS	FFP	Boeing / St Charles MO	Dec-11	Feb-13	N	Dec-11
Increment II							/				
(2013)	144	0.248	Eglin AFB	Oct-09	OPT		Raytheon / Tucson AZ	Jan-13	Jul-14	Y	
Increment II							/				
(2014)	250	0.252	Eglin AFB	Oct-09	OPT		Raytheon / Tucson AZ	Jan-14	Jul-15	Y	
Increment II							/				
					P-1 Shoppin	a. 1 :at !!-	No. C			History and	<u> </u>

Exhibit P-5A, page 6 of 12

Exhibit P-5A, Procu	rement His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) C				vity 02, Ot	ther Missi	les, Item	No. 6		Item Nomeno		
Weapon System	•	•			Subline Ite	em					
SDB											
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
(2015)	390	0.228	Eglin AFB	Oct-09	OPT		Raytheon / Tucson AZ	Jan-15	Jul-16	Y	
Increment II							/				
(2016)	460	0.212	Eglin AFB	Oct-09	OPT		Raytheon / Tucson AZ	Jan-16	Jul-17	Y	
price prior to the perior	od of perform	ance based o	n certified cos	t or pricing d	ata proposals.						

#### **Exhibit P-21, Production Schedule** Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity - 02, Other Missiles, Item No. 6 **Small Diameter Bomb** FISCAL YEAR 2011 ACCEP. BALAN PRIOR CE DUE 2009 CALENDAR YEAR 2010 CALENDAR YEAR 2011 Α PROC. PROC. SERV. TO AS OF T 0 N D D YEAR 1 OCT 1 OCT Ε O Е U U C О Е Е U U Е Α Е Α Α 2009 2009 R V Y C В R N G $\mathbf{C}$ В N 2007 USAF 687 557 130 28 **GWOT** USAF 1,404 1,261 143 102 41 0 USAF 2.612 2,612 262 248 192 136 264 272 256 256 200 194 266 2010 USAF 2,594 2,594 195 195 195 195 195 195 195 195 195 839 2010 USAF 100 100 100 OCO 2011 USAF 2,885 2,885 2,885 USAF 100 100 100 2012 USAF 100 100 100 OCO Request 10,482 TOTAL 1,818 8,664 204 69 0 66 194 262 248 266 192 136 264 272 256 256 200 195 195 195 195 195 195 195 195 195 4,024 D M D M Α A U N S E U C Α U U U T N Y N G PRODUCTION RATES PROCUREMENT LEAD TIME ITEM/MANUFACTURER'S NAME LOCATION MSR **ECON** MAX ADMIN LEAD TIME MFG. TOTAL AFTER Boeing St Charles MO 1395 40 4661 PLT 1 OCT **PRIOR** AFTER 1 OCT 1 OCT 13 17 INITIAL REORDER REMARKS Carriage deliveries are on the same schedule as weapons. A total of 2,000 carriages will be procured between FY05-FY11 - FY05 - 27, FY06 - 128, FY07 -300, FY08 - 335, FY09 - 377, FY10 - 454 and FY11 - 379. Most

Carriage deliveries are on the same schedule as weapons. A total of 2,000 carriages will be procured between FY05-FY11 - FY05 - 27, FY06 - 128, FY07 -300, FY08 - 335, FY09 - 377, FY10 - 454 and FY11 - 379. Most carriages will be delivered in containers with weapons. The remaining weapons will be delivered in their individual containers.

P-1 Shopping List Item No. 6

Production Schedule Exhibit P-21, page 8 of 12

Exhi	bit P-2	21, Pr	oduct	ion Sc	chedu	ıle																	Date	: Febi	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/E	BA/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em Nor	mencla	ture					
Mis	sile F	rocu	ırem	ent, A	۱r F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	issil	es, I	tem	No.	6		Sn	nall l	Diam	eter	· Bor	mb				
				BALAN					Fl	SCAL Y	EAR 20										FI		EAR 20						L
PROC.		PROC.		CE DUE		2011						CAI	ENDAR	YEAR	2012							(	CALENI	DAR YE	AR 2013	-			A
YEAR	SERV.	QTY.	TO 1 OCT. 2011	AS OF 1 OCT 2011	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
2010	USAF	2,594	1,755	839	279	279	281																						0
2010 OCO	USAF	100	0	100			100																						0
2011	USAF	2,885	0	2,885				240	240	240	240	240	240	240	241	241	241	241	241										0
2011	USAF	100		100															100										0
2012 OCO Request	USAF	100		100																	100								0
TO	ΓAL	5,779	1,755	4,024	279	279	381	240	240	240	240	240	240	240	241	241	241	241	341	0	100	0	0	0	0	0	0	0	0
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ION RA	TES								PRC	CURE	ΛΕΝΤ L	EAD TI	ИE						
ITE	M/MANU	IFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	MA	ΑX				ADMI	N LEAD	TIME		MF	G.	TO	ΓAL AF	ΓER					
		Boeing			St Cha	rles MO	13	95	4	.0	46	61			PR 1 C	IOR ICT		AFTER 1 OCT		Pl	_T		1 OCT						
													INITIAL REORI		(	3		4		1	3		17						
REMAI	RKS								l								ı								l				

P-1 Shopping List Item No. 6

Production Schedule Exhibit P-21, page 9 of 12

Exhi	bit P-	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	Procu	ıreme	ent, A	ir F	orce	, Bu	dget	Act	vity	- 02,	Oth	ner M	issi	es, I	tem	No.	6		Sn	nall	Dian	nete	r Bo	mb				
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	13									FI	SCAL Y	EAR 20	)14					L
PROC.		PROC.	PRIOR	CE DUE		2012						CAI	LENDAR	YEAR	2013								CALEN.	DAR YI	AR 2014	1			A
YEAR	SERV.	QTY.	TO 1 OCT. 2012	AS OF 1 OCT 2012	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2013	USAF	144	0	144																						12	12	12	108
2013         USAF         144         0         144         0         144																													
2015	USAF	390	0	390																									390
2016	USAF	460	0	460																									460
TO	ΓAL	1,244	0	1,244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	12	12	1,208
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PR	ODUCT	ION RA	TES	•							PRC	CURE	ΛΕΝΤ L	EAD TII	ME	•		•			
ITE	M/MANU	JFACTU	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	AX				ADMI	N LEAD	TIME		MF	-G	TO.	TAL AF	TFR					
		Raytheo	n		Tucs	on AZ									PR 1 C	OR OCT		AFTER 1 OCT		Pl			1 OCT						
													INITIAL					4		1	9		23						
REMA	RKS								•													•							

P-1 Shopping List Item No. 6

Production Schedule Exhibit P-21, page 10 of 12

Exhi	ibit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011							
Appro	priation	ı (Treası	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	r											P-1	Line It	em No	mencla	ature									
Mis	sile l	Procu	ırem	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 02,	Oth	er M	issi	es, I	tem	No.	6		Sn	nall	Dian	nete	r Bo	mb								
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	15									FI	SCAL Y	EAR 20	16					L				
PROC.		PROC.		CE DUE		2014						CAI	LENDAR	YEAR	2015								CALEN	DAR YE	EAR 201	6			Α				
YEAR	SERV.	QTY.	TO 1 OCT. 2014	AS OF 1 OCT 2014	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R				
2013	USAF	144	36	108	12	12	12	12	12	12	12	12	12																0				
2014	USAF	250	0	250										20	20	21	21	21	21	21	21	21	21	21	21				0				
2015	USAF	390	0	390																						32	32	32	294				
2016	USAF	460	0	460																									460				
TO	TAL	1,244	36	1,208	12	12	12	12	12	12	12	12	12	20	20	21	21	21	21	21	21	21	21	21	21	32	32	32	754				
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
								PRO	DDUCT	ION RA	TES								PRO	CURE	ΛΕΝΤ L	EAD TII	ME										
ITE	M/MANU	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	:G	TO	TAL AF	TFR									
		Raytheo	n		Tucs	on AZ							]		PR 1 C	OR OCT		AFTER 1 OCT		PI			1 OCT		R								
													INITIAL					4		1	9		23		1								
REMA	RKS										l		I VEOIN	<u> </u>								<u> </u>			<u> </u>				=				

P-1 Shopping List Item No. 6

Production Schedule Exhibit P-21, page 11 of 12

Exhi	ibit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	Procu	ırem	ent, A	ir F	orce	, Bu	dget	Act	vity	- 02,	Oth	er M	issi	es, I	tem	No.	6		Sn	nall	Dian	netei	r Bo	mb				
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	17									FI	SCAL Y	EAR 20	18					$\Gamma_{\rm L}$
PROC.		PROC.	PRIOR	CE DUE		2016						CAI	LENDAR	YEAR	2017								CALENI	DAR YE	AR 2018	3			A
YEAR	SERV.	QTY.	TO 1 OCT. 2016	AS OF 1 OCT 2016	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2013	USAF	144	144	0																									0
2014	USAF	250	250	0																									0
2015	USAF	390	96	294	32	32	32	33	33	33	33	33	33																0
2016	USAF	460	0	460										38	38	38	38	38	38	38	38	39	39	39	39				0
TO	TAL	1,244	490	754	32	32	32	33	33	33	33	33	33	38	38	38	38	38	38	38	38	39	39	39	39	0	0	0	0
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PR	DDUCT	ION RA	TES							•	PRC	CURE	лЕNT L	EAD TII	ME						
ITE	M/MANU	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	٩Χ				ADMI	N LEAD	TIME		MF	-G	TO	TAL AF	TER					
		Raytheo	n		Tucs	on AZ							]		PR 1 C			AFTER 1 OCT		Pl		10	1 OCT						
													INITIAL REORI					4		1	9		23						
REMA	RKS																•												$\neg$

P-1 Shopping List Item No. 6

**Production Schedule** Exhibit P-21, page 12 of 12

Exhibit P-40, Budget Item Justif	cation									Date: Fe	bruary 20	)11	
Appropriation (Treasury) Code/CC/BA/BSA  Missile Procurement, Air F			lo. 7		e Item Nome <b>strial Pr</b>		ness						
Program Element for Code B Items	N/A			rogram Ele	ments	N	/A						
		Prior	FY	FY	FY	FY 2012	FY 2012	FY	FY	FY	FY	To	
	ID Code	Years	2010	2011	2012	OCO	Total	2013	2014	2015	2016	Comp	Total
Proc Qty	A						0						0
Total Proc Cost(\$ M)		TBD	0.838	0.833	0.726		0.726	0.742	0.752	0.758	0.771	TBD	TBD

#### **Description**

The Air Force Industrial Preparedness program element combines the resources of several appropriations (Aircraft Procurement, Missile Procurement, and Operations and Maintenance) to create a comprehensive program that aids in ensuring the defense industry can supply reliable, affordable systems to operational commanders. The Missile Procurement part of Industrial Preparedness supports the management of Air Force Plant 44, Tucson, AZ. This plant is the backbone of Department of Defense (DoD) weapon systems assembly and maintenance supporting Cruise, Chaparral, Phalanx, Standard Missiles, Advanced Medium Range Air-to-Air Missile, Joint Stand-Off Weapon, High-speed Antiradiation Missile, Tomahawk, and numerous other weapon systems. Funds are provided within this appropriation to assess space-related industrial base concerns.

#### **FY 2012 Program Justification**

For FY 2012, this portion of the Air Force Industrial Preparedness programs funds the environmental compliance program, MPC 7000, at Air Force Plant 44, a unique defense asset which supports the production of several missile systems for the Air Force and the Navy. It also provides funds for space-related industrial base assessments, MPC 6000.

P-1 Shopping List Item No. 7

Budget Item Justification Exhibit P-40, page 1 of 3

Exhibit P-5, Weapon System Cost An	alysis					Date: Feb	ruary 2	2011					
Appropriation (Treasury) Code/CC/BA/BSA/Item (	Control Number							P-	1 Line Item No	menclature			
Missile Procurement, Air Force	, Budget A	ctivit	y 02, Otl	ner Miss	iles, l	tem No.	7	In	dustrial	Prepared	dness	1	
Weapon System Cost Elements	Ident Code					Total	l Cost in Mi	llions o	of Dollars				
Cost Elements Code Prior Years FY 2010 FY 2011													,
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Industrial Base Assessment (MPC 6000)	A			TBD			0.593			0.589			0.481
Environmental Compliance (MPC 7000)	A			TBD			0.245			0.244			0.245
TOTAL PROGRAM:				TBD			0.838			0.833			0.726

P-1 Shopping List Item No. 7

Weapon System Cost Analysis Exhibit P-5, page 2 of 3

Exhibit P-5, Weapon System Cost An	alysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item (	Control Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force	, Budget A	ctivit	y 02, Otł	ner Miss	iles, I	tem No.	7	Industrial Preparedness
Weapon System Cost Elements	Ident Code					Total	Cost in Mil	llions of Dollars
Cost Elements	Code		FY 2012 O	CO	(	Cost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Industrial Base Assessment (MPC 6000)	A							
Environmental Compliance (MPC 7000)	A						TBD	
TOTAL PROGRAM:				0.000			TBD	

P-1 Shopping List Item No. 7

Weapon System Cost Analysis Exhibit P-5, page 3 of 3

## THIS PAGE INTENTIONALLY LEFT BLANK

## P-1M MODIFICATION REPORT - 2012 PB

MISSILE	CLASS	MOD NR	MODIFICATION TITLE	PRIOR	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	Total FY-12	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>FY-17</u>	COST TO GO
AGM129	P	_9622	LOW COST MODIFICATION	0.6	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
		129001	SERVICE LIFE EXTENSION PROGRAM	0.6											
TOTA	AL FOR CL	ASS P		1.2	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		
TOTAL	L FOR MIS	SILE AGM129		1.2	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		

# THIS PAGE INTENTIONALLY LEFT BLANK

## P-1M MODIFICATION REPORT - 2012 PB

MISSILE	CLASS	MOD NR	MODIFICATION TITLE	PRIOR	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	Total FY-12	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>FY-17</u>	COST TO GO
LGM-30	P	13503B	MM III GUIDANCE REPLACEMENT PROGRAM	1821.0		1.2	0.6		0.6	0.4	0.4				
		5739	ENVIRONMENTAL CONTROL SYSTEM MODIFICATION	207.7	50.8	24.2									
		5747	MM III TRAINERS BLOCK UPGRADE	16.9		5.7	0.3		0.3						
		5768	PSRE LIFE EXTENSION PROGRAM	127.1	26.2	21.5	26.1		26.1	10.7					
		5910	MINUTEMAN MEECN MODIFICATION				41.0		41.0	16.6	12.4				
		5914	ICBM SECURITY MODERNIZATION PROGRAM	352.1	77.5	25.2	22.6		22.6	20.2	14.8	5.8			
		5915	Fuse Modernization									11.6	14.0		
		5916	ICBM Cryptography Upgrade Increment II								13.2	25.1	29.7		
		5917	Mintueman III Solid Rocket Motor Warm Line Program	10.0	42.9	44.2	34.0		34.0						
		99999X	LOW COST MODIFICATIONS	19.6	1.5	1.4	1.3		1.3	2.2	2.3	2.7	2.9		
TOTA	AL FOR CLA	SS P	-	2554.5	198.9	123.4	126.0		126.0	50.1	43.1	45.3	46.6		
TOTA	L FOR MISS	SILE LGM-30	-	2554.5	198.9	123.4	126.0		126.0	50.1	43.1	45.3	46.6		

## P-1M MODIFICATION REPORT - 2012 PB

MISSILE	<u>CLASS</u>	MOD NR	MODIFICATION TITLE	PRIOR	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	<u>Total</u> <u>FY-12</u>	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>FY-17</u>	COST TO GO
AGM-65	P	650002	AGM-65 B TO H UPGRADES	0.8	0.3	15.3	0.3		0.3	0.3	0.3	0.3	0.3		
TOTA	L FOR CL	ASS P		0.8	0.3	15.3	0.3		0.3	0.3	0.3	0.3	0.3		
TOTAL	L FOR MIS	SILE AGM-65		0.8	0.3	15.3	0.3		0.3	0.3	0.3	0.3	0.3		

## P-1M MODIFICATION REPORT - 2012 PB

MISSILE	<u>CLASS</u>	MOD NR	MODIFICATION TITLE	<u>PRIOR</u>	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	Total FY-12	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>FY-17</u>	COST TO GO	
AGM-88	P	_2984	HARM Control Section Modification		18.2	4.1	25.6		25.6	23.4	1.3					-
		Z88888	ADJUSTMENTS		6.0											
TOTA	AL FOR CL	ASS P			24.2	4.1	25.6		25.6	23.4	1.3					-
TOTA	L FOR MIS	SILE AGM-88		1	24.2	4.1	25.6		25.6	23.4	1.3					-

#### P-1M MODIFICATION REPORT - 2012 PB

MISSILE	CLASS	MOD NR	MODIFICATION TITLE	<u>PRIOR</u>	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	Total FY-12	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>FY-17</u>	COST TO GO
AGM-86	P	_0468	LOW COST MODIFICATIONS	0.8		0.5	0.5		0.5						
		_2783	AGM-86B SERVICE LIFE EXTENSION PROGRAM 2				8.4		8.4	4.3					
		_3165	AGM-86B TRAINERS	0.0		2.5									
		860001	AGM-86B SERVICE LIFE EXTENSION PROGRAM	3.3		1.6	1.6		1.6	0.2					
		860004	CATIK PAYLOAD DOOR	71.8		6.2				1.7					
		860005	Electronic System Test Set				4.5		4.5						
TOTA	AL FOR CL	ASS P		75.9		10.8	15.0		15.0	6.3					
TOTA	L FOR MIS	SILE AGM-86		75.9		10.8	15.0		15.0	6.3					

	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)											
APPROPRIATION MISSILE PROCUE			lifications		P-1 L	INE ITEM NOMEN	ICLATURE: AGM	129				
	FY-10	FY-11	FY-12	FY-12	осо	FY-12 Total	FY-13	FY-14	FY-15	FY-16		
COST (In Mil)	\$0.032	\$0.048	\$0.039		\$	\$0.039	\$0.041	\$0.042	\$0.041	\$0.045		

The Advanced Cruise Missile (ACM) is a low-observable air-launched, strategic missile with significant improvements in range, accuracy and survivability over the Air Launched Cruise Missile (ALCM). The overall goal of the modification budgeted in FY11 is to extend operational capability of the ACM weapons system via the Low Cost mod program.

<u>CLASS</u>	MOD NR	MODIFICATION TITLE	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	FY-12 Total	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	COST TO GO	TOTAL PROG
Р	_9622	LOW COST MODIFICATION	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.8
	Z88888	ADJUSTMENTS	0.0										0.0
TOTAL FO	OR CLASS P		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.8

**TOTAL FOR WEAPON SYSTEM AGM129** 

Totals may not add due to rounding

TOTAL PROG includes Prior Year and Cost To Go Dollars			
	P-1 SHOPP LIST ITEM	PAGE NO.	
	NO. 8	1	

# THIS PAGE INTENTIONALLY LEFT BLANK

	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)											
APPROPRIATION MISSILE PROCUE			ifications		P-1 L	INE ITEM NOMEN	ICLATURE: LGM-	30				
	FY-10	FY-11	FY-12	FY-12 (	осо	FY-12 Total	FY-13	FY-14	FY-15	FY-16		
COST (In Mil)	\$198.913	\$123.378	\$125.953		\$	\$125.953	\$50.150	\$43.069	\$45.258	\$46.580		

This line item funds modifications to the LGM-30, Minuteman III Intercontinental Ballistic Missile (ICBM) weapon system. The Minuteman III is a strategic missile capable of delivering special weapons against a full range of targets. The purpose of the modifications budgeted in FY12 is to support the operational capability of the Minuteman ICBM through 2030. The main modifications being performed to the LGM-30 are the ICBM Security and Propulsion System Rocket Engine (PSRE) Life Extension mods.

	<u>MOD</u>	<b>MODIFICATION</b>				<u>FY-12</u>	<u>FY-12</u>					<u>COST</u>	<b>TOTAL</b>
<u>CLASS</u>	<u>NR</u>	<u>TITLE</u>	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>000</u>	<u>Total</u>	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>TO GO</u>	<u>PROG</u>
Р	13503B	MM III GUIDANCE REPLACEMENT PROGRAM		1.2	0.6		0.6	0.4	0.4				1823.6
	5739	ENVIRONMENTAL CONTROL SYSTEM MODIFICATION	50.8	24.2									282.6
	5747	MM III TRAINERS BLOCK UPGRADE		5.7	0.3		0.3						22.9
	5768	PSRE LIFE EXTENSION PROGRAM	26.2	21.5	26.1		26.1	10.7					211.8
	5910	MINUTEMAN MEECN MODIFICATION			41.0		41.0	16.6	12.4				69.9
	5914	ICBM SECURITY MODERNIZATION PROGRAM	77.5	25.2	22.6		22.6	20.2	14.8	5.8			518.1
	5915	Fuse Modernization								11.6	14.0		25.6
	5916	ICBM Cryptography Upgrade Increment II							13.2	25.1	29.7		68.0
	5917	Mintueman III Solid Rocket Motor Warm Line Program	42.9	44.2	34.0		34.0						131.1
	99999X	LOW COST MODIFICATIONS	1.5	1.4	1.3		1.3	2.2	2.3	2.7	2.9		34.1
	Z88888	ADJUSTMENTS	0.0										0.0
TOTAL FO	OR CLASS P	-	198.9	123.4	126.0		126.0	50.1	43.1	45.3	46.6		3187.8

#### **TOTAL FOR WEAPON SYSTEM LGM-30**

Totals may not add due to rounding

101AL PROG includes Prior Year and Cost 10 Go Dollars			
	P-1 SHOPP LIST ITEM	PAGE NO.	
	NO. 9	ļ	

02/03/2011 Exhibit P3A Congressional **Individual Modification** FY 2012 PB Appropriation: Missile Procurement, Air Force

Center: OO-ALC - Hill AFB, UT

Modification Title and No. PSRE LIFE EXTENSION PROGRAM MN- 5768

PE 0101213F Team SPACE

CLC: LGM-30 Class: P

Models of Systems Affected: LGM-30G

#### **Description/Justification**

The Propulsion System Rocket Engine (PSRE) Life Extension Program (LEP) refurbishes/replaces Minuteman III (MM III) post-boost propulsion system components produced in the 1970s. Deficiencies identified in several components may cause system failure/loss of performance and, in turn, cause potential mission failure. The program is required due to non-availability of replacement parts, material and component obsolescence and environmentally restricted chemicals and solvents. This program corrects age related degradation, reduces life cycle costs, and supports MM III availability/relia USSTRATCOM alert requirement. The program is scoped to refurbish the 574 PSREs necessary to support the alert requirements based upon the calculated annual PSRE attrition rate. This rate reflects attrition due to flighttests, aging/surveillance tests, and other historical information; it is estimated to remain unchanged through 2030. Total kits: 574 (450 MM III plus 124 flight and aging/surveillance tests).

FY12 funds will be used to fund an additional labor production year.

Missile Breakdown: ACTIVE 574, RESERVE 0, ANG 0, TOTAL 574

#### **Development Status**

Complete

#### **Projected Financial Plan**

	PR	<u>IOR</u>	FY-1	0	FY-	· <u>11</u>	F	Y-12	FY-12	2 OCO	FY	<u>7-13</u>
	QTY	COST	QTY	COST	QTY	<b>COST</b>	QTY	COST	QTY	<b>COST</b>	QTY	COST
RDT & E (3600) (Active)												
RDT & E (3600) (Guard)												
RDT & E (3600) (Reserve)												
Total RDT & E (3600)												
PROCUREMENT (3020)												
INSTALL KITS Group A (Active)												
INSTALL KITS Group A (Guard)												
INSTALL KITS Group A (Reserve)												
TOTAL: INSTALL KITS												
KITS NONRECUR Group A (Active)												
KITS NONRECUR Group A (Guard)												
KITS NONRECUR Group A (Reserve)												
TOTAL: KITS NONRECUR												
EQUIPMENT Group B (Active)	[441]	73.420	[96]	14.780	[37]	8.700						
EQUIPMENT Group B (Guard)												
EQUIPMENT Group B (Reserve)												
TOTAL: EQUIPMENT	[441]	73.420	[96]	14.780	[37]	8.700						
EQUIP NONREC Group B (Active)	[0]											
EQUIP NONREC Group B (Guard)												
				0 2								

Fact Sheet: LGM-30 MN 5768 PSRE LIFE EXTENSION PROGRAM (Continued)

## **Projected Financial Plan Continued**

	PR	<u>IOR</u>	FY-	·10	FY	<u>-11</u>	<u>FY</u>	<u>Y-12</u>	FY-12	2 OCO	FY	<u>Y-13</u>
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
EQUIP NONREC Group B (Reserve)												
TOTAL: EQUIP NONREC	[0]											
CHANGE ORDERS		2.882		0.543		1.356						
DATA												
SIM/TRAINER												
SUPPORT- EQUIP						2.000						
OTHER												
SHIPPING FIXTURES		2.350										
ICS								8.704				
OGC		48.494		10.907		9.486		17.434				10.733
TOTAL COST (BP-2100) (Totals may not add due to rounding) INSTALLATION QTY		127.146		26.230		21.542		26.138				10.733

## Continued

INSTALLATION QTY

Continued	FV	-14	FY-	15	FY	16	TO	COMP	TOT	AT
	QTY T	COST	QTY	COST	QTY T	COST	QTY	COST	<u>101</u> QTY	<u>COST</u>
RDT & E (3600) (Active)	QII	<u>COST</u>	QII	<u>COS1</u>	QII	<u>CO31</u>	QII	<u>CO31</u>	QII	<u>COS1</u>
RDT & E (3600) (Guard)										
RDT & E (3600) (Reserve)										
Total RDT & E (3600)										
PROCUREMENT (3020)										
INSTALL KITS Group A (Active)										
INSTALL KITS Group A (Guard)										
INSTALL KITS Group A (Reserve)										
TOTAL: INSTALL KITS										
KITS NONRECUR Group A (Active)										
KITS NONRECUR Group A (Guard)										
KITS NONRECUR Group A (Reserve)										
TOTAL: KITS NONRECUR										
EQUIPMENT Group B (Active)									[574]	96.900
EQUIPMENT Group B (Guard)									L J	
EQUIPMENT Group B (Reserve)										
TOTAL: EQUIPMENT									[574]	96.900
EQUIP NONREC Group B (Active)									[0]	
EQUIP NONREC Group B (Guard)									. ,	
EQUIP NONREC Group B (Reserve)										
TOTAL: EQUIP NONREC									[0]	
CHANGE ORDERS										4.781
DATA										
SIM/TRAINER										
SUPPORT- EQUIP										2.000
OTHER										
SHIPPING FIXTURES										2.350
ICS										8.704
OGC										97.054
TOTAL COST (BP-2100)										211.789
(Totals may not add due to rounding)										

PAGE 03 - 12 UNCLASSIFIED

Fact Sheet: LGM-30 MN 5768 PSRE LIFE EXTENSION PROGRAM (Continued)

Method of Implementation: Org/Intermediate
Initial Lead Time: 14 Months

Initial Lead Time: 14 Months Follow-On Lead Time: 10 Months

**Milestones** 

	<u>FY-99</u>	<u>FY-00</u>	<u>FY-01</u>	<u>FY-02</u>	<u>FY-03</u>	<u>FY-04</u>	<u>FY-05</u>	<u>FY-06</u>	<u>FY-07</u>	<u>FY-08</u>	<u>FY-09</u>	<u>FY-10</u>	<u>FY-11</u>
Contract Date (Month/CY)						02/04	11/04	11/05	11/06	11/07	11/08	11/09	11/10
Delivery Date (Month/CY)						04/05	09/05	09/06	09/07	09/08	09/09	09/10	09/11

02/03/2011 Individua FY 2012 PB

Modification Title and No. MINUTEMAN MEECN MODIFICATION MN- 5910

CLC: LGM-30 Class: P

Exhibit P3A Congressional

Appropriation: Missile Procurement, Air Force

Models of Systems Affected: LGM-30 Center: ESC - Hanscom AFB, MA

PE 0303131F

Team C4I

#### **Description/Justification**

Minuteman Minimum Essential Emergency Communications Network (MEECN) Program Upgrade (MMPU) system will provide a capability for Missile Combat Crew Members to have operator control of the terminal in the Launch Control Center (LCC) to switch among various EHF/AEHF satellite constellations and be compatible with Advanced EHF (AEHF).

The terminal operator control modification will allow missile combat crews to transition between MILSTAR and AEHF satellite constellations without dispatch of a maintenance team. These modifications comply with USSTRATCOM requirement for Minuteman MEECN Program (MMP) terminals to communicate at higher data rates.

The AEHF production and installation in FY12 - FY14 includes upgrades to 45 missile wing LCCs; 1 test LCC at Vandenberg AFB, CA; 3 operational maintenance system (OMS) terminals; 1 terminal at General Dynamics Integration Test Facility; 2 terminals at the ICS/CLS depot. The program also includes modifications to the Missile Procedures Trainers.

The MMPU program currently funds 41 of 46 active missile facility sites.

Missile Breakdown: ACTIVE 46, RESERVE 0, ANG 0, TOTAL 46

#### **Development Status**

Minuteman MEECN Program Upgrade (MMPU) entered Engineering and Manufacturing Development (EMD) 15 Jan 08. Raytheon Company of Marlborough, MA is the prime contractor and General Dynamics Corporation of Needham Heights, MA is a major subcontractor for upgrades to the Higher Authority Communication/Rapid Message Processing Element (HAC/RMPE) subsystem. EMD will continue through FY12.

#### Projected Financial Plan

	<u>PR</u>	<u>IOR</u>	<u>FY</u>	-10	<u>F</u>	<u>Y-11</u>	<u>FY</u>	<u>-12</u>	<u>FY-12</u>	2 OCO	<u>FY</u>	<u>-13</u>
	QTY	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<b>COST</b>	<u>QTY</u>	<u>COST</u>
RDT & E (3600) (Active)		71.311		21.127		32.029		10.465				
RDT & E (3600) (Guard)												
RDT & E (3600) (Reserve)												
Total RDT & E (3600)		71.311		21.127		32.029		10.465				
PROCUREMENT (3020)												
INSTALL KITS Group A (Active)	[0]						[41]	3.548				
INSTALL KITS Group A (Guard)												
INSTALL KITS Group A (Reserve)												
TOTAL: INSTALL KITS	[0]						[41]	3.548				
KITS NONRECUR Group A (Active)	[0]							1.543				1.569
KITS NONRECUR Group A (Guard)												
KITS NONRECUR Group A (Reserve)												
TOTAL: KITS NONRECUR	[0]							1.543				1.569
EQUIPMENT Group B (Active)	0						41	15.249				
EQUIPMENT Group B (Guard)												
EQUIPMENT Group B (Reserve)												
TOTAL: EQUIPMENT	0						41	15.249				

## **Projected Financial Plan Continued**

		<u>PRI</u>	<u>OR</u>	<u>FY-</u>	-10	<u>FY</u> -	<u>-11</u>	<u>FY</u>	<u>-12</u>	<u>FY-12</u>	<u>OCO</u>	<u>FY</u>	-13
EQUIP NONREC Group B (Active) EQUIP NONREC Group B (Guard) EQUIP NONREC Group B (Reserve)		<u>QTY</u> [0]	COST	QTY	COST	QTY	COST	QTY	<u>COST</u> 3.367	QTY	COST	QTY	<u>COST</u> 4.014
TOTAL: EQUIP NONREC CHANGE ORDERS DATA		[0]							3.367				4.014
SIM/TRAINER SUPPORT- EQUIP								[14] [120]	2.245 4.182			[1]	1.595
OGC SPARES DISTANLATION OF HARDWARE								[12]	6.418 4.439			[6]	3.395 4.546
INSTALLATION OF HARDWARE FY-12 (Active)	41 KITS							[0]		[0]		[18]	1.454
TOTAL INSTALL								0		0		18	1.454
TOTAL COST (BP-2100) (Totals may not add due to rounding)		0						41	40.991				16.573
INSTALLATION QTY												18	

PAGE 03 - 15 UNCLASSIFIED

#### Continued

Continued		FV	<u>-14</u>	FY-	15	FY-	-16	TO	COMP	TOT	'ΔΙ
		QTY 1.1	COST	QTY	COST	QTY TITE	COST	QTY	COST	QTY	COST
RDT & E (3600) (Active)		<u>VII</u>	<u>COB1</u>	<u>VII</u>	<u>cos1</u>	QII	<u>CO51</u>	<u>VII</u>	<u>CO51</u>	<u>VII</u>	134.932
RDT & E (3600) (Guard)											151.752
RDT & E (3600) (Gaard)											
Total RDT & E (3600)											134.932
PROCUREMENT (3020)											15,52
INSTALL KITS Group A (Active)										[41]	3.548
INSTALL KITS Group A (Guard)										. ,	
INSTALL KITS Group A (Reserve)											
TOTAL: INSTALL KITS										[41]	3.548
KITS NONRECUR Group A (Active)			1.601							[0]	4.713
KITS NONRECUR Group A (Guard)											
KITS NONRECUR Group A (Reserve)											
TOTAL: KITS NONRECUR			1.601							[0]	4.713
EQUIPMENT Group B (Active)										41	15.249
EQUIPMENT Group B (Guard)											
EQUIPMENT Group B (Reserve)											
TOTAL: EQUIPMENT										41	15.249
EQUIP NONREC Group B (Active)			4.189							[0]	11.570
EQUIP NONREC Group B (Guard)											
EQUIP NONREC Group B (Reserve)											
TOTAL: EQUIP NONREC			4.189							[0]	11.570
CHANGE ORDERS											
DATA											
SIM/TRAINER										[15]	3.840
SUPPORT- EQUIP		[14]	1.590							[134]	5.772
OGC			3.101								12.914
SPARES										[18]	8.985
INSTALLATION OF HARDWARE				503		507				5443	
FY-12 (Active)	41 KITS	[23]	1.895	[0]		[0]		0		[41]	3.349
TOTAL INSTALL	-	23	1.895	0		0		0		41	3.349
TOTAL COST (BP-2100) (Totals may not add due to rounding)			12.376							41	69.940
INSTALLATION QTY		23								41	

9 - 8

PAGE 03 - 16 UNCLASSIFIED

Method of Implementation: Contractor Facility

Initial Lead Time: 16 Months Follow-On Lead Time: 12 Months

**Milestones** 

 FY-06
 FY-07
 FY-08
 FY-09
 FY-10
 FY-11
 FY-12
 FY-13

 Contract Date (Month/CY)
 10/12
 10/13
 10/13

 Delivery Date (Month/CY)
 10/13
 10/13

**Installation Schedule** 

FY-06 FY-07 FY-08 FY-09 FY-10 <u>FY-11</u> FY-12 FY-12 OCO Quarter 1 2 3 4 1 2 3 4 2 3 4 2 3 2 3 2 3 4 1 2 3 4

Input Output

02/03/2011 Individual Modification FY 2012 PB

[0]

Modification Title and No. ICBM SECURITY MODERNIZATION PROGRAM MN- 5914

PE 0101213F Models of Systems Affected: LGM-30 Center:

CLC: LGM-30 Class: P

FY-13

COST

OTY

Exhibit P3A Congressional

Appropriation: Missile Procurement, Air Force

### Team SPACE

#### **Description/Justification**

National Security Presidential Directive (NSPD) 28, dated 24 Jun 03, directed modernization of Intercontinental Ballistic Missile (ICBM) Launch Facility (LF) security systems to mitigate threats identified in the ICBM Security Review Document and compliance with the Nuclear Weapons Security Manual (DoD S-5210.41-M). The ICBM Security Modernization Program is comprised of three primary activities: LF concrete headwork expansion, Remote Visual Assessment (RVA), and the Fast Rising B-Plug. Expanding the LF concrete bolsters the barriers that will delay an intruder's ability to enter the LF (completed at 450 LFs). RVA allows security controllers to remotely evaluate the situation at an LF prior to dispatching forces. RVA Satellite installed at 280 LFs, 29 Missile Alert Facilities (MAFs), and 1 Missile Security Control (MSC). RVA Terrestrial will be installed at 450 LFs, 45 MAFs, and 3 MSCs, replacing the RVA Satellite system for a total of 808 kits. RVA will also utilize Interim Contractor Support to maintain the system until Full Operational Capability is reached. Fast Rising B-Plug secures a penetrated LF faster in order to delay or deny intruder entry (450 Operational LFs and 7 training LFs for a total of 457 kits). Implementing these advanced delay/denial features, updated detection/assessment technology, and data transmission systems from the LF to the responsible MAF will counter emerging threat technologies and methods.

Total kits procured: 1265 (RVA Satellite: 280 LFs. 29 MAFs. 1 MSC; RVA Terrestrial: 450 LFs. 45 MAFs. 3 MSCs; Fast Rising B-Plug; 450 LFs. 7 training LFs).

FY12 funds procure 95 RVA kits to support installation at operational LFs and MAFs.

Missile Breakdown: ACTIVE 1265. RESERVE 0. ANG 0. TOTAL 1265

#### **Development Status**

Complete

#### **Projected Financial Plan**

EQUIPMENT Group B (Guard) EQUIPMENT Group B (Reserve)

TOTAL: EQUIPMENT

	PF	RIOR	FY-	-10	FY	<u>'-11</u>	FY	<u>7-12</u>	FY-12	2 OCO
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT & E (3600) (Active)										
RDT & E (3600) (Guard)										
RDT & E (3600) (Reserve)										
Total RDT & E (3600)										
PROCUREMENT (3020)										
INSTALL KITS Group A (Active)										
INSTALL KITS Group A (Guard)										
INSTALL KITS Group A (Reserve)										
TOTAL: INSTALL KITS										
KITS NONRECUR Group A (Active)										
KITS NONRECUR Group A (Guard)										
KITS NONRECUR Group A (Reserve)										
TOTAL: KITS NONRECUR										
EQUIPMENT Group B (Active)	[0]									

## **Projected Financial Plan Continued**

	PR	<u>IOR</u>	<u>FY-1</u>	.0	FY-	<u>·11</u>	FY	-12	FY-12	2 OCO	FY	<u>7-13</u>
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
EQUIP NONREC Group B (Active)	738	321.947	180	72.445	85	10.581	95	12.104			100	12.448
EQUIP NONREC Group B (Guard)												
EQUIP NONREC Group B (Reserve)	0											
TOTAL: EQUIP NONREC	738	321.947	180	72.445	85	10.581	95	12.104			100	12.448
CHANGE ORDERS		11.088		3.154		1.000		1.721				1.003
DATA												
SIM/TRAINER												
SUPPORT- EQUIP												
ICS						5.896		4.999				5.084
OGC		19.062		1.880		7.677		3.777				1.710
TOTAL COST (BP-2100) (Totals may not add due to rounding) INSTALLATION QTY	738	352.097	180	77.479	85	25.154	95	22.601			100	20.245

#### Continued

	<u>FY</u>	<u>7-14</u>	FY-	·15	<u>FY</u>	<u>-16</u>	<u>TO (</u>	COMP	TOT	ΓAL
	QTY	COST	<b>QTY</b>	<u>COST</u>	<b>QTY</b>	<b>COST</b>	<b>QTY</b>	<b>COST</b>	<b>QTY</b>	<b>COST</b>
RDT & E (3600) (Active)										
RDT & E (3600) (Guard)										
RDT & E (3600) (Reserve)										
Total RDT & E (3600)										
PROCUREMENT (3020)										
INSTALL KITS Group A (Active)										
INSTALL KITS Group A (Guard)										
INSTALL KITS Group A (Reserve)										
TOTAL: INSTALL KITS										
KITS NONRECUR Group A (Active)										
KITS NONRECUR Group A (Guard)										
KITS NONRECUR Group A (Reserve)										
TOTAL: KITS NONRECUR										
EQUIPMENT Group B (Active)									[0]	
EQUIPMENT Group B (Guard)										
EQUIPMENT Group B (Reserve)										
TOTAL: EQUIPMENT									[0]	
EQUIP NONREC Group B (Active)	67	7.971							1265	437.496
EQUIP NONREC Group B (Guard)										
EQUIP NONREC Group B (Reserve)									0	
TOTAL: EQUIP NONREC	67	7.971							1265	437.496
CHANGE ORDERS		0.739								18.705
DATA										
SIM/TRAINER										
SUPPORT- EQUIP										
ICS		5.171								21.150
OGC		0.894		5.781						40.781
TOTAL COST (BP-2100)	67	14.775		5.781					1265	518.132
(Totals may not add due to rounding)										

Method of Implementation: Org/Intermediate

INSTALLATION QTY

Initial Lead Time: 6 Months

Follow-On Lead Time: 6 Months

9 - 12

PAGE 03 - 20 UNCLASSIFIED

## **Milestones**

	<u>FY-03</u>	<u>FY-04</u>	<u>FY-05</u>	<u>FY-06</u>	<u>FY-07</u>	<u>FY-08</u>	<u>FY-09</u>	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-13</u>
Contract Date (Month/CY)		02/04	01/05	01/06	01/07	01/08	01/09	01/10	01/11	01/12	01/13
Delivery Date (Month/CY)		08/04	07/05	07/06	07/07	07/08	07/09	07/10	07/11	07/12	07/13

02/03/2011 **Individual Modification** FY 2012 PB

Modification Title and No. Mintueman III Solid Rocket Motor Warm Line Program MN-5917

PE 0101213F

CLC: LGM-30 Class: P Team SPACE

Exhibit P3A Congressional

Appropriation: Missile Procurement, Air Force

Models of Systems Affected: LGM-30

Center: OO-ALC - Hill AFB, UT

#### **Description/Justification**

The Minuteman III Solid Rocket Motor (SRM) Warm Line (WL) Program is a low-rate production line for Minuteman III solid rocket motors. The purpose of the SRMWL Program is to sustain and maintain the unique manufacturing and engineering infrastructure necessary to preserve the current Minuteman III solid rocket motor production capability. A delivered unit is a motor set and consists of a Stage 2, and Stage 3 motor. An additional motor set will be produced each year to be consumed for Production Quality Assurance (PQA) testing. Other government costs (OGC) include funding for depot labor to accomplish government furnished equipment (GFM) calibration, motor transportation, POA testing, and Government travel.

The SRMWL has no kit installation requirement.

FY12 funds complete program shutdown and contract closeout efforts.

Missile Breakdown: ACTIVE 0, RESERVE 0, ANG 0, TOTAL 0

### **Development Status**

N/A

#### Projected Financial Plan

	PR	<u>IOR</u>	<u>FY-</u>	<u>10</u>	FY	<u>-11</u>	FY	<u>Y-12</u>	FY-12	2 OCO	FY	<u>-13</u>
	<u>QTY</u>	COST	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<b>QTY</b>	COST	<b>QTY</b>	<u>COST</u>	<u>QTY</u>	<b>COST</b>
RDT & E (3600) (Active)												
RDT & E (3600) (Guard)												
RDT & E (3600) (Reserve)												
Total RDT & E (3600)												
PROCUREMENT (3020)												
INSTALL KITS Group A (Active)												
INSTALL KITS Group A (Guard)												
INSTALL KITS Group A (Reserve)												
TOTAL: INSTALL KITS												
KITS NONRECUR Group A (Active)												
KITS NONRECUR Group A (Guard)												
KITS NONRECUR Group A (Reserve)												
TOTAL: KITS NONRECUR												
EQUIPMENT Group B (Active)	[0]		[6]	41.280	[4]	42.200						
EQUIPMENT Group B (Guard)												
EQUIPMENT Group B (Reserve)												
TOTAL: EQUIPMENT	[0]		[6]	41.280	[4]	42.200						
EQUIP NONREC Group B (Active)												
EQUIP NONREC Group B (Guard)												

## **Projected Financial Plan Continued**

	PR	OR	FY	<u>-10</u>	<u>FY</u>	<u>Y-11</u>	FY	<u>-12</u>	<u>FY-12</u>	<u> 2 OCO</u>	<u>FY</u>	-13
EQUIP NONREC Group B (Reserve) TOTAL: EQUIP NONREC CHANGE ORDERS DATA SIM/TRAINER SUPPORT- EQUIP	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
OGC INSTALLATION OF HARDWARE		10.000		1.595		2.040		33.993				
TOTAL INSTALL												
TOTAL COST (BP-2100) (Totals may not add due to rounding)		10.000		42.875		44.240		33.993				
INSTALLATION QTY	0		0		0		0				0	

## Continued

Continued										
	<u>FY</u>	<u>-14</u>	FY-	<u>15</u>	FY-	<u>-16</u>	<u>TO C</u>	<u>OMP</u>	<u>TOT</u>	<u>AL</u>
	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<b>QTY</b>	<u>COST</u>	<b>QTY</b>	<u>COST</u>	<u>QTY</u>	<u>COST</u>
RDT & E (3600) (Active)										
RDT & E (3600) (Guard)										
RDT & E (3600) (Reserve)										
Total RDT & E (3600)										
PROCUREMENT (3020)										
INSTALL KITS Group A (Active)										
INSTALL KITS Group A (Guard)										
INSTALL KITS Group A (Reserve)										
TOTAL: INSTALL KITS										
KITS NONRECUR Group A (Active)										
KITS NONRECUR Group A (Guard)										
KITS NONRECUR Group A (Reserve)										
TOTAL: KITS NONRECUR										
EQUIPMENT Group B (Active)									[10]	83.480
EQUIPMENT Group B (Guard)										
EQUIPMENT Group B (Reserve)										
TOTAL: EQUIPMENT									[10]	83.480
EQUIP NONREC Group B (Active)										
EQUIP NONREC Group B (Guard)										
EQUIP NONREC Group B (Reserve)										
TOTAL: EQUIP NONREC										
CHANGE ORDERS										
DATA										
SIM/TRAINER										
SUPPORT- EQUIP										
OGC										47.628
INSTALLATION OF HARDWARE										
TOTAL INSTALL										
TOTAL COST (BP-2100)										131.108
(Totals may not add due to rounding)										
INSTALLATION QTY	0		0		0				0	

Method of Implementation: Combination

Initial Lead Time: 6 Months Follow-On Lead Time: 6 Months

**Milestones** 

 FY-08
 FY-09
 FY-10

 Contract Date (Month/CY)
 02/10

Delivery Date (Month/CY)

**Installation Schedule** 

		FY	<u>-08</u>			FY	<u>7-09</u>			FY	<u>'-10</u>			FY	<u>-11</u>			FY	<u>7-12</u>			FY-1	2 OC	<u>C</u>		FY	<u>-13</u>			FY	<u>-14</u>	
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input								0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0
Output								0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0

# THIS PAGE INTENTIONALLY LEFT BLANK

	BUDGET ITEM JUSTIFICATION (EXHIBIT P-40)										
APPROPRIATION/BUDGET ACTIVITY: MISSILE PROCUREMENT-AIR FORCE/MISSILE Modifications						INE ITEM NOMEN	ICLATURE: AGM	-65			
	FY-10	FY-11	FY-12	FY-12	осо	FY-12 Total	FY-13	FY-14	FY-15	FY-16	
COST (In Mil)	\$0.257	\$15.260	\$0.266	\$0	0.000	\$0.266	\$0.270	\$0.276	\$0.279	\$0.284	

FY2011 funding totals include \$15.0M requested for Overseas Contingency Operations.

This line item funds modifications to the AGM-65H and AGM-65K Maverick

missiles. This Retrofit program upgrades the AGM-65H/K tracker by reworking and improving the tracker circuit card assembly (CCA). CCAs are removed and replaced during a depot-level modification being performed in the field by Air Force Reserve Ammunition Troops (AFRAT), Raytheon, and USAF enlisted troops around the world. The removed CCAs are reworked and installed in the next group of H/K Retrofit modifications. Repairing the tracker deficiencies improves the accuracy of the missile by 15%. Modifications are budgeted and programmed below.

<u>CLASS</u>	MOD NR	MODIFICATION TITLE	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	FY-12 Total	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	COST TO GO	TOTAL PROG
Р	650002	AGM-65 B TO H UPGRADES	0.3	15.3	0.3		0.3	0.3	0.3	0.3	0.3		17.6
	Z88888	ADJUSTMENTS	0.0										0.0
TOTAL F	OR CLASS P		0.3	15.3	0.3		0.3	0.3	0.3	0.3	0.3		17.6

**TOTAL FOR WEAPON SYSTEM AGM-65** 

Totals may not add due to rounding

TOTAL PROG includes Prior Year and Cost To Go Dollars			
	P-1 SHOPP LIST ITEM	PAGE NO.	
	NO. 10	1	

# THIS PAGE INTENTIONALLY LEFT BLANK

			BUDGET ITEM JU (EXHIBIT				DATE: Febi	uary 2011		
APPROPRIATION/BUDGET ACTIVITY: MISSILE PROCUREMENT-AIR FORCE/MISSILE Modifications					P-1 L	INE ITEM NOMEN	ICLATURE: AGM	-88		
FY-10		FY-11	FY-12	FY-12	осо	FY-12 Total	FY-13	FY-14	FY-15	FY-16
COST (In Mil)	\$24.193	\$4.079	\$25.642		\$	\$25.642	\$23.434	\$1.261	\$0.000	\$0.000

This line item funds modifications of the AGM-88, High Speed Anti-Radiation Missile (HARM). The AGM-88 HARM is designed to target and destroy threat radar installations and transmitters. The primary modification budgeted for the AGM-88 in FY12 is the AGM-88 HARM Control Section Modification to add a Global Positioning System (GPS) receiver and an improved Inertial Measurement Unit (IMU) to improve missiles capability for the Destruction of Enemy Air Defenses (DEAD) mission.

<u>CLASS</u>	MOD NR	MODIFICATION TITLE	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>FY-12</u> <u>OCO</u>	FY-12 Total	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	COST TO GO	TOTAL PROG
Р	_2984	HARM Control Section Modification	18.2	4.1	25.6		25.6	23.4	1.3				72.6
	Z88888	ADJUSTMENTS	6.0										6.0
TOTAL F	OR CLASS P		24.2	4.1	25.6		25.6	23.4	1.3				78.6

**TOTAL FOR WEAPON SYSTEM AGM-88** 

Totals may not add due to rounding

TOTAL PROG includes Prior Year and Cost To Go Dollars			
	P-1 SHOPP LIST ITEM	PAGE NO.	
	NO. 11	1	

02/03/2011 Individual FY 2012 PB

Center: AAC Eglin AFB

Modification Title and No. HARM Control Section Modification MN- 2984

CLC: AGM-88 Class: P

Appropriation: Missile Procurement, Air Force

Exhibit P3A Congressional

PE 0207162F

Team INFO

#### **Description/Justification**

Models of Systems Affected: AGM-88

The AGM-88 High Speed Anti-Radiation Missile (HARM) program is supported by long range planning objectives identified in Defense Planning Guidance(DPG)and the HQ ACC Air Superiority Mission Area Plan. Defense planning guidance requires fighter aircraft to accomplish the conventional warfare strategies of attaining air superiority and supporting surface operations. To execute these strategies, Combat Air Forces (CAF) must be able to conduct air operations around-the-clock under various weather conditions against numerous enemy ground threats employing a full spectrum of air defense systems to include countermeasures. The AGM-88 HARM is designed to target and destroy threat radar installations and transmitters. The effectiveness of AGM-88 can be significantly improved by modifying the missile control section to provide precision navigation capability. This modification will include addition of a Global Positioning System (GPS) receiver and Inertial Measurement Unit (IMU), comprised of a high-precision gyroscope, to replace existing navigation hardware. The modification also includes a new control section microprocessor with associated software to merge targeting solutions from navigation and seeker systems. An F-16CJ armed with an AGM-88 and modified missile control section will have an improved capability to engage an expanded set of enemy Integrated Air Defense Systems (IADS) targets compared to conventional HARMs. This AGM-88 control section modification will increase probability of hit(POH) against systems using counter-HARM techniques, provide high speed point-to-point capability, and reduce the potential for collateral damage and fratricide. Current program funding procures approximately 500 control section modifications (CSM) in FY12 & FY13. After award of a contract for hardware and installation, missile control sections will be pulled for inventory and sent to the contractor's facility for modification.

Missile Breakdown: ACTIVE 500, RESERVE 0, ANG 0, TOTAL 500

#### **Development Status**

Development of the HARM DEAD Attack Module (HDAM) modification to the HARM Control Section was accomplished through a joint Air Force-contractor research and development effort. Flight-worthy assets were delivered and integrated into the F-16 M4+ OFP Flight Test Program in mid-2005. Full capability was demonstrated with three missile launches in 2006. Additionally, another contractor has developed an upgrade to the HARM control section for use with the Navy's AARGM program, which may be adaptable for use on Air Force missiles. After completing market research, a competitive acquisition approach which was chosen. On 28 Jul 09, the AFPEO for Weapons approved an acquisition strategy for awarding limited production contracts in FY10 to two competing contractor's for delivery of five modified control sections each. Performance of each contractor's modified control section will be verified through lab and flight testing on the F-16 aircraft. Selection of a contractor for full production of modified HARM control sections will be based on lowest price that meets minimum required performance parameters. First full production contract award is planned for FY12.

#### **Projected Financial Plan**

	<u>PF</u>	LIOR	<u>FY-1</u>	10	FY	<u>'-11</u>	<u>FY</u>	<u>-12</u>	FY-12	2 OCO	<u>FY</u>	-13
	QTY	COST	$\underline{\text{QTY}}$	<b>COST</b>	QTY	<u>COST</u>	QTY	<b>COST</b>	<b>QTY</b>	<b>COST</b>	QTY	<b>COST</b>
RDT & E (3600) (Active)												
RDT & E (3600) (Guard)												
RDT & E (3600) (Reserve)												
Total RDT & E (3600)												
PROCUREMENT (3020)												
INSTALL KITS Group A (Active)			[0]									
INSTALL KITS Group A (Guard)												
INSTALL KITS Group A (Reserve)												
TOTAL: INSTALL KITS			[0]									
KITS NONRECUR Group A (Active)			0				250	23.731			250	21.670
KITS NONRECUR Group A (Guard)												
KITS NONRECUR Group A (Reserve)												
TOTAL: KITS NONRECUR			0				250	23.731			250	21.670

## **Projected Financial Plan Continued**

		<u>PR</u>	<u>IOR</u>	<u>FY-1</u>	0	FY	<u>-11</u>	<u>FY</u> :	<u>-12</u>	FY-12	2 OCO	<u>FY-</u>	13
EQUIPMENT Group B (Active) EQUIPMENT Group B (Guard)		QTY	COST	<u>QTY</u> [0]	COST	QTY	COST	QTY [0]	COST 0.000	QTY	COST	QTY [0]	COST 0.000
EQUIPMENT Group B (Reserve) TOTAL: EQUIPMENT EQUIP NONREC Group B (Active) EQUIP NONREC Group B (Guard) EQUIP NONREC Group B (Reserve)				[0]				[0]	0.000			[0]	0.000
TOTAL: EQUIP NONREC CHANGE ORDERS DATA SIM/TRAINER SUPPORT- EQUIP					2.865								
PROGRAM MNGMT TELEMETRY (E-9) Limited Production Units				[10]	1.770 1.555 9.000		1.998		1.832				1.614
TEST FLT TEST							0.659 1.422						
SHIPPING FIXTURES Mission Planning SOFTWARE Acft Integration OMINIBUS					0.003 1.000 1.000 1.000				0.079				0.150
INSTALLATION OF HARDWARE FY-12 (Active) FY-13 (Active)	250 KITS 250 KITS							[120]				[130] [120]	
TOTAL INSTALL								120				250	
TOTAL COST (BP-2100) (Totals may not add due to rounding) INSTALLATION QTY				0	18.193		4.079	250 120	25.642			250 250	23.434

11 - 3

PAGE 03 - 31 UNCLASSIFIED

## Continued

Continucu	FY	<u>7-14</u>	FY-	-15	FY	<b>-</b> 16	ТО	COMP	TOT	AL
	QTY	COST	QTY	COST	QTY	COST	QTY	COST	QTY	COST
RDT & E (3600) (Active)										
RDT & E (3600) (Guard)										
RDT & E (3600) (Reserve)										
Total RDT & E (3600)										
PROCUREMENT (3020)										
INSTALL KITS Group A (Active)									[0]	
INSTALL KITS Group A (Guard)										
INSTALL KITS Group A (Reserve)										
TOTAL: INSTALL KITS									[0]	
KITS NONRECUR Group A (Active)									500	45.401
KITS NONRECUR Group A (Guard)										
KITS NONRECUR Group A (Reserve)										
TOTAL: KITS NONRECUR									500	45.401
EQUIPMENT Group B (Active)									[0]	0.000
EQUIPMENT Group B (Guard)										
EQUIPMENT Group B (Reserve)										
TOTAL: EQUIPMENT									[0]	0.000
EQUIP NONREC Group B (Active)										
EQUIP NONREC Group B (Guard)										
EQUIP NONREC Group B (Reserve)										
TOTAL: EQUIP NONREC										
CHANGE ORDERS										
DATA										
SIM/TRAINER										
SUPPORT- EQUIP										2.865
PROGRAM MNGMT		1.093								8.307
TELEMETRY (E-9)										1.555
Limited Production Units									[10]	9.000
TEST										0.659
FLT TEST										1.422
SHIPPING FIXTURES		0.168								0.400
Mission Planning										1.000
SOFTWARE										1.000

11 - 4

PAGE 03 - 32 UNCLASSIFIED

	ıued

		<u>FY</u>	-14	FY-	<u>-15</u>	FY	<u>-16</u>	<u>TO C</u>	COMP	TOT	<u>AL</u>
		<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<u>COST</u>
Acft Integration											1.000
OMINIBUS											
INSTALLATION OF HARDWARE											
FY-12 (Active)	250 KITS									[250]	
FY-13 (Active)	250 KITS	[130]								[250]	
TOTAL INSTALL	_	130								500	
TOTAL COST (BP-2100) (Totals may not add due to rounding)			1.261							500	72.609
INSTALLATION QTY		130								500	

Method of Implementation: Contractor Facility
Initial Lead Time: 12 Months

Follow-On Lead Time: 12 Months

**Milestones** 

	<u>FY-09</u>	<u>FY-10</u>	<u>FY-11</u>	FY-12	<u>FY-13</u>
Contract Date (Month/CY)		09/10		06/12	06/13
Delivery Date (Month/CY)		09/11		06/13	06/14

**Installation Schedule** 

		FY	<u>-09</u>			FY	<u>-10</u>			$\mathbf{FY}$	<u>-11</u>			FY	<u>-12</u>			FY-12	2 OCC	<u>C</u>		FY	-13			FY	<u>-14</u>			FY	<u>-15</u>	
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Input															60	60					60	70	60	60	60	70						
Output																							60	60	60	70	60	60	60	70		

# THIS PAGE INTENTIONALLY LEFT BLANK

			BUDGET ITEM JU (EXHIBIT		ON				DATE: February 2011			
APPROPRIATION MISSILE PROCUE			lifications		P-1 L	INE ITEM NOMEN	ICLATURE: AGM	-86				
	FY-10	FY-11	FY-12	FY-12	осо	FY-12 Total	FY-13	FY-14	FY-15	FY-16		
COST (In Mil)	\$0.000	\$10.795	\$14.987		\$	\$14.987	\$6.255	\$0.000	\$0.000	\$0.000		

The AGM-86B, Air Launched Cruise Missile (ALCM), is a subsonic, air-to-surface strategic nuclear missile, operational since 1982. Armed with a W80 warhead, it is designed to evade air and ground-based defenses in order to strike targets at any location within any enemy's territory. ALCM was designed for both B-52H internal and external carriage.

	<u>MOD</u>	MODIFICATION				FY-12	<u>FY-12</u>					COST	<u>TOTAL</u>
<u>CLASS</u>	<u>NR</u>	<u>TITLE</u>	<u>FY-10</u>	<u>FY-11</u>	<u>FY-12</u>	<u>000</u>	<u>Total</u>	<u>FY-13</u>	<u>FY-14</u>	<u>FY-15</u>	<u>FY-16</u>	<u>TO GO</u>	<u>PROG</u>
Р	_0468	LOW COST MODIFICATIONS		0.5	0.5		0.5						1.9
	_2783	AGM-86B SERVICE LIFE EXTENSION PROGRAM 2			8.4		8.4	4.3					12.7
	_3165	AGM-86B TRAINERS		2.5									2.6
	860001	AGM-86B SERVICE LIFE EXTENSION PROGRAM		1.6	1.6		1.6	0.2					6.6
	860004	CATIK PAYLOAD DOOR		6.2				1.7					79.6
	860005	Electronic System Test Set			4.5		4.5						4.5
TOTAL FO	OR CLASS P	-		10.8	15.0		15.0	6.3					108.0

**TOTAL FOR WEAPON SYSTEM AGM-86** 

Totals may not add due to rounding

_	TOTAL PROG includes Prior Year and Cost To Go Dollars			
		P-1 SHOPP LIST ITEM	PAGE NO.	
		NO. 12	1	

02/03/2011 Individual Mod FY 2012 PB

Center: Kirtland, NM

Modification Title and No. AGM-86B SERVICE LIFE EXTENSION PROGRAM 2 MN- 2783

CLC: AGM-86 Class: P

Exhibit P3A Congressional

Appropriation: Missile Procurement, Air Force

PE 0101122F

Team SPACE

#### **Description/Justification**

Models of Systems Affected: AGM-86B

The AGM-86B Air Launched Cruise Missile (ALCM) is a subsonic, air-to-surface strategic nuclear missile, operational since 1982. Armed with a W80 warhead, it is designed to evade air and ground-based defenses in order to strike targets at any location within any enemy's territory. ALCM was designed for both B-52H internal and external carriage. AF Long Range Planning required the service life of the ALCM be extended to 2030. In order to satisfy the life extension requirement, several phases of the Service Life Extension Program (SLEP) were implemented. Through several studies and surveillance and analysis programs, various components were identified as candidates for replacement due to aging and obsolescence issues before they become a fleet-wide problem. This modification executes SLEP 2, using separate contractual vehicles, to replace three critical components with new or refurbished components: Warhead Arming Device (WAD), Rotary Switch, and Guided Missile Flight Controller (GMFC). SLEP 2 components will be delivered via Time Compliance Technical Order (TCTO) kits to the organizational level maintenance personnel for installation in conjunction with scheduled maintenance activity. Service life extension of this critical weapon is essential to meet Air Force Global Strike Command (AFGSC) and United States Strategic Command (USSTRATCOM) commitments.

A total of 129 missiles are currently funded for modification.

ALCM SLEP is a FY12 new start.

Missile Breakdown: ACTIVE 129, RESERVE 0, ANG 0, TOTAL 129

#### **Development Status**

Engineering studies and surveillance and analysis programs have identified potential candidates for replacement due to aging and obsolescence issues. Solutions to the aging and obsolescence issues were identified through engineering studies conducted by the Original Equipment Manufacturer (OEM) and paid for with sustaining engineering funds (3400). The most recent SLEP assessments have indentified ALCM components – WAD, Rotary Switch, and the GMFC that are addressed in SLEP 2. The WAD requires complete rebuilding to include a reapplication of circuit board solder and replacement of aging wet-slug tantalum capacitors. The rotary switch and GMFC both require replacement of aging wet-slug tantalum capacitors.

#### **Projected Financial Plan**

	PR	LIOR	FY-	-10	FY	<u>-11</u>	FY	<u>Y-12</u>	FY-12	2 OCO	FY	-13
	<u>QTY</u>	COST	<u>QTY</u>	<u>COST</u>	<u>QTY</u>	<b>COST</b>	QTY	<b>COST</b>	<b>QTY</b>	<u>COST</u>	<b>QTY</b>	COST
RDT & E (3600) (Active)												
RDT & E (3600) (Guard)												
RDT & E (3600) (Reserve)												
Total RDT & E (3600)												
PROCUREMENT (3020)												
INSTALL KITS Group A (Active)							[0]					
INSTALL KITS Group A (Guard)												
INSTALL KITS Group A (Reserve)												
TOTAL: INSTALL KITS							[0]					
KITS NONRECUR Group A (Active)												
KITS NONRECUR Group A (Guard)												
KITS NONRECUR Group A (Reserve)												
TOTAL: KITS NONRECUR												

## **Projected Financial Plan Continued**

	PR	LIOR	FY-	<u>-10</u>	<u>FY</u>	<u>-11</u>	<u>FY</u>	<u>-12</u>	<u>FY-12</u>	<u> 2 OCO</u>	<u>FY</u>	<u>′-13</u>
EQUIPMENT Group B (Active) EQUIPMENT Group B (Guard)	QTY	COST	QTY	COST	QTY	COST	<u>QTY</u> 85	COST 8.362	QTY	COST	<u>QTY</u> 44	<u>COST</u> 4.328
EQUIPMENT Group B (Reserve) TOTAL: EQUIPMENT EQUIP NONREC Group B (Active) EQUIP NONREC Group B (Guard)							85	8.362			44	4.328
EQUIP NONREC Group B (Reserve) TOTAL: EQUIP NONREC CHANGE ORDERS DATA												
SIM/TRAINER SUPPORT- EQUIP INSTALL KITS												
PMA OGC								0.039 0.020				0.000
TOTAL COST (BP-2100) (Totals may not add due to rounding)							85	8.421			44	4.328
INSTALLATION QTY											50	

## Continued

Continued										
	FY	<u>-14</u>	FY-	·15	FY-	<u>-16</u>	<u>TO C</u>	COMP	TOT	<u>AL</u>
	<u>QTY</u>	<u>COST</u>	<b>QTY</b>	<u>COST</u>	<u>QTY</u>	<u>COST</u>	<b>QTY</b>	<u>COST</u>	<u>QTY</u>	<u>COST</u>
RDT & E (3600) (Active)										
RDT & E (3600) (Guard)										
RDT & E (3600) (Reserve)										
Total RDT & E (3600)										
PROCUREMENT (3020)										
INSTALL KITS Group A (Active)									[0]	
INSTALL KITS Group A (Guard)										
INSTALL KITS Group A (Reserve)										
TOTAL: INSTALL KITS									[0]	
KITS NONRECUR Group A (Active)										
KITS NONRECUR Group A (Guard)										
KITS NONRECUR Group A (Reserve)										
TOTAL: KITS NONRECUR										
EQUIPMENT Group B (Active)									129	12.690
EQUIPMENT Group B (Guard)										
EQUIPMENT Group B (Reserve)										
TOTAL: EQUIPMENT									129	12.690
EQUIP NONREC Group B (Active)										
EQUIP NONREC Group B (Guard)										
EQUIP NONREC Group B (Reserve)										
TOTAL: EQUIP NONREC										
CHANGE ORDERS										
DATA										
SIM/TRAINER										
SUPPORT- EQUIP										
INSTALL KITS										
PMA										0.039
OGC										0.020
TOTAL COST (BP-2100)									129	12.749
(Totals may not add due to rounding)	70								120	
INSTALLATION QTY	79								129	

Fact Sheet: AGM-86 MN  $\_2783\;$  AGM-86B SERVICE LIFE EXTENSION PROGRAM 2

(Continued)

Method of Implementation: Org/Intermediate
Initial Lead Time: 16 Months

Initial Lead Time: 16 Months Follow-On Lead Time: 12 Months

#### **Milestones**

	F Y - 1 1	FY-12	FY-13
Contract Date (Month/CY)		01/12	01/13
Delivery Date (Month/CY)		05/13	01/14

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 04, Spares and Repair Parts, Item No. 13	P-1 Line Item Nomenclature  Missile Initial/Replenishment Spares

Program Element for Code B Items	N/A				Other	Related Pro	ogram Ele	ments	N	I/A			
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A											TBD	TBD
Total Proc Cost(\$ M)			63.884	43. 192	43.241	0.000	43.241	46.929	55.438	40.438	38.484	TBD	TBD

## **Description**

MDAP PROGRAMS	FY10	FY11	FY12	FY13	FY14	FY15	FY16
AIM-9X	1.571	1.558	1.659	1.647	1.650	1.736	1.766
AMRAAM	2.335	0.079	0.082	0.082	.0084	0.085	0.087

Totals include funding for PRCP Program Number 185, AMRAAM.

Totals include funding for PRCP Program Number 581, AIM-9X.

Missile Initial Spares (Budget Program 26) and Replenishment Spares (Budget Program 25)

Program Description: MISSILE INITIAL SPARES (Budget Program 26). Missile Initial Spares are required to fill the initial spare parts pipeline or inventory for all new ballistic and non-ballistic missile systems, including modifications, support equipment, and other production categories. Initial spares include peculiar reparable and consumable components, assemblies, and subassemblies that must be available for issue at all levels of supply in time to support and maintain newly fielded end items.

Initial spares are funded in the two program segments described below.

Working Capital Fund (WCF) Spares. Since FY94 most spares are purchased using obligation authority in the WCF. When the spares are delivered, this central procurement account reimburses the WCF. Types of spares in this program segment are Readiness Spares Packages, New Acquisition Spares, Modification Spares, Support Equipment, Other Production, and Consumables.

Exempt Spares. This program segment finances spares that are not purchased through the WCF. The budget authority is a direct cite on the contract. Types of spares in this program segment are Contractor Logistics Support, Simulators/Trainers, Classified Equipment, and Munitions.

Program Description: MISSILE REPLENISHMENT SPARES (Budget Program 25). The Missile Replenishment Spares program funds all ballistic and non-ballistic missile replenishment spares. The replenishment and repair spare parts are needed to support and maintain ballistic and non-ballistic missile systems. Replenishment spares include such items as rocket motors, cables, telemetry packages, and electronic components.

This program has associated Research Development Test and Evaluation funding in PEs 11120F, 27161F, 11122F, and 27163F.

P-1 Shopping List Item No. 13

Budget Item Justification Exhibit P-40, page 1 of 2

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 04, Spares and Repair Parts, Item No. 13	P-1 Line Item Nomenclature Missile Initial/Replenishment Spares
FY 2012 Program Justification LGM-30 Minuteman III Mods continues to have large intial and replenishment spares requirements for FY12.	
P-1 Shopping List Item No. 13	Budget Item Justification Exhibit P-40, page 2 of 2

Missile Procurement, Air Force, 13	, Budget A	ctivity	y 04, Sp	ares and	l Repa	air Parts	, Item No	o. Mis	ssile Init	tial/Repl	enish	ment Sp	oares
Weapon System Ident Cost in Millions of Dollars Cost Elements Code													
			Prior Years FY 2010						FY 2011 FY 2012			2	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
INITIAL SPARES (Budget Program 26)	A						4.694			10.957			14.255
REPLEN SPARES (Budget Program 25)	A						59.190			32.235			28.986
TOTAL PROGRAM:							63.884			43.192			43.241

Remarks

Exhibit P-5, Weapon System Cost Analysis

Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number

P-1 Shopping List Item No. 13

Weapon System Cost Analysis Exhibit P-5, page 1 of 2

Date: February 2011

P-1 Line Item Nomenclature

Exhibit P-5, Weapon System Cost An	Date: February 2011							
Appropriation (Treasury) Code/CC/BA/BSA/Item (	Control Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force	, Budget A	ctivit	y 04, Sp	ares and	l Repa	air Parts	, Item No	. Missile Initial/Replenishment Spares
Weapon System Cost Elements	Ident Code					Total	Cost in Mill	lions of Dollars
			FY 2012 O	CO	C	ost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
INITIAL SPARES (Budget Program 26)	A						TBD	
REPLEN SPARES (Budget Program 25)	A						TBD	
TOTAL PROGRAM:							TBD	

P-1 Shopping List Item No. 13

Weapon System Cost Analysis Exhibit P-5, page 2 of 2

**Exhibit P-18A, Initial Spares Funding Summary** 

Appropriation (Treasury) Code/CC/BA/BSA/Item Number

Missile Pro Parts, Item	curement, Air Force, Budget Activity 04, Spar No. 13	es and Repair	d Repair Missile Initial/Replenishment Spares						
	Initial Spares Funding Summary								
P-1 Line	End Item Nomenclature	FY 2010	FY 2011	FY 2012	FY 2012 OCO				
13	LGM-30 Minuteman III Mods	0.788	9.320	12.514	0.000				
13	Advanced Medium Range Air-to-Air Missile (AMRAAM) / AIM-120	2.335	0.079	0.082	0.000				
13	Tactical AIM Missile	1.571	1.558	1.659	0.000				
	Total Initial Spares	4.694	10.957	14.255	0.000				

P-1 Shopping List Item No. 13

Initial Spares Funding Summary Exhibit P-18A, page 1 of 4

Date: February 2011

P-1 Line Item Nomenclature

Exhibit P-18A, Initial Spares Funding

Appropriation (Treasury) Code/CC/BA/BSA/Item Number

Missile Procu Parts, Item No	rement, Air Force, Budget Activity 04, Spare	Missile Initial/Replenishment Spares				
	<b>Initial Spares Funding</b>					
P-1 Line	End Item Nomenclature	FY 2010	FY 2011	FY 2012	FY 2012 OCO	
	TOTAL INITIAL SPARES	4.694	10.957	14.255	0.000	
	EXEMPT SPARES	4.646	10.800	12.110		
	WCF SPARES	0.048	0.157	2.145	0.000	

P-1 Shopping List Item No. 13

Initial Spares Funding Exhibit P-18A, page 2 of 4

Date: February 2011

P-1 Line Item Nomenclature

Exhibit P-18A, Replenishment Spares Funding Summary

Appropriation (Treasury) Code/CC/BA/BSA/Item Number

Missile Pro Parts, Item	curement, Air Force, Budget Activity 04, Spares No. 13	and Repair	Missile Initial/F	Replenishment S <sub>l</sub>	pares
	Replenishment Spares Funding Summary				
P1-Line	End Item Nomenclature	FY 2010	FY 2011	FY 2012	FY 2012 OCO
1	AIM-9 Tactical AIM Missile (0207161F)	0.817	3.514	7.866	0.000
2	AGM-86 Air Launced Cruise Missile (0101122F) (ALCM)	10.875	0.266	1.296	
3	LGM-30 MINUTEMAN (0101213F) (MM III)	40.304	17.676	13.922	
7	AGM-88A Tactical AGM Missile (0207162F) (HARM)	6.393	9.981	3.401	
8	AIM-120 Advanced Medium Range Air to Air Missile (0207163F) (AMRAAM)	0.801	0.798	0.804	0.000
10	AGM-65D Maverick (0207313F)	0.000	0.000	1.398	
11	Preditor Hellfire Missile (0201109F)	0.000	0.000	0.299	
	Total Replenishment Spares	59.190	32.235	28.986	0.000

Date: February 2011

P-1 Line Item Nomenclature

**Exhibit P-18A, Replenishment Spares Funding**Appropriation (Treasury) Code/CC/BA/BSA/Item Number

Missile Prod Parts, Item	curement, Air Force, Budget Activity 04, Spare No. 13	es and Repair	Missile Initial/F	Replenishment S	pares
	Replenishment Spares Funding				
P-1 Line	End Item Nomenclature	<u>FY 2010</u>	FY 2011	<u>FY 2012</u>	<u>FY 2012 OCO</u>
	TOTAL REPLENSHMENT SPARES	59.190	32.235	28.986	0.000
	EXEMPT SPARES	59.190	32.235	28.986	
	WCF SPARES	0.000	0.000	0.000	0.000

P-1 Shopping List Item No. 13

Replenishment Spares Funding Exhibit P-18A, page 4 of 4

Date: February 2011

P-1 Line Item Nomenclature

Exhibit P-40, Budget Item Justific	cation						Date: Febru	ary 2011			
Appropriation (Treasury) Code/CC/BA/BS.  Missile Procurement, Air F			05, Other	Support,	Item No. 1	4	P-1 Line Item N Advanced				
Program Element for Code B Items: N	//A						Other Rela	ited Program E	lements: 0603	430F	
	ID Code	Prior Years	FY 2014	FY 2015	FY 2016	To Complete	Total				
Proc Qty	A	1	1		2				2		6
Annual Appropriation											
Cost (\$ M)		538.692	1,836.687	38.078	552.833	85.521	88.088	90.605	328.269	144.800	3,703.573
Adv Proc Cost (\$ M)		385.438		208.520							593.958
Total Proc Cost (\$ M)		924.130	1,836.687	246.598	552.833	85.521	88.088	90.605	328.269	144.800	4,297.531

469.900

555.421

454.300

542.388

395.800

486.405

358.200

686.469

716.700

861.500

2,394.900

6,692.431

#### **Description**

Advance Appropriations
Space Vehicles 5 & 6 (\$ M)

Total Proc Cost (\$M)

Totals include funding for PRCP Program Number 261, AEHF. This program has associated Research Development Test and Evaluation funding in PE 0603430F.

1,836.687

924.130

The program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$9.2M in FY12.

Develop and acquire Advanced Extremely High Frequency (AEHF) Military Satellite Communications (MILSATCOM) satellites, mission control segment and cryptography for survivable, anti-jam, worldwide, secure communications for the strategic and tactical warfighter. AEHF satellites will replenish the existing EHF system (Milstar) providing much higher capacity and data rate (5x increase over Milstar II) capabilities. AEHF is a cooperative program that includes International Partners (Canada, the United Kingdom, and the Kingdom of the Netherlands).

246.598

552.833

Satellite Vehicle-3 (SV-3) has a projected launch availability of No Earlier Than (NET) 1QFY13 and SV-4 has a projected launch availability of 3QFY17.

SVs 5-6 will be procured under the Department of Defense's Evolutionary Acquisition for Space Efficiency (EASE) approach which enables stable production and strategic sub-tier management through the block buy of two space vehicles employing fixed-price contracting. The block buy of satellites enables savings by reducing the effect of obsolescence and production breaks, economic buying of components, and by optimizing production "learning". Additionally, EASE enables cost efficiencies with the prime and subcontractor team, including Economic Order Quantities (EOQ) as well as predictability for the space industrial base.

#### FY 2012 Program Justification

Funding supports efforts such as the initiation of SV 5-6 production block buy; continuation of technical support to include obsolescence/Diminshing Manufacturing Sourcrs (DMS) studies; and continuation of program office and related support.

#### **EASE Implementation**

FY12 is the year of full funding for SV-5 and SV-6. FY13-17 comprises five years of advance appropriations as requested in the EASE Legislative Proposal for the FY12 National Defense Authorization Act. The FY12 \$475.3M and the Advance Appropriations amounts reflect the OSD CAPE estimate of the contract costs. Funding for program related support costs will be requested as an annual appropriation.

P-1 Shopping List Item No. 14

Budget Item Justification Exhibit P-40, page 1 of 12

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 14 Advanced EHF

Weapon System Cost Elements	Ident Code					Total	Cost in Mi	illions of	Dollars				
			Prior Yea	rs		FY 2010	)		FY 2011			FY 2012	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Satellite Vehicle 3 procurement	A	1		600.114			370.100						
Satellite Vehicle 3 launch support services	A			7.897			27.700			20.700			
Satellite Vehicle 4	A				1		1703.099						
Satellite Vehicle 4 launch support services	A												
Satellite Vehicle 5-6 Block Buy	A										2		3078.720
Satellite Vehicle 7-8 Block Buy	A												
Technical Support to include obsolescence studies and analyses	A			8.907			30.800			11.200			26.700
Program Office Support	A						12.200			6.178			50.833
Gross P-1 Cost		[1]		[616.918]	[1]		[2143.899]	[0]		[38.078]	[2]		[3156.253
Less Prior Year Advance Procurement	A			-78.226			-307.212						-208.520
Less Advance Appropriations	A												
For FY13	A												-469.900
For FY14	A												-454.300
For FY15	A												-395.800
For FY16	A												-358.200
For FY17	A												-716.700
For FY18	A												
For FY19	A												
For FY20	A												
For FY21	A												
Net P-1 Full Funding Cost	A			[538.692]			[1395.887]						[552.833]
Plus Current Year Advance Procurement	A			385.438						208.520			
TOTAL PROGRAM:				924.130			1836.687			246.598			552.833

#### Remarks

Unit procurement cost under traditional acquisition approach (TY\$):

SV #3 = \$970.2M; SV #4 = \$1,703.1M.

P-1 Shopping List Item No. 14

Weapon System Cost Analysis Exhibit P-5, page 2 of 12

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 14	Advanced EHF
Domontos Continued	
Remarks Continued  In 2010, the OSD CAPE estimated that under a traditional acquisition approach, SV #5 production in FY12 would cost \$2,174M.	\$1,781M and SV #6 production in FY14 would cost
Unit procurement cost under EASE acquisition (TY\$): SV #5 = \$1,539.4M; SV #6 \$1.539.4M.	
Assuming successful EASE implementation for SV 5 & 6, the Block Buy of SV 7 & 8 under Ease acquisition strategy/	funding is reflected beginning in FY16.
P-1 Shopping List Item No. 14	Weapon System Cost Analysis  Exhibit P-5, page 3 of 12

Appropriation (Treasury) Code/CC/BA/BSA/Item Contro	Mumbar							P-1 Line Item Nomenclature
		41 14						
Missile Procurement, Air Force, Bu	idget A	Ctivity	y 05, Oti	ner Supp	ort, I	em No.	14	Advanced EHF
Weapon System	Ident					Tota	1 Cost in Milli	ions of Dollars
Cost Elements	Code							
		]	FY 2012 O	CO	C	ost to Com	nplete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Satellite Vehicle 3 procurement	A							
Satellite Vehicle 3 launch support services	A							
Satellite Vehicle 4	A							
Satellite Vehicle 4 launch support services	A							
Satellite Vehicle 5-6 Block Buy	A							
Satellite Vehicle 7-8 Block Buy	A							
Technical Support to include obsolescence studies and analyses	A							
Program Office Support	A							
Gross P-1 Cost		[0]		[0.000]	[0]		[0.000]	
Less Prior Year Advance Procurement	A							
Less Advance Appropriations	A							
For FY13	A							
For FY14	A							
For FY15	Α							
For FY16	A							
For FY17	A							
For FY18	A							
For FY19	A							
For FY20	A							
For FY21	A							
Net P-1 Full Funding Cost	A							
Plus Current Year Advance Procurement	A							
ГОТAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 14

Weapon System Cost Analysis Exhibit P-5, page 4 of 12

Exhibit P-5A, Procui	ement His	tory and Pl	anning							Date: Fe	ebruary 201	1
Appropriation (Treasury) C Missile Procuren				vity 05, Ot	ther Supp	ort, Item	No. 14			Item Nomeno		
Weapon System					Subline Ite	m		-				
Advanced EHF												
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Awar	d Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
Satellite Vehicle 3							1					
(2006)	1	970.214	SMC, LA AFB, El Segundo, CA	Sep-05	SS	CPAF	Lockheed Martin / Sunnyvale, CA	Jan-0	6	Aug-12	Y	
Satellite Vehicle 4							/					
(2010)	1	1703.099	SMC, LA AFB, El Segundo, CA	Sep-09	SS	CPIF	Lockheed Martin / Sunnyvale, CA	Dec-1	.0	Feb-17	Y	
Satellite Vehicle 5-6 Block Buy							1					
(2012)	2	1539.360	SMC, LA AFB, El Segundo, CA	Jun-11	SS	FPIF	Lockheed Martin / Sunnyvale, CA	Apr-1	2		Y	
<u>Remarks</u>												
Satallita Wahiala 2 Uni	it Cost is bos	ad an nagatic	atad aantroat n	rigina plua ¢2	270M for proje	antad anot a	varrun Advance Porte cont	troot m		dad in Maral	2005 Eull	

Satellite Vehicle 3 Unit Cost is based on negotiated contract pricing plus \$370M for projected cost overrun. Advance Parts contract was awarded in March 2005. Full Procurement contract was awarded in January 2006. First time integration test challenges along with flight hardware problems encountered with SV-1 had a cascading effect on the SV-3 schedule and funding; these impacts were reflected in the November 2008 OSD CAIG cost estimate.

Satellite Vehicle 4 unit cost is based on the November 2008 OSD CAIG cost estimate.

Satellite Vehicles 5-6 will be procured as a block buy, the unit cost is based on a December 2010 OSD CAPE cost estimate of \$3.079B for two satellites.

P-1 Shopping List Item No. 14

Procurement History and Planning Exhibit P-5A, page 5 of 12

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	r											P-1	Line Ite	em Noi	mencla	iture					
Mis	sile F	Procu	ırem	ent, A	ir Fر	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	uppo	ort, I	tem	No.	14		Ad	van	ced	EHF						
			ACCEP	BALAN					Fl	SCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC		PROC				2009						CAL	ENDAR	YEAR	2010								CALENI	DAR YE	AR 2011	l			Α
YEAR	SERV.	QTY.			O	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	T
PROC. YEAR         SERV. QTY.         TO AS OF 1 OCT.         O N D J F M A M J J A S TO														R															
2006	Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 14    Post																												
TO	ACCE, BALAN PRIOR CE DUE CE DUE TO AS OF 1 OCT. 2009 T V C N B R R R Y N L G P T V C N T T V C N T T V C N T T V C N T T V C N T T V C N T T T V C N T T T V C N T T T V C N T T T V C N T T T V C N T T T T T T V C N T T T T T T T T T T T V C N T T T T T T T T T T T T T T T T T T																												
	Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 14  FISCAL YEAR 2010  FISCAL YEAR 2010  CALENDAR YEAR 2010  CALENDAR YEAR 2010  CALENDAR YEAR 2010  CALENDAR YEAR 2011  A SERV. PRIOR (C DUE)  2009  TO AS OF O N D J F M A M J J J A S S O N D J F M A S R R Y N N L G P T V C N B R R R Y N L G P R C DUE  2006  USAF 1																												
Missile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 14   Advanced EHF   Advanced EH																													
						•		PRO	DDUCT	ION RA	TES								PRC	CUREN	MENT L	EAD TI	ME						
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	MS	SR	EC	ON	M	4Χ				ADMII	N LEAD	TIME		MF	·G	TO	TAI AF	TFR					
	Loc	kheed M	artin		Sunnyv	ale, CA							1		PR	IOR		AFTER	1			. •							
	Lockheed Martin Sunnyvale, CA PRIOR 1 OCT											1 OCT																	
		Lockheed Martin Sunnyvale, CA PRIOR										4		7	9		83												
													REORE	DER															
REMA	RKS																												

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 6 of 12

Exhi	bit P-	21, Pr	oduct	ion S	chedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/E	BA/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em No	mencla	ture					
Mis	sile F	rocu	ırem	ent, /	Air F	orce,	, Bu	dget	Acti	ivity	- 05,	Oth	er S	upp	ort, I	tem	No.	14		Ac	lvan	ced	EHF						
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC.		PROC.		CE DUE	E	2011						CAI	LENDAR	YEAR	2012								CALENI	OAR YE	AR 2013	3			Α
YEAR	YEAR SERV. QTY. 10 AS OF O N D J F M A M J J A S O D O D E A E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O D E A E A F R Y N L G P T V C N B R R Y N L G I COMB COMB COMB COMB COMB COMB COMB COMB															S E P	T E R												
2006	USAF	1		1																							0		
TO	006         USAF         1         1         1         1         1         0 <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>															0	0	0	0	0	0	0	0	0					
								PRO	ODUCT	ION RA	TES							•	PRC	CURE	ΛΕΝΤ L	EAD TII	ME						-
ITE	M/MANU	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	-G	TO.	TAL AF	ΓFR					
	Loc	kheed M	artin		Sunny	/ale, CA										IOR OCT		AFTER 1 OCT		PI			1 OCT						
								INITIAL 4										7	9		83		1						
													REOR	DER															
REMAI	RKS																												

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 7 of 12

Exhi	bit P-	21, Pr	oduct	ion S	chedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/E	BA/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em No	mencla	iture					
Mis	sile F	rocu	ırem	ent, /	4ir F	orce,	, Bu	dget	Acti	ivity	- 05,	Oth	er S	upp	ort, I	tem	No.	14		Ac	lvan	ced	EHF						
			ACCEP	BALAN	1				F	ISCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.		PROC.		CE DUE	3	2009						CAI	LENDAR	YEAR	2010								CALENI	DAR YE	EAR 201	1	_		Α
YEAR	YEAR SERV. QTY. 10CT. 1 OCT. 1 OCT. C O E A E A E A P A U U U E C O E A E A P A U U U C E C O E A E A P A U U U C E C O E A E A P A U U U C E C O E A E A F R Y N L G P T V C N B R R Y N L G															S E P	T E R												
2010	USAF	1		1																								1	
TO																0	0	0	0	0	0	0	0	1					
								PR	DDUCT	ION RA	TES				•		•		PRO	CURE	ΛΕΝΤ L	EAD TII	ME		•				
ITE	M/MANU	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	-G	TO.	TAL AF	TFR					
	Loc	kheed M	lartin		Sunny	/ale, CA										IOR OCT		AFTER 1 OCT		PI			1 OCT						
								INITIAL 3										8	7		90		Ī						
													REORI	DER															
REMAI	RKS																												

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 8 of 12

Exhibit P-21, Production Schedule																												
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	iture				
Mis	sile F	Procu	ırem	ent, A	ir Fر	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	14		Ad	van	ced	EHF					
	ROC. TO USAF 1 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																											
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number   Missile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 14   Advanced EHF													A															
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 14  PROC. YEAR PROC. YEAR 2012  TO AS OF O N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D B R R R Y N N L G P T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N N L G P F T V C N B R R R Y N L G R P T V N L G T T T T T T T T T T T T T T T T T T														T E R														
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 14  PROC. SERV. PROC. OTT. OF AS OF 1 OF														1														
P-1 Line														1														
	P-1 Line   Item Nomenclature																											
						•		PR	DUCT	ION RA	TES								PRC	CUREN	1ENT LI	EAD TII	ME					
ITE	M/MANU	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	G.	TO.	TAL AF	TER				
	Loc	kheed M	artin		Sunnyv	ale, CA												—.										
			ACCEP, BALAN PRIOR CE DUE TO AS OF 1 OCT. 1 OCT. 2011 TO V C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E C O E A E A E A P A U U U U E E C O E E A E A E A P A U U U U E E C O E E A E A E A P A U U U U E E C O E E A E A E A P A U U U U E E C O E E A E A E A P A U U U U E E C O E E A E A E A P A U U U U E E C O E E A E A E A P A U U U U E E C O E E A E A E A P A U U U U U E E C O E E A E A E A P A U U U U U E E C O E E A E E A E A P A U U U U E E C O E E A E E A E A P A U U U U E E C O E E A E E A E E A E E A E E A E E A E E A E E A E E A E E A E E A E																									
													REORE	DER														
REMA	RKS																											

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 9 of 12

Exhi	bit P-2	21, Pr	oduct	ion S	chedu	le																	Date	: Febi	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/E	BA/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	ture					
Mis	sile F	rocu	ırem	ent, /	Air F	orce,	, Bu	dget	Acti	vity	- 05,	Oth	ier S	upp	ort, I	tem	No.	14		Ad	lvan	ced	EHF						
			ACCEP.	BALAN					FI	SCAL Y	EAR 20	14									FI	SCAL Y	EAR 20	15					L
PROC.		PROC.		CE DUE		2013						CAI	LENDAR	YEAR	2014								CALENI	OAR YE	AR 201:	5	_		Α
YEAR	SERV.         PROC. QTY.         TO 1 OCT. 1 OCT. 2013         O N D E A B C C O E A E A E A P A U U U U E C C O E A E A E A P A U U U U U U E C C O E C C O E C C O E C C C C C C C															D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R			
2010	USAF	1		1		V C N B R R I N E G I I																							1
TO	ΓAL	1	0	1	0	0 0 0 0 0 0 0 0 0 0 0 0													0	0	0	0	0	0	0	0	0	0	1
	OTAL 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0															A P R	M A Y	J U N	J U L	A U G	S E P								
								PRO	ODUCTI	ON RA	TES	•		•	•	•	•	•	PRO	CUREN	/ENT L	EAD TII	ME		•	•	•		
ITE	M/MANU	IFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	AX				ADMI	N LEAD	TIME		MF	:G	TO	TAL AF	ΓFR					
	Loc	kheed M	artin		Sunnyv	ale, CA										IOR OCT		AFTER 1 OCT		PL			1 OCT						
								INITIAL 3										8	7		90		1						
													REORI	DER											1				
REMA	RKS																												

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 10 of 12

Exhi	bit P-	21, Pr	oduct	ion S	chedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/E	BA/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em No	mencla	iture					
Mis	sile F	Procu	ırem	ent, /	Air F	orce,	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	14		Ac	lvan	ced	EHF						
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	16									FI	SCAL Y	EAR 20	17					L
PROC.		PROC			E	2015						CAI	LENDAR	YEAR	2016	_			_				CALENI	OAR YE	AR 2017	7			Α
YEAR	SERV.   PROC.   TO   AS OF   O   N   D   J   F   M   A   M   J   J   A   S   O   N   D   J   F   M   A   M   J   J   A   S   T																												
2010	USAF	1		1																									
TO	ΓAL																												
					O C T	N O V	E		E	Α	A P R	M A Y	J U N	J U L	A U G	Ē		N O V	E	J A N	F E B	Α	A P R	Α	J U N	J U L	U	S E P	
						•		PRO	ODUCT	ION RA	ΓES			•	•	•	•	•	PRC	CURE	ΛΕΝΤ L	EAD TII	ME	•	•		•		
ITE	M/MANL	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	4Χ				ADMI	N LEAD	TIME		ME	:G	TO	TAI AF	TFR					
	Loc	kheed M	artin		Sunny	/ale, CA																							
													INITIAL	_				3		8	7		90		1				
													REORI	DER															
REMA	RKS	•	•	•			•			•	·		•	•						·	•		•		•				

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 11 of 12

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treası	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	rocu	ırem	ent, A	ir Fر	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	14		Ad	van	ced	EHF						
			ACCEP.	BALAN					Fl	ISCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.		PROC				2009						CAI	ENDAR	YEAR	2010								CALENI	DAR YE	AR 2011				Α
YEAR	SERV.	QTY.	TO 1 OCT. 2009	AS OF 1 OCT 2009	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2012	SERV   PROC.   OT   OCT   OC																												
TO	O																												
					O C T		Е	J A N	F E B	M A R	P	M A Y	J U N	J U L	A U G	E	O C T		D E C	J A N	F E B	A	A P R	M A Y	J U N	J U L	U	S E P	
								PR	ODUCT	ION RA	TES								PRC	CUREN	IENT L	EAD TII	ME						
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	·G.	TO.	TAL AF	TER					
	Loc	kheed M	artin		Sunnyv	ale, CA											1	—.	-										
													INITIAL																
													REORE	DER															
REMA	RKS																												

P-1 Shopping List Item No. 14

Production Schedule Exhibit P-21, page 12 of 12

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature Advanced EHF Advanced Procurement

Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments	Advanced EHF (PE 0603430F)					
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total	
Proc Qty	Α						0						0	
Cost(\$ M)			0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000	
Advance Proc Cost(\$ M)		385.438	0.000	208.520	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	593.958	
Weapon System Cost(\$ M)		385.438	0.000	208.520	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	593.958	
Initial Spares(\$ M)							0.000						0.000	
Total Proc Cost(\$ M)		385.438	0.000	208.520	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	593.958	
Flyaway Unit Cost(\$ M)							0.000						0.000	
Wpn Sys Unit Cost(\$ M)							0.000						0.000	

#### **Description**

Totals include funding for PRCP Program Number 261, AEHF. This program has associated Research Development Test and Evaluation funding in PE 0603430F.

Develop and acquire Advanced Extremely High Frequency (AEHF) Military Satellite Communications (MILSATCOM) satellites, mission control segment and cryptography for survivable, anti-jam, worldwide, secure communications for the strategic and tactical warfighter. AEHF satellites will replenish the existing EHF system (Milstar) providing much higher capacity and data rate (5x increase over Milstar II) capabilities. AEHF is a cooperative program that includes International Partners (Canada, the United Kingdom, and the Kingdom of the Netherlands).

#### **FY 2012 Program Justification**

N/A

P-1 Shopping List Item No. 15

Budget Item Justification Exhibit P-40, page 1 of 4

Exhibit P-10 p.1. (Page 1 – Fundir		rocureme	nt Require	ments Ana	lysis					Date:	February 2	2011	
Appropriation (Treasu Missile Procu					05, Other	Support	i, Item Nc	). 15		Nomenclatur ed EHF A		Procure	ment
Weapon System				First Syste	em Award Da	ate	First Syste	m Completio	on Date		Interval Be	tween Syster	ms
Advanced EHF Ad	vance Procur	ement		1									
						(\$ in Millio	ons)						
Description	PLT	When Rqd	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2013	FY 2014	FY 2015	FY 2016	То Сотр	<u>Total</u>
End Item Qty			1	1		2					2		6
					_				-			_	
CFE													0.000
Engines				Ī	·								0.000
GFE													0.000
EOQ													0.000
Design		!			!	!							0.000
Term Liability													0.000
Parts Obsolescence Study			5.000										5.000
Other Advance Funding	12.000		380.438		208.520								588.958
TOTAL AP			385.438	0.000	208.520	0.000	0.000	0.000	0.000	0.000	0.000	0.000	593.958

P-1 Shopping List Item No. 15

Advance Procurement Requirements Analysis (Page 1 - Funding) Exhibit P-10, p. 1, page 2 of 4

Exhibit P-10 p.2 (Page 2 – Budg			∍ment Re	quiremen	nts Analys	sis						Date: Fe	bruary 20	11	
Appropriation (Treas Missile Proc					tivity 05	, Other \$	Suppor	t, Item N	lo. 15		e Item Nome anced E		anced F	Procure	ment
Weapon System										•					
Advanced EHF A	dvance Pro	curement													
						(TO	A, \$ in Mi	llions)							
<u>Description</u>	<u>PLT</u>	<u>QPA</u>	<u>Unit</u> <u>Cost</u>	2010 QTY	2010 Contract Forecast Date	2010 Total Cost Request	2011 QTY	2011 Contract Forecast Date	2011 Total Cost Request	2012 QTY	2012 Contract Forecast <u>Date</u>	2012 Total Cost Request	2012 OCO QTY	2012 OCO Contract Forecast Date	2012 OCO Total Cost Request
End Item															
	-														
CFE															
GFE															
EOQ															
Parts Obsolescence Study															
Design															
Term Liability															
Other Advance Funding	12.000							Mar-11	208.520						
TOTAL AP						0.000			208.520			0.000			0.000
Description															

In FY11, a contract for SV-5 long lead parts and replacement of obsolete parts will be awarded. Contract is projected to include the design, production, and related support of SV-5 long lead parts for the Monolithic Microwave Integrated Circuit Design/Production and the Timing Generator Unit Design. Additionally, items such as Application-Specific

P-1 Shopping List Item No. 15

**Advance Procurement Requirements Analysis** (Page 2 - Budget Justification) Exhibit P-10, p. 2, page 3 of 4

Exhibit P-10 p.2. Advance Procurement Requirements Analysis	Date: February 2011
(Page 2 – Budget Justification)	Bate. I deliatly 2011
	Line Item Nomenclature Ivanced EHF Advanced Procurement
Integrated Circuits (ASICs), Static Random Access Memory (SRAM), Gimbal Dish Antenna (GDA), Gimbal Drive Mecha Hall Thrusters require longer procurement time to support the production, integration and testing of SV-5.	nism (GDM), Reaction Wheel Assembly (RWA), and
P-1 Shopping List Item No. 15	Advance Procurement Requirements Analysis (Page 2 - Budget Justification) Exhibit P-10, p. 2, page 4 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature Wideband Gapfiller Satellites (Space)

Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments	P	E 0603854	·F		
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	5	0	1	1	0	1	0	0	0	0	0	7
Cost(\$ M)		1330.264	150.217	517.601	468.745		468.745	50.659	62.379	97.163	98.473	74.700	2850.201
Advance Proc Cost(\$ M)		138.343	62.201	58.110	0.000		0.000	0.000	0.000	0.000		0.000	258.654
Weapon System Cost(\$ M)		1468.607	212.418	575.711	468.745	0.000	468.745	50.659	62.379	97.163	98.473	74.700	3108.855
Initial Spares(\$ M)		0.000					0.000					0.000	0.000
Total Proc Cost(\$ M)		1468.607	212.418	575.711	468.745	0.000	468.745	50.659	62.379	97.163	98.473	74.700	3108.855
Flyaway Unit Cost(\$ M)							0.000						0.000
Wpn Sys Unit Cost(\$ M)							0.000						0.000

#### **Description**

Totals include funding for PRCP Program Number 326, WGS. This program has associated Research Development Test and Evaluation funding in PE 0603854F.

The program funding includes overhead reduction efficiencies that are not intended to impact the program content. The efficiencies reductions total \$3.694M in FY12.

The Wideband Global SATCOM (WGS) System, previously known as the Wideband Gapfiller Satellite System, provides the DoD with high data rate military satellite communication (MILSATCOM) services in accordance with the Joint Space Management Board-approved MILSATCOM architecture (August 1996), the Joint Requirements Oversight Council (JROC)-approved MILSATCOM Capstone Requirements Document (October 1997), and JROC-approved WGS Operational Requirements Document (May 2000). This program was originally conceived to augment the near-term "bandwidth gap" in warfighter communications needs. Dual-frequency WGS satellites augment, then replace the DoD's Defense Satellite Communications System X-band service and augment one-way Global Broadcast Service Ka-band capabilities. In addition, WGS provides a new high capacity two-way Ka-band service.

WGS Block I consists of satellites 1-3. These satellites were successfully launched on 10 October 2007, 3 April 2009, and 5 December 2009, respectively.

WGS Block II consists of satellites 4-6. Block II satellites are designed with slight modifications to better support the Airborne Intelligence, Surveillance and Reconnaissance mission. Launches for satellites 4-5 are scheduled for December 2011 and October 2012, respectively.

A United States-Australia WGS partnership was codified 14 November 2007. Australia provides funds needed to buy Space Vehicle-6 (SV-6) in exchange for access to constellation-wide resources. Launch for satellite 6 is scheduled for March 2013.

WGS Block II Follow-on currently consists of satellites 7 and 8 with projected launches in FY16 and FY17, respectively.

P-1 Shopping List Item No. 16

Budget Item Justification Exhibit P-40, page 1 of 10

UNCLASSIFIED	
Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 16	P-1 Line Item Nomenclature Wideband Gapfiller Satellites (Space)
Description Continued	
A Nunn-McCurdy review due to a critical Average Procurement Unit Cost (APUC) breach has completed and the	program consisting of eight satellites was certified on 1 Jun 20
The Air Force is currently working to develop a Memorandum of Understanding (MOU) with a consortium of Inte of WGS-9. The MOU must be signed by October 2011 to ensure receipt of IP funding by January 2012 in order to maintain the WGS production line.	
<b>FY 2012 Program Justification</b> FY12 funding includes: Satellite 8 full procurement, Satellites 4 and 5 flight preparation, spares, mission assurance technical analysis, test support (to include Camp Parks), program office and other related support activities.	e, Federally Funded Research and Development Center (FFRDC
P-1 Shopping List Item No. 16	Budget Item Justification

Exhibit P-40, page 2 of 10

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 16	Wideband Gapfiller Satellites (Space)

Weapon System Cost Elements	Ident Code	Total Cost in Millions of Dollars													
2333			Prior Year	rs		FY 2010	)		FY 201	1		FY 2012			
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
Flyaway Cost	A														
Hardware-Recurring	A														
Vehicle	A	5	248.239	1241.197				1	511.369	511.369	1	486.923	486.923		
Subtotal Recurring	A														
Non-recurring & Ancillary Cost	A						[67.760]								
Tooling & Test Equipment	A														
Subtotal Non-recurring	A						67.760								
Joint Terminals Engineering Office	A			[1.359]											
Program Office Support Cost*	A			[34.478]			[7.821]			[11.923]			[11.776]		
Total Flyaway Cost	A														
Total Support Cost	A			35.837			7.821			11.923			11.776		
Checkout & Launch	A			[149.025]			[57.279]			[35.149]			[10.098]		
Storage, Reactivation, & Transport	A						[4.637]			[4.966]					
Launch Services - Flight Support	A														
Technical Analysis Support	A			[42.548]			[12.720]			[16.395]			[18.058]		
Total Checkout & Launch	A			191.573			74.636			56.510			28.156		
Net P-1 Funding Cost	A			[1468.607]			[150.217]			[578.802]			[526.855]		
Less Advance Procurement (Prior Year)	A			-138.343						-62.201			-58.110		
Net P-1 Full Funding Cost	A			[1102.854]						[449.168]			[428.813]		
Plus Advance Procurement (Current Year)	A			138.343			62.201			58.110					
TOTAL PROGRAM:				1468.607			212.418			575.711			468.745		

#### Remarks

P-1 Shopping List Item No. 16

Weapon System Cost Analysis Exhibit P-5, page 3 of 10

<sup>\*</sup> Program Office Support Cost includes SPO operations (such as travel, supplies, acquisition mission support, etc.), SETA, and Systems Engineering and Integration

#### Exhibit P-5, Weapon System Cost Analysis Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 16 Wideband Gapfiller Satellites (Space) Weapon System Total Cost in Millions of Dollars Ident Cost Elements Code FY 2012 OCO Cost to Complete Unit Cost Total Cost Unit Cost Total Cost Qty Qty Flyaway Cost Α Hardware-Recurring Α Vehicle Α Subtotal Recurring Α Non-recurring & Ancillary Cost Α Tooling & Test Equipment Α Subtotal Non-recurring Α Joint Terminals Engineering Office Α Program Office Support Cost\* [106.718] Α Total Flyaway Cost Α Total Support Cost 106.718 Α Checkout & Launch [49.849] Α Storage, Reactivation, & Transport [63.840] Α Launch Services - Flight Support Α Technical Analysis Support [162.967] Α Total Checkout & Launch 276.656 Α Net P-1 Funding Cost Α

P-1 Shopping List Item No. 16

0.000

383.374

Less Advance Procurement (Prior Year)

Plus Advance Procurement (Current Year)

Net P-1 Full Funding Cost

TOTAL PROGRAM:

Α

Α

Α

Weapon System Cost Analysis Exhibit P-5, page 4 of 10

Exhibit P-5A, Procus Appropriation (Treasury) C Missile Procuren	ode/CC/BA/Bs	/Item Control N	Number:	vity 05, Ot	ther Supp	ort, Item	No. 16		tem Nomeno	ebruary 201 clature: pfiller Sat	
Weapon System					Subline Ite	m		(Opa			
WBd											
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
Satellites 1 & 2							/				
(2002)	2	246.300	SMC	Jun-00	SS	FFP	BSS / El Segundo, CA	Jan-02	Mar-08	Y	
Satellite 3							/				
(2003)	1	246.300	SMC	Jun-00	SS	FFP	BSS / El Segundo, CA	Nov-02	May-10	Y	
Satellite 4							/				
(2007)	1	376.463	SMC	Apr-05	SS	FPI	BSS / El Segundo, CA	Nov-06	Dec-11	Y	
Satellite 5							/				
(2008)	1	343.864	SMC	Apr-05	SS	FPI	BSS / El Segundo, CA	Dec-07	Oct-12	Y	
Satellite 7							1				
(2011)	1	TBD	SMC	Jan-10	SS	FPI	BSS / El Segundo, CA	Mar-11	Oct-15	Y	
Satellite 8							1				
(2012)	1	TBD	SMC	Jan-10	SS	FPI	BSS / El Segundo, CA	Jan-12	Oct-16	Y	
Remarks Satellites 1-3 Unit Cos	t: The above	e unit cost is	the Average D	rocurement I	Init Cost (BV)	Ol) This in	cludes both Missile Procur	rement and Oth	per Progurem	ent but door	not include

**UNCLASSIFIED PAGE 05 -21** 

P-1 Shopping List Item No. 16

**Procurement History and Planning** 

Exhibit P-5A, page 5 of 10

Exhibit P-5A, Procurement History and Planning		Date: February 2011
Appropriation (Treasury) Code/CC/BA/Bs/Item Control Number:		P-1 Line Item Nomenclature:
Missile Procurement, Air Force, Budget A	ctivity 05, Other Support, Item No. 16	Wideband Gapfiller Satellites (Space)
<u>Veapon System</u>	Subline Item	•
VBd		
the WGS program development costs or other RDT&E.	Launch Services/Flight Ops Support: Date of delivery varies for	each satellite.
	d on Missile Procurement only (includes production of satellite ve February 2006 and Full Procurement in November 2006. Satelli	
Satellite 6 is funded by Australia. Advance Procurement of	contract was awarded in December 2007 and Full Procurement in	December 2008.
Satellite 7-8 Unit Cost: TBD, Contract award with priced	options pending.	
	ne government is approximately five months after launch. DD250 es 4-6 is accomplished upon ignition of their respective launch ve	
	P-1 Shopping List Item No. 16	Procurement History and Planning Exhibit P-5A, page 6 of 1

Exhi	bit P-2	21, Pr	oducti	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	le/CC/B	A/BSA	/Item C	Control	Numbe	r											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	rocu	ıreme	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	16		Wi	deb	and	Gap	filler	Sat	ellite	s (S	pace	e)
			ACCEP.	BALAN					Fl	ISCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.		PROC.		CE DUE		2009						CAL	ENDAR	YEAR	2010								CALENI	DAR YE	AR 201	1			Α
YEAR	SERV.	QTY.	TO 1 OCT.	AS OF	O	N	D	J	F	M	A	M	J	J	Α	S	O	N	D	J	F	M	A	M	J	J	A	S	T
			2009	1 OCT 2009	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	G U	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	L	U G	E P	R
2007	USAF	1	0	1																									1
2008	USAF	1	0	1																									1
2011	USAF	1	0	1																									1
2012	USAF	1	0	1																									1
TO	ΓAL	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
					О	N	D	J	F	M	A	M	J	J	A	S	О	N	D	J	F	M	A	M	J	J	A	S	
					С	O	E	A N	E	A	P	A	U	U	U	E	C	O V	E	A N	Е	A	P	A	U	U	U G	E	
					1	V	C	DD(		ION RA	TES	I	IN	L	G	P	1	V	PRO	CURE	/ENIT I	EAD TII	ME	1	IN	L	G	r	Щ
I 175	NA/NA NII I	EACTLE	RER'S NA	<b>^ ^ ^ / ^ / / / / / / / / / /</b>	LOCA	MOITA	N / S	SR		ON		ΑX							1110	I	/ILINI L		VIL						$\overline{}$
111	IVI/IVIAINO	ACTO	ALIA O INA	≺IVIL	LOOP	VIIOIV	IVIS	SK.		ON	IVIZ	4.^				ADMI	N LEAD	TIME		MF	G.	TO.	TAL AF	TER					
	Boeing :	Satellite	Systems												PR	IOR		AFTER	1	PI			1 OCT						
															1 0	CT		1 OCT											
													INITIAL	_						6	3		63						
													REORE	DER															
REMA	RKS					<u> </u>													<u> </u>										

P-1 Shopping List Item No. 16

Production Schedule Exhibit P-21, page 7 of 10

Exhi	bit P-2	21, Pr	oducti	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Coc	le/CC/B	A/BSA	/Item C	Control	Numbe	r											P-1	Line Ite	em Noi	mencla	ture					
Mis	sile F	rocu	ıreme	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	16		Wi	deb	and	Gap	filler	Sat	ellite	s (S	pace	e)
			ACCEP.	BALAN					FI	SCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC.		PROC.		CE DUE		2011						CAL	ENDAR	YEAR	2012							(	CALENI	DAR YE	AR 2013	3			Α
YEAR	SERV.	QTY.	TO 1 OCT.	AS OF 1 OCT	O	N O	D E	J	F	M	A	M A	J	J U	A	S E	0	N O	D	J	F E	M	A P	M	J U	J	A II	S E	T E
			2011	2011	T	V	C	A N	В	A R	R	Y	N	L	G	P	T	v	C	N	В	A R	R	Y	N	L	G	P	R
2007	USAF	1	0	1			1																						0
2008	USAF	1	0	1													1												0
2011	USAF	1	0	1																									1
2012	USAF	1	0	1																									1
TO	ΓAL	4	0	4	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
					O	N	D	J	F	M	A	M	J	J	Α	S	O	N	D	J	F	M	A	M	J	J	Α	S	
					С	O V	E	A N	E B	A	P	A V	U N	U	G	E	C	O V	E	A N	E	A D	P	A	U N	U	G	E D	
					1	· ·		PRO	DUCT	ION RA	TES	1	- 11	L	G	1	1	,	PRO	CURE	/FNT I	FAD TII	MF	1	11	L	0	1	
I ITE	M/MANU	FACTUF	RER'S NA	AME	LOCA	ATION	MS			ON	MA	ΑX											***						$\overline{}$
			_													ADMI	N LEAD	IIME		l me	G	TO	TAL AF	TFR					
	Boeing :	Satellite	Systems												PR	IOR		AFTER	1	PI			1 OCT						
															1 C	CT		1 OCT											
													INITIAL							6	3		63						
													REORE	DER															
REMA	RKS																												

P-1 Shopping List Item No. 16

Production Schedule Exhibit P-21, page 8 of 10

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treası	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	ature					
Mis	sile F	rocu	ırem	ent, A	ir F	orce	, Bu	dget	Act	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	16		Wi	deb	and	Gap	filler	Sat	ellite	s (S	pac	e)
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	14									FI	SCAL Y	EAR 20	15					L
PROC.		PROC.		CE DUE		2013						CAI	LENDAR	YEAR	2014								CALEN	DAR YE	AR 2015	5			Α
YEAR	SERV.	QTY.	TO 1 OCT. 2013	AS OF 1 OCT 2013	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2011	USAF	1	0	1																									1
2012	USAF	1	0	1																									1
TO	ΓAL	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	ODUCT	ION RA	TES								PRC	CURE	/ENT L	EAD TI	ME						
ITE	M/MANU	IFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	AX				ADMII	N LEAD	TIME		MF	:G.	то	TAL AF	TER					
	Boeing	Satellite	Systems												PR 1 C	OR OCT		AFTER 1 OCT		Pl			1 OCT						
													INITIAL	-						6	3		63						
				_									REORI	DER															
REMAI	RKS																												

P-1 Shopping List Item No. 16

Production Schedule Exhibit P-21, page 9 of 10

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	rocu	ırem	ent, A	ir Fر	orce	, Bu	dget	Acti	vity	- 05	Oth	er S	upp	ort, I	tem	No.	16		Wi	ideb	and	Gap	filler	Sat	ellite	es (S	рас	e)
			ACCEP	BALAN					Fl	SCAL Y	EAR 20	16									FI	SCAL Y	EAR 20	17					L
PROC.		PROC.	PRIOR	CE DUE		2015						CAI	ENDAR	YEAR	2016								CALEN	DAR YE	AR 201	7			A
YEAR	SERV.	QTY.	TO 1 OCT. 2015	AS OF 1 OCT 2015	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2011	USAF	1	0	1	1																								0
2012	USAF	1	0	1													1												0
TO	TAL	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						•		PRO	ODUCT	ION RA	TES	•			•	•	•		PRO	CURE	MENT L	EAD TII	ME		•	•	•		
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	М	SR	EC	ON	M	AX				ADMI	N LEAD	TIME		MF	=G	TO	TAL AF	TFR					
	Boeing	Satellite	Systems													IOR OCT		AFTER 1 OCT		PI			1 OCT						
													INITIAL							6	3		63						
REMA	RKS												INITIAL REORE					. 551		6	3		63						

P-1 Shopping List Item No. 16

Production Schedule Exhibit P-21, page 10 of 10

Exhibit P-40, Budget Item Justification	Date: February 2011
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 17	P-1 Line Item Nomenclature Wideband Gapfiller Satellites (Space) Advance Procurement

Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments	P	E 0603854	F		
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A		0	0	0		0	0					0
Cost(\$ M)			0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000
Advance Proc Cost(\$ M)		138.343	62.201	58.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	258.654
Weapon System Cost(\$ M)		138.343	62.201	58.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	258.654
Initial Spares(\$ M)							0.000						0.000
Total Proc Cost(\$ M)		138.343	62.201	58.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	258.654
Flyaway Unit Cost(\$ M)						·	0.000			·	·		0.000
Wpn Sys Unit Cost(\$ M)							0.000						0.000

#### **Description**

Totals include funding for PRCP Program Number 326, WGS. This program has associated Research Development Test and Evaluation funding in PE 0603854F.

The Wideband Global SATCOM (WGS) System, previously known as the Wideband Gapfiller Satellite System, provides the DoD with high data rate military satellite communication (MILSATCOM) services in accordance with the Joint Space Management Board-approved MILSATCOM architecture (August 1996), the Joint Requirements Oversight Council (JROC)-approved MILSATCOM Capstone Requirements Document (October 1997), and JROC-approved WGS Operational Requirements Document (May 2000). This program was originally conceived to augment the near-term "bandwidth gap" in warfighter communications needs. Dual-frequency WGS satellites augment, then replace the DoD's Defense Satellite Communications System X-band service and augment one-way Global Broadcast Service Ka-band capabilities. In addition, WGS provides a new high capacity two-way Ka-band service.

WGS Block I consists of satellites 1-3. These satellites were successfully launched on 10 October 2007, 3 April 2009, and 5 December 2009, respectively.

WGS Block II consists of satellites 4-6. Block II satellites are designed with slight modifications to better support the Airborne Intelligence, Surveillance and Reconnaissance mission. Launches for satellites 4-5 are scheduled for December 2011 and October 2012, respectively.

A United States-Australia WGS partnership was codified 14 November 2007. Australia provides funds needed to buy Space Vehicle-6 (SV-6) in exchange for access to constellation-wide resources. Launch for satellite 6 is scheduled for March 2013.

WGS Block II Follow-on currently consists of satellites 7 and 8 with projected launches in FY16 and FY17, respectively.

A Nunn-McCurdy review due to a critical Average Procurement Unit Cost (APUC) breach has completed and the program consisting of eight satellites was certified on 1 Jun 2010.

P-1 Shopping List Item No. 17

Budget Item Justification Exhibit P-40, page 1 of 4

UNCLASSIFIED	
Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 17	P-1 Line Item Nomenclature Wideband Gapfiller Satellites (Space) Advance Procurement
Description Continued  The Air Force is currently working to develop a Memorandum of Understanding (MOU) with a consortium of Inter of WGS-9. The MOU must be signed by October 2011 to ensure receipt of IP funding by January 2012 in order to maintain the WGS production line.	national Partners (IP) to provide requisite funds for the purcha meet program timelines to execute the contract option and
FY 2012 Program Justification N/A	

P-1 Shopping List Item No. 17

Budget Item Justification Exhibit P-40, page 2 of 4

Exhibit P-10 p.1 (Page 1 – Fundi		Procureme	nt Require	ments Ana	ılysis					Date:	February 2	.011	
Appropriation (Treas  Missile Procu					05, Other	Support	, Item No	o. 17	P-1 Line Item Widebar Advance	nd Gapfil	ler Satell	ites (Spa	ce)
Weapon System	<u> </u>		<u> </u>	First Syste	m Award Da	ate	First Syste	m Completio	on Date		Interval Be	tween Syster	ms
WBd AP				Oct-00			Nov-03						
				<u>!</u>		(\$ in Millio	ons)			•			
Description	PLT	When Rqd	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2013	FY 2014	FY 2015	<u>FY 2016</u>	To Comp	<u>Total</u>
End Item Qty			5		1	1						0	7
CFE Engines GFE													0.000 0.000 0.000
EOQ													0.000
Design													0.000
Term Liability													0.000
Other Advance Funding	12.000		138.343	62.201	58.110								258.654
TOTAL AP			138.343	62.201	58.110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	258.654

P-1 Shopping List Item No. 17

Advance Procurement Requirements Analysis (Page 1 - Funding) Exhibit P-10, p. 1, page 3 of 4

Exhibit P-10 p (Page 2 – Budg			ement Re	quiremer	its Analys	sis						Date: Fe	bruary 20	11	
Appropriation (Trease Missile Proc					tivity 05	, Other :	Suppor	t, Item N	lo. 17	Wide	e Item Nome eband G ance Pro	apfiller		es (Spa	ce)
Weapon System															
WBd AP															
						(TO	A, \$ in Mi	llions)							
Description End Item	<u>PLT</u>	<u>QPA</u>	Unit Cost	2010 QTY	2010 Contract Forecast Date	2010 Total Cost Request	2011 QTY	2011 Contract Forecast Date	2011 Total Cost Request	2012 QTY	2012 Contract Forecast Date	2012 Total Cost Request	2012 OCO QTY	2012 OCO Contract Forecast Date	2012 OCO Total Cost Request
End Item															
CFE															
GFE															
								l	<u>I</u>					1	
			,	,											
EOQ															
Design															
Term Liability															
Other Advance Funding	12.000				Aug-10	62.201		Mar-11	58.110						
TOTAL AP						62.201			58.110			0.000			0.000
<u>Description</u>															
					P-	1 Shoppin	ng List Iter	m No. 17		A	dvance P	(Pag	ge 2 - Bu	irements <i>i</i> dget Justi p. 2, page	ification)

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature  GPS III Space Segment

Program Element for Code B Items	N/A	Other Related Program Elements											
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	0	0	0	2	0	2	2	2	2	3		11
Cost(\$ M)		0.000	0.000	0.000	433.526		433.526	433.012	455.456	438.528	508.621	40.500	2309.643
Advance Proc Cost(\$ M)		0.000	0.000	122.490	81.811		81.811	82.396	74.167	117.396	117.500	0.000	595.760
Weapon System Cost(\$ M)		0.000	0.000	122.490	515.337	0.000	515.337	515.408	529.623	555.924	626.121	40.500	2905.403
Initial Spares(\$ M)							0.000						0.000
Total Proc Cost(\$ M)		0.000	0.000	122.490	515.337	0.000	515.337	515.408	529.623	555.924	626.121	40.500	2905.403
Flyaway Unit Cost(\$ M)			·	·		·	0.000			·			0.000
Wpn Sys Unit Cost(\$ M)			·				0.000	·	·	·			0.000

#### **Description**

The program funding includes reductions for acquisition program management efficiencies that are not intended to impact program content. The efficiencies reductions total \$3.707M in FY12.

The program funding includes reductions for acquisition excellence efficiencies in FY15 and FY16 that are not intended to impact program content. Reductions for efficiencies may be spread to other Air Force programs at a later date. Amounts of the reductions are: \$12.514M/FY15 and \$144.951M/FY16.

The Navstar Global Positioning System (GPS) fills validated Joint Service requirements for worldwide, accurate, common grid three-dimensional positioning/navigation for military aircraft, ships and ground personnel. The consistent accuracy, unaffected by location or weather and available in real time, significantly improves effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. The system is composed of three segments: user equipment (funded under PE 0305164F), satellites and a control network. The satellites broadcast high-accuracy data using precisely synchronized signals which are received and processed by user equipment installed in military platforms. This equipment computes the platform position and velocity and provides steering vectors to target locations or navigation waypoints. The control segment provides daily updates to the navigation messages broadcast from the satellites to maintain system precision in three dimensions to 16 meters spherical error probable worldwide.

GPS IIIA is the next generation space vehicle supporting the Navstar GPS constellation. GPS IIIA space vehicles will deliver significant enhancements, including a new L1C (civil) signal, Galileo-compatible signal, enhanced M-code Earth Coverage power, and a growth path to full warfighter capabilities. GPS IIIA is in the Production and Deployment Phase.

Totals include funding for PRCP Program Number 292, GPS III.

#### **FY 2012 Program Justification**

P-1 Shopping List Item No. 18

Budget Item Justification Exhibit P-40, page 1 of 11

Exhibit P-40, Budget Item Justification	Date: February 2011				
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 18	P-1 Line Item Nomenclature GPS III Space Segment				
FY12 funding procures two GPS IIIA Space Vehicles (SVs).					
P-1 Shopping List Item No. 18	Budget Item Justification				
	Exhibit P-40, page 2 of 11				

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 18 Date: February 2011 P-1 Line Item Nomenclature GPS III Space Segment

Weapon System Cost Elements	Ident Code	Total Cost in Millions of Dollars											
	Code	Prior Years			FY 2010			FY 2011			FY 2012		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Item													
Hardware - Recurring	A			0.000			0.000			0.000	2		451.936
Nonrecurring	A			0.000			0.000			0.000			0.000
Total Flyaway Cost		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[2]		[451.936]
Launch Services	A												1.314
Total Checkout & Launch		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[1.314]
Program Support	A												62.087
On-Orbit Support	A			0.000			0.000			0.000			0.000
On-Orbit Incentive	A			0.000			0.000			0.000			0.000
Total Support Costs		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[62.087]
Less Prior Year Advance Procurement	A												[-122.490]
		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[-122.490]
TOTAL GPS IIIA													[518.580]
Item													
Hardware - Recurring	A												
Nonrecurring	A												
Total Flyaway Cost		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[518.580]
Launch Services	A												
Total Checkout & Launch		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[0.000]
Program Support	A												
On-Orbit Support	A												
Total Support Costs		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[0.000]
TOTAL GPS IIIB													
		[0]		[0.000]	[0]		[0.000]	[0]		[0.000]	[0]		[0.000]
Less Prior Year Advance Procurement	A												
TOTAL PROGRAM:				0.000			0.000			0.000			515.337

#### Remarks

FY12 funding procures two GPS IIIA Space Vehicles (SVs).

P-1 Shopping List Item No. 18

Weapon System Cost Analysis Exhibit P-5, page 3 of 11

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011					
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature					
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 18	GPS III Space Segment					
Remarks Continued						
P-1 Shopping List Item No. 18	Weapon System Cost Analysis Exhibit P-5, page 4 of 11					

#### Exhibit P-5, Weapon System Cost Analysis Date: February 2011 Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number P-1 Line Item Nomenclature Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 18 **GPS III Space Segment** Weapon System Total Cost in Millions of Dollars Ident Cost Elements Code Cost to Complete FY 2012 OCO Unit Cost Total Cost Unit Cost | Total Cost Qty Qty Item Hardware - Recurring TBD Α 0.000 Nonrecurring Α [0] TBD Total Flyaway Cost [0.000] [0] Launch Services TBD Α TBD Total Checkout & Launch [0] [0.000] [0] Program Support TBD Α On-Orbit Support TBD Α On-Orbit Incentive TBD Α **Total Support Costs** [0] [0.000][0] TBD Less Prior Year Advance Procurement Α [0.000] [0] [0.000][0] TBD TOTAL GPS IIIA Hardware - Recurring **TBD** Α Nonrecurring Α Total Flyaway Cost [0] [0.000] [0] TBD TBD Launch Services TBD Α Total Checkout & Launch [0] [0] **TBD** [0.000]Program Support TBD Α On-Orbit Support Α TBD Total Support Costs [0] [0.000][0] **TBD TBD** TOTAL GPS IIIB TBD [0] [0.000] [0] TBD Less Prior Year Advance Procurement Α TOTAL PROGRAM: 0.000 TBD

P-1 Shopping List Item No. 18

Weapon System Cost Analysis Exhibit P-5, page 5 of 11

Exhibit P-5A, Procu	rement His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) C  Missile Procuren				ity 05, Ot	her Supp	ort, Item	No. 18		Item Nomeno	clature: Segment	į
Veapon System					Subline Ite	m					
GPS III											
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
GPS IIIA SV							/				
(2012)	2	208.300	LAAFB, CA	Jul-07	С	Allot	Lockheed Martin / Newtown, PA	Dec-10	Jan-16	Y	
(2013)	2	208.300	LAAFB, CA	Jul-07	С	CPAF	Lockheed Martin / Newtown, PA	Dec-10	Jan-17	Y	
(2014)	2	208.300	LAAFB, CA	Jul-07	С	CPAF	Lockheed Martin / Newtown, PA	Dec-11	Dec-17	Y	

P-1 Shopping List Item No. 18

Procurement History and Planning Exhibit P-5A, page 6 of 11

Exh	bit P-2	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	ature					
Mis	sile F	Procu	ırem	ent, <i>P</i>	ir F	orce	, Bu	dget	Act	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	18		GF	PS III	Spa	ace S	Segn	nent				
			ACCEP.	BALAN					F.	ISCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.		PROC.		CE DUE		2009						CAL	ENDAR	YEAR	2010								CALEN	DAR YE	AR 201	1			A
YEAR	SERV.	QTY.	TO 1 OCT. 2009	AS OF 1 OCT 2009	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2012	USAF 2 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0																												
2013	USAF 2 0 2																												
2014	USAF	2		2																								<u> </u>	2
TO	ΓAL	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
					0	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	
					T	O V	E C	A N	B B	A R	P R	A Y	N N	U L	G G	E P	T	O V	E C	A N	E B	A R	P R	A Y	N N	L	G	P	
					-	<u> </u>		PRO	ODUCT	ION RA	TES	-				-		<u> </u>	PRO	CURE	/ENT L	EAD TII	ME						
ITE	M/MANU	IFACTUF	RER'S N	AME	LOCA	ATION	M	SR		ON		ΑX				ADMI	N LEAD	TIME		MF			TAL AF	TFR					
	Loc	kheed M	artin		Newto	wn, PA									PR	IOR		AFTER	2	Pl			1 OCT						
															10	CT		1 OCT											
													INITIAL					3		6	2		65						
													REOR	DER															
REMA	RKS																												

P-1 Shopping List Item No. 18

Production Schedule Exhibit P-21, page 7 of 11

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	ature					
Mis	sile F	rocu	ırem	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	18		GF	S III	Spa	ace S	Segn	nent				
			ACCEP.	BALAN					F	ISCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC		PROC.		CE DUE		2011			_			CAL	ENDAR	YEAR	2012								CALEN	DAR YE	AR 2013	3			Α
PROC. YEAR	SERV.	QTY.	TO 1 OCT. 2011	AS OF 1 OCT 2011	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2012																													
2013	USAF	2		2																									2
2014	USAF	2		2																									2
TO	ΓAL	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
					О	N	D	J	F	M	A	M	J	J	A	S	О	N	D	J	F	M	A	M	J	J	A	S	
					C	0	E	A N	E B	A	P R	A	U N	U	U G	E	C	0	E	A	E B	A	P	A	U	U	U G	E D	
<b>-</b>					1	·		- 11		ION RA	10	1	IN	L	U	Г	1	·	DDC	CURE			ME	1	IN	L	U	Г	
ITE	Μ/ΜΔΝΙΙΙ	IEACTI IE	RER'S N	ΔΜΕ	LOCA	MOITA	N 45	SR		ON		ΑX							FIX	I	/ILINI L		VIL						
l '''	VI/IVI/AINO	n ACTO	CLIC O IV	TIVIL	LOCA	ATTON	IVI	)K		ON	IVIZ	4.^				ADMI	N LEAD	TIME		MF	ic.	ΤΟ.	TAL AF	TED					
	Loc	kheed M	artin		Newto	wn, PA							İ		PR	IOR		AFTER	?	P		10	1 OCT						
													1		1 0			1 OCT											
													INITIAL					3		6	2		65		1				
													REORI												1				
REMA	RKS				•		•		•				•		•		•			•					•				

P-1 Shopping List Item No. 18

Production Schedule Exhibit P-21, page 8 of 11

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	rocu	ırem	ent, A	ir F	orce	, Bu	dget	Act	ivity	- 05,	Oth	er S	upp	ort, I	tem	No.	18		GF	S III	Spa	ace S	Segn	nent				
			ACCEP.	BALAN					F.	ISCAL Y	EAR 20	14									FI	SCAL Y	EAR 20	15					L
PROC.		PROC.		CE DUE		2013						CAI	ENDAR	YEAR	2014								CALENI	DAR YE	AR 2015	5			Α
YEAR	SERV.	QTY.	TO 1 OCT. 2013	AS OF 1 OCT 2013	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2012	USAF	USAF         2         0         2         2         0         2         0         2         0         2         0																											
2013	USAF	2		2																									2
2014	USAF	2		2																									2
TO	ΓAL	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
					0	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	
					T	O V	E C	A N	B	R	R	A Y	N N	U L	G	E P	T	O V	C	A N	E B	A R	R	A Y	N N	L	G	E P	
						<u>'</u>		PR	ODUCT	ION RA	TES	-							PRO	CURE	/ENT L	EAD TII	ME.					•	
ITE	M/MANL	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR		ON		ΑX				ADMI	N LEAD	TIME		MF			TAL AF	TFR					
	Loc	kheed M	artin		Newto	wn, PA							]		PR	IOR		AFTER	}	PI			1 OCT						
															10	OCT		1 OCT											
													INITIAL	-				3		6	2		65						
													REOR	DER															
REMA	RKS																												

P-1 Shopping List Item No. 18

Production Schedule Exhibit P-21, page 9 of 11

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line Ite	em No	mencla	iture					
Mis	sile F	Procu	ırem	ent, <i>P</i>	ir F	orce	, Bu	dget	Act	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	18		GF	PS III	Spa	ace S	Segn	nent				
			ACCEP	BALAN					F	ISCAL Y	EAR 20	16									FI	SCAL Y	EAR 20	17					L
PROC		PROC.		CE DUE		2015						CAL	ENDAR	YEAR	2016								CALENI	DAR YE	AR 2017	7			Α
PROC. YEAR	SERV.	QTY.	TO 1 OCT. 2015	AS OF 1 OCT 2015	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2012																													
2013	USAF	2		2																1						1			0
2014	USAF	2		2																									2
TO	ΓAL	6	0	6	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2
					O	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	
					Ст	O V	E C	A N	B	A	P R	A V	U N	U	G U	E	Т	O V	E	A N	E B	A R	P R	A V	U N	U I	U G	E P	
					-			- 11	Ь	ION RA	10		- 11	L		1			PRO	CURE		FAD TII	ME.	1	11	L			
ITE	M/MANU	IFACTU	RER'S N	AME	LOCA	ATION	M	SR		ON		ΑX				ADMII	N LEAD	TIME	- 1100	MF			TAL AF	TER					
	Loc	kheed M	artin		Newto	wn, PA									PR	IOR		AFTER	1	Pl	_T		1 OCT						
													1		1 0	CT		1 OCT											
													INITIAL					3		6	2		65						
													REOR	DER															
REMAI	RKS																												

P-1 Shopping List Item No. 18

Production Schedule Exhibit P-21, page 10 of 11

Exhi	bit P-	21, Pr	oduct	ion Sc	chedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line It	em Noi	mencla	iture					
Mis	sile F	rocu	ırem	ent, A	ir Fر	orce	, Bu	dget	Acti	ivity	- 05,	Oth	er S	upp	ort, I	tem	No.	18		GF	S III	Spa	ace S	Segn	nent				
			ACCEP	BALAN					F	ISCAL Y	EAR 20	18									FI	SCAL Y	EAR 20	19					L
PROC.		PROC.		CE DUE		2017						CAI	LENDAR	YEAR	2018							(	CALENI	DAR YE	EAR 2019	)			Α
YEAR	SERV.	QTY.	TO 1 OCT. 2017	AS OF 1 OCT 2017	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
2014	USAF	2		2			1						1																0
TO	Γ <b>A</b> L	2	0	2	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						•		PRO	ODUCT	ION RA	TES			•	•	•	•	•	PRO	CURE	/ENT L	EAD TI	ME	•	•		•	•	-
ITE	M/MANL	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	4Χ				ADMI	N LEAD	TIME		MF	:G	TO	TAL AF	TFR					
	Loc	kheed M	artin		Newto	wn, PA										IOR OCT		AFTER 1 OCT	-	PI			1 OCT						
													INITIAL	_				3		6	2		65		1				
													REOR	DER															
REMAI	RKS																												

P-1 Shopping List Item No. 18

Production Schedule Exhibit P-21, page 11 of 11

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature GPS III Space Segment Advance Procurement

	3.7/1				0.1	n 1 . 1 n				T / 1			
Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments	N	I/A			
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A						0						0
Cost(\$ M)			0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000
Advance Proc Cost(\$ M)			0.000	122.490	81.811	0.000	81.811	82.396	74.167	117.396	117.500		595.760
Weapon System Cost(\$ M)		0.000	0.000	122.490	81.811	0.000	81.811	82.396	74.167	117.396	117.500	0.000	595.760
Initial Spares(\$ M)							0.000						0.000
Total Proc Cost(\$ M)		0.000	0.000	122.490	81.811	0.000	81.811	82.396	74.167	117.396	117.500	0.000	595.760
Flyaway Unit Cost(\$ M)					·		0.000	·	·				0.000
Wpn Sys Unit Cost(\$ M)							0.000						0.000

#### **Description**

Totals include funding for PRCP Program Number 292, GPS IIIA.

The Navstar Global Positioning System (GPS) fills validated Joint Service requirements for worldwide, accurate, common grid three-dimensional positioning/navigation for military aircraft, ships and ground personnel. The consistent accuracy, unaffected by location or weather and available in real time, significantly improves effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. The system is composed of three segments: user equipment (funded under PE 0305164F), satellites and a control network. The satellites broadcast high-accuracy data using precisely synchronized signals which are received and processed by user equipment installed in military platforms. This equipment computes the platform position and velocity and provides steering vectors to target locations or navigation waypoints. The control segment provides daily updates to the navigation messages broadcast from the satellites to maintain system precision in three dimensions to 16 meters spherical error probable worldwide

GPS IIIA is the next generation space vehicle supporting the Navstar GPS constellation. GPS IIIA space vehicles will deliver significant enhancements, including a new L1C (civil) signal, Galileo-compatible signal, enhanced M-code Earth Coverage power, and a growth path to full warfighter capabilities.

#### **FY 2012 Program Justification**

FY12 funding procures long lead parts for GPS IIIA satellites.

P-1 Shopping List Item No. 19

Budget Item Justification Exhibit P-40, page 1 of 3

Exhibit P-10 p.1. (Page 1 – Fundin		Procureme	nt Require	ments Ana	lysis					Date:	February 2	2011	
Appropriation (Treasu Missile Procu	ry) Code/CC/B				05, Other	Support	, Item No	. 19		•	gment A	dvance	
Weapon System				First Syste	m Award Da	ite	First System	m Completic	on Date		Interval Be	tween Syster	ns
GPS III AP				May-08			Apr-16						
1				·!		(\$ in Millio	ons)			-			
Description	PLT	When Rqd	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2013	FY 2014	FY 2015	<u>FY 2016</u>	То Сотр	<u>Total</u>
End Item Qty						2		2	2	2	3	11	22
CFE													0.000
Engines													0.000
GFE													0.000
EOQ													0.000
Design													0.000
Term Liability													0.000
Long Lead Parts			0.000	0.000	122.490	81.811		82.396	74.167	117.396	117.500	TBD	TBD
		•											
TOTAL AP			0.000	0.000	122.490	81.811	0.000	82.396	74.167	117.396	117.500	TBD	TBD

P-1 Shopping List Item No. 19

Advance Procurement Requirements Analysis (Page 1 - Funding) Exhibit P-10, p. 1, page 2 of 3

Exhibit P-10 p.2 (Page 2 – Budg			ement Re	quiremer	nts Analys	sis						Date: Fe	bruary 20	11	
Appropriation (Treas	ury) Code/C	C/BA/BSA/I			tivity 05	, Other \$	Suppor	t, Item N	o. 19	GPS	e Item Nome III Spac curemen	e Segm	ent Ad	vance	
Weapon System										•					
GPS III AP															
						(TO	A, \$ in Mi	llions)							
Description End Item	<u>PLT</u>	QPA	<u>Unit</u> <u>Cost</u>	2010 QTY	2010 Contract Forecast Date	2010 Total Cost Request 0.000	2011 QTY	2011 Contract Forecast Date	2011 Total Cost Request	2012 QTY	2012 Contract Forecast Date	2012 Total Cost Request	2012 OCO OTY	2012 OCO Contract Forecast Date	2012 OCO Total Cost Request
CFE				I	<u> </u>									I	
GFE															
GLL															
EOQ															
Design															
Term Liability															
Long Lead Parts						0.000			122.490	2		81.811			
TOTAL AP						0.000			122.490			81.811			0.000
Description FY12 funding pro-	cures long	lead items	for GPS II	IA satellite		1 Shoppin	ng Liet Ito	m No. 10		Δ	dvance P	rocureme	ent Requ	irements /	Analysis
					Ρ-	т эпорріп	ig List itel	II NO. 19			availee P	(Pag	ge 2 - Bu	dget Justi p. 2, page	ification)

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
FF -F ( 7/	P-1 Line Item Nomenclature  Spaceborne Equipment (COMSEC)

Program Element for Code B Items	N/A				Other	Related Pi	ogram Ele	ments	N	one			
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	TBD	0	0	0		0	0	0	0		TBD	TBD
Total Proc Cost(\$ M)		85.689	5.368	14.894	21.568		21.568	10.526	10.244	10.379	10.566	TBD	TBD

#### **Description**

Space Communications Security (COMSEC) is on the front line of AF Space and Information superiority goals. Space COMSEC provides communications security products to all DoD satellite systems. It enables secure command and control of DoD satellites and prevents unauthorized access and destruction. It enables secure transmission of satellite systems health and status telemetry data to ground control stations thus protecting critical information about the capabilities of DoD satellite systems. Space COMSEC provides the warfighter with global secure anti-jam communications capabilities. It provides secure transmission of information collected by sensor satellites, which provides the warfighter an integrated view of the battle space. Space COMSEC is a foundation enabler for achieving Information Superiority.

Space COMSEC Products are grouped in two primary product families: Mission Data and Command/Telemetry. The Mission Data Product family provides secure transmission for large volumes of satellite sensor data to the ground station for processing and enables secure anti-jam communications for the warfighter. The Command/Telemetry (CMD/TLM) Product family provides secure command and control of satellites.

#### **FY 2012 Program Justification**

FY12 funds will procure CMD/TLM products providing secure transmission of satellite command and control uplinks and secure transmission of satellite telemetry and tracking data. All DoD satellite systems require secure command and control of the satellites, which make up the system and enable their missions. Satellite telemetry is securely transmitted from satellite to ground station to protect the health and status information satellite systems. The CMD/TLM product family provides embedment satellite and stand alone space qualified COMSEC products to satellite systems. The CMD/TLM products cost from \$60,000 for a satellite embedment chip to \$500,000 per unit for stand alone COMSEC units. The high cost can be attributed to the specialized government requirements, radiation hardening, space-qualified components, and the low rate productions for satellite systems.

Items requested in FY12 are identified on the following P-5 and are representative of items to be procured. Items procured during execution may change based on critical equipment needed to support current Air Force mission requirements.

P-1 Shopping List Item No. 20

Budget Item Justification Exhibit P-40, page 1 of 4

**Exhibit P-5, Weapon System Cost Analysis** 

Remarks

Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number

Missile Procurement, Air Force,	Budget A	Activity	y 05, Otl	ner Sup <sub>l</sub>	oort, I	tem No.	20	Sp	aceborr	e Equip	ment	(COMSI	EC)	
Weapon System Cost Elements	Ident Code					Total	Cost in Mi	illions of	Dollars					
			Prior Years FY 2010 FY 2011 FY									FY 2012	012	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
CMD/TLM Devices (1)	A							66	0.166	10.981	128	0.166	21.568	
CMD/TLM Devices (2)	A				27	0.199	5.368							
CMD/TLM Devices (3)	A							16	0.245	3.913		0.000		
TOTAL PROGRAM:				0.000			5.368			14.894			21.568	

P-1 Shopping List Item No. 20

Weapon System Cost Analysis Exhibit P-5, page 2 of 4

Date: February 2011

P-1 Line Item Nomenclature

Exhibit P-5, Weapon System Cost A	nalysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Iten	n Control Number							P-1 Line Item Nomenclature
Missile Procurement, Air Ford	e, Budget A	ctivit	y 05, Otl	ner Supp	ort, I	tem No.	20	Spaceborne Equipment (COMSEC)
Weapon System	Ident					Total	Cost in Mill	lions of Dollars
Cost Elements	Code		FY 2012 O	CO	C	Cost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
CMD/TLM Devices (1)	A							
CMD/TLM Devices (2)	A							
CMD/TLM Devices (3)	A							
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 20

Weapon System Cost Analysis Exhibit P-5, page 3 of 4

Exhibit P-5A, Procure	ment His	tory and Pl	anning							Date: Fo	ebruary 201	1
Appropriation (Treasury) Cod Missile Procuremo				vity 05, Ot	her Supp	ort, Item	No. 20	;	Spac	Item Nomence eborne E ISEC)	lature: quipment	t
Weapon System					Subline Ite	em		-				
COMSEC												
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Awar	d Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
CMD/TLM Devices (1)							/					
(2011)	66	0.166	AFMC/ESC	Jan-11	С	FFP	General Dynamics / AZ	Jun-1	1	Sep-12	Y	
(2012)	128	0.166	AFMC/ESC	Jan-12	С	FFP	General Dynamics / AZ	Jun-12	2	Sep-13	Y	
CMD/TLM Devices (2)							/					
(2010)	27	0.199	AFMC/ESC	Jan-10	С	FFP	L 3 Communications / CA	Sep-1	0	Dec-11	Y	
CMD/TLM Devices (3)			,				/					
(2011)	16	0.245	AFMC/ESC	Jan-11	С	FFP	SafeNet / CA	Jun-1	1	Nov-12	Y	
Remarks						<b>I</b>						

P-1 Shopping List Item No. 20

Procurement History and Planning Exhibit P-5A, page 4 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011
FF - F	P-1 Line Item Nomenclature  Global Positioning System (Space)

Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments					
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	61	0	0	0		0	0	0	0		0	61
Cost(\$ M)		2469.405	124.194	64.609	67.689		67.689	61.574	80.966	10.522	0.000	0.000	2878.959
Advance Proc Cost(\$ M)		975.215	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	975.215
Weapon System Cost(\$ M)		3444.620	124.194	64.609	67.689	0.000	67.689	61.574	80.966	10.522	0.000	0.000	3854.174
Initial Spares(\$ M)							0.000						0.000
Total Proc Cost(\$ M)		3444.620	124.194	64.609	67.689	0.000	67.689	61.574	80.966	10.522	0.000	0.000	3854.174
Flyaway Unit Cost(\$ M)				·	·		0.000						0.000
Wpn Sys Unit Cost(\$ M)							0.000						0.000

#### **Description**

Totals include funding for PRCP Program Number 166, Navstar GPS.

The program funding includes reductions for overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$1.413M in FY12. The program has been funded to latest cost estimate, less efficiencies. Acquisition affordability efficiencies in the amounts of \$12.5M/FY15 and \$145.0M/FY16 have also been applied to this program.

This program has associated Research Development Test and Evaluation funding in PE 0305165F.

The Navstar Global Positioning System (GPS) fills validated Joint Service requirements for worldwide, accurate, common grid three-dimensional positioning/navigation for military aircraft, ships, and ground personnel. The consistent accuracy, unaffected by location or weather and available in real time, significantly improves effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. The system is composed of three segments: user equipment (funded under PE 0305164F), satellites and a control network. The satellites broadcast high-accuracy data using precisely synchronized signals which are received and processed by user equipment installed in military platforms. This equipment computes the platform position and velocity and provides steering vectors to target locations or navigation waypoints. The control segment provides daily updates to the navigation messages broadcast from the satellites to maintain system precision.

Block IIF is launched on the Evolved Expendable Launch Vehicle (EELV). Launch schedules are established based on constellation sustainment needs and launch manifest contstraints. The system hosts the Nuclear Detonation Detection System (funded under PE 0305913F)

The acquisition strategy for the Block IIF satellites was a competitive multiyear contract for 6 satellites awarded in FY1996. Block IIF satellites are being modernized to include a new military signal and a second and third civil signal.

P-1 Shopping List Item No. 21

Budget Item Justification Exhibit P-40, page 1 of 10

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 21	P-1 Line Item Nomenclature Global Positioning System (Space)
Description Continued	
<b>FY 2012 Program Justification</b> FY12 funding is required for IIF launch and on-orbit support.	
P-1 Shopping List Item No. 21	Budget Item Justification Exhibit P-40, page 2 of 10

# Exhibit P-5, Weapon System Cost Analysis Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 21 Date: February 2011 P-1 Line Item Nomenclature Global Positioning System (Space)

Weapon System Cost Elements	Ident Code	Total Cost in Millions of Dollars													
		Prior Years			FY 2010			FY 2011			FY 2012				
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
Flyaway Cost	A														
Hardware-Recurring	A														
Space Vehicle	A						80.532								
Total Hardware-Recurring		[0]		[0.000]	[0]		[80.532]	[0]		[0.000]	[0]		[0.000]		
Checkout & Launch	A														
Integration & Checkout	A						0.400			0.300			0.300		
Launch Services Planning	A						14.770			24.200			22.300		
Propellants	A						0.550			1.000			1.000		
Total Checkout & Launch		[0]		[0.000]	[0]		[15.720]	[0]		[25.500]	[0]		[23.600]		
Support Costs	A														
Technical Support	A						7.517			12.895			12.743		
Program Support	A						10.310			15.109			16.046		
On-Orbit Planning Support	A						10.115			11.105			15.300		
Total Support Costs		[0]		[0.000]	[0]		[27.942]	[0]		[39.109]	[0]		[44.089]		
TOTAL PROGRAM:				0.000			124.194			64.609			67.689		

#### Remarks

FY12 funding provides launch, on orbit and support for IIF production and launch.

P-1 Shopping List Item No. 21

Weapon System Cost Analysis Exhibit P-5, page 3 of 10

#### 

Weapon System Cost Elements	Ident Code					Total	Cost in Mil
		F	FY 2012 O	CO	C	ost to Com	plete
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Flyaway Cost	A						
Hardware-Recurring	A						
Space Vehicle	A						
Total Hardware-Recurring		[0]		[0.000]	[0]		[0.000]
Checkout & Launch	A						
Integration & Checkout	A						TBD
Launch Services Planning	A						TBD
Propellants	A						TBD
Total Checkout & Launch		[0]		[0.000]	[0]	TBD	TBD
Support Costs	A						
Technical Support	A						TBD
Program Support	A						TBD
On-Orbit Planning Support	A						TBD
Total Support Costs		[0]		[0.000]	[0]	TBD	TBD
TOTAL PROGRAM:				0.000			TBD
	<del></del>						

P-1 Shopping List Item No. 21

Weapon System Cost Analysis Exhibit P-5, page 4 of 10

Exhibit P-40A, Budget Item Justific	ation for Aggre	gated I	tems							Date: Fel	oruary 2	2011	
Appropriation (Treasury) Code/CC/BA/BSA/Iter  Missile Procurement, Air Ford		ctivity	, 05, Otł	ner Supp	ort, Ite	em No.	21			omenclature sitioning	Syste	em (Spa	ıce)
Weapon System Cost Elements	Ident Code	Total Cost in Milli						illions of	lions of Dollars				
			Prior Year	rs		FY 2010	)		FY 201	1		FY 2012	2
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Block IIA	A	28		869.768	0		0.000	0		0.000	0		0.000
Block IIR	A	21		1088.345	0		0.000	0		0.000	0		0.000
Block IIF	A	12		1486.507	0		124.194	0		64.609	0		67.689
TOTAL PROGRAM:				3444.620			124.194			64.609			67.689
Previous GPS Blocks are maintained on the	his form to preser	ve prior	year fundi	ng accuracy									
			D 1	Shopping	List Iton	No. 21		Bud	ant Itam	Justificati	on for	\aaroast	od Itoms

Exhibit P-40A, page 5 of 10

Exhibit P-40A, Budget Item Justification for Aggregated Items

Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number

Missile Procurement, Air Force	, Budget A	ctivit	y 05, Oth	ner Supp	ort, Ite	em No.	21	Gle	obal Pos	sitioning	g Syst	em (Spa	ıce)
Weapon System Cost Elements	Ident Code					Total	Cost in M	illions of	Dollars				
			FY 2012 OCO FY 2013 FY 2014 FY 201										;
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Block IIA	A			0.000	0		0.000	0		0.000	0		0.000
Block IIR	A			0.000	0		0.000	0		0.000	0		0.000
Block IIF	A			0.000	0		61.574	0		80.966	0		10.522
TOTAL PROGRAM:		0.000 61.574 80.966 10.522									10.522		

P-1 Shopping List Item No. 21

Budget Item Justification for Aggregated Items Exhibit P-40A, page 6 of 10

Date: February 2011

P-1 Line Item Nomenclature

Exhibit P-40A, Budget Item Justific	ation for Aggre	egated	Items					Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Iter	n Control Number							P-1 Line Item Nomenclature
Missile Procurement, Air Ford	ce, Budget A	ctivit	y 05, Otl	her Supp	ort, It	em No.	21	Global Positioning System (Space)
Weapon System Cost Elements	Ident Code					Total	Cost in Mil	lions of Dollars
Cost Elements	Code		FY 2016	5	С	ost to Comp		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Block IIA	A							
Block IIR	A							
Block IIF	A			0.000			0.000	
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 21

Budget Item Justification for Aggregated Items Exhibit P-40A, page 7 of 10

ppropriation (Treasury) Co Missile Procurem		Globa	P-1 Line Item Nomenclature: Global Positioning System (Space)								
<u>Veapon System</u>					Subline Ite	m		-			
SPS	1		1			1	1	1			I
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available
Boeing - IIF units 1-3							/				
(FY97)	3	114.200	SMC/GP	Dec-02	SS	CPAF	Boing / Huntington Beach, CA	Nov-02	Feb-10	Y	
Boeing - IIF units 4-6							/				
(FY98)	3	114.200	SMC/GP	Dec-02	SS	FPI	Boeing / Huntington Beach, CA	Dec-03	Jul-11	Y	
Boeing - IIF units 7-9							/				
(FY05)	3	114.200	SMC/GP	Dec-02	SS	FPI	Boeing / Huntington Beach, CA	Oct-04	Feb-12	Y	
Boeing - IIF units 10-12							/				
(FY06)	3	114.200	SMC/GP	Dec-02	SS	FPI	Boeing / Huntington Beach, CA	Oct-05	Aug-12	Y	
<u>Remarks</u>		1	I	ı	ı	1	I .	l		I	

P-1 Shopping List Item No. 21

Procurement History and Planning Exhibit P-5A, page 8 of 10

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	Control	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	rocu	ırem	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	21		GI	obal	Pos	itior	ning	Sys	tem	(Spa	ce)	
			ACCEP	BALAN					F	SCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.	EAR SERV. QTY. 10 AS OF O N D J F M A W J J A S O N D J J F A S O N D J J A S O N D J OCT. 1 OCT C O E A E A E A P A U U U U E C O E A S O N D E A S O																	CALENI	DAR YE	AR 201	1			A					
YEAR	SERV.		1 OCT.	1 OCT	O C T	О	Е		F E B		P	Α	J U N	J U L	A U G	E	O C T	0	E	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R
1997	USAF	3	0	3					1												1		1						0
1998	USAF	3	0	3																						1		1	1
																							3						
2006	USAF	3	0	3																									3
TO	ΓAL	12	0	12	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	7
O N D J F M A M C O E A E A P A T V C N B R R V												J U N	J U	A U	S E	O C	N O V	D E	J A	F E	M A	A P	M A	J U N	J U	A U	S E		
					1	·		DD	Ь	ION RA	IX.	1	IN	L	G   P   T   V   C   N   B   R   R   Y   N   L   G   P														
I	M/MANI I	IFACTU	RER'S N	AME	LOCA	ATION	M	SR		ON		ΑX			1				1110	I	VILIVI L		VIL		1				
			KEIK O I W	UVIL	200,		""	OI (		OIV	'''	•				ADMII	N LEAD	TIME											
Boeing Huntington Beach, CA 8										PR 1 C	IOR OCT		AFTER 1 OCT		MI P	∓G. LT	TO	TAL AF	TER										
													INITIAL REORI																
REMA	RKS								<u> </u>				INCON	<i></i>	l		l			<u> </u>		<u> </u>							

P-1 Shopping List Item No. 21

Production Schedule Exhibit P-21, page 9 of 10

Exhi	bit P-	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011						
Appro	priation	(Treas	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	iture								
Mis	sile l	Procu	ıreme	ent, A	ir F	orce	, Bu	dget	Act	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	21		GI	obal	Pos	itior	ning	Syst	tem	(Spa	ice)				
				BALAN					F	SCAL Y	EAR 20	12									FI		EAR 20	_					L			
PROC.		PROC.		CE DUE		2011						CAI	ENDAF	YEAR	2012								CALENI	DAR YE	AR 2013	3			A			
YEAR	SERV.	QTY.	TO 1 OCT. 2011	AS OF 1 OCT 2011	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R			
1997	USAF	3	3	0																				P A U U U E R Y N L G P								
1998	USAF	3	2	1		1																							0			
2005	USAF	3	0	3															0													
2006	USAF	3	0	3					1 1									1										0				
TO	ΓAL	12	5	7	0	1	0	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0			
	O N D J F C O E A E							F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
								PR	ODUCT	ION RA	TES			•					PRC	CURE	/ENT L	EAD TII	ME	•		•						
ITE	M/MANU	JFACTU	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME			_											
		Boeing			Hunti Beac	ington h, CA				3						PRIOR AFTER PLT 1 OCT 1 OCT																
													INITIAI REORI																			
REMAI	RKS				l				1				I COM	IX			l			I					1							

P-1 Shopping List Item No. 21

Production Schedule Exhibit P-21, page 10 of 10

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature Defense Meteorological Satellite Program (DMSP)

Program Element for Code B Items	N/A				Other	Related Pr	rogram Ele	ments	N	/A			
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	45	2010	2011	2012	000	0	2010	2014	2010	2010	0	45
Total Proc Cost(\$ M)		2700.710	96.555	88.719	101.397		101.397	91.191	98.238	98.614	18.625	19.845	3313.894

#### **Description**

The program funding includes Overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$1.111M in FY12.

The Defense Meteorological Satellite Program (DMSP) is a fully operational program supporting a broad range of national security users who require timely and accurate global weather information. DMSP is DoD's only assured source of global weather data providing visible and infrared cloud cover imagery (1/3 nautical miles (nm) constant resolution) and other meteorological, oceanographic, land surface, and space environmental data. At least two fully mission capable satellites (one in each of two orbit planes) are required in sun-synchronous, 450nm polar-orbit at all times (sun-synchronous means the satellites cross the equator at the same local sun time on each of their 14 orbits/day).

Premature attitude determination gyro failures on DMSPs F15 (launched Dec 99) and F16 (launched Oct 03) exposed a fleet-wide life-limiting problem with the attitude determination gyros that will fly on all remaining DMSP satellites. Mini-Inertial Measurement Units (MIMUs) are being integrated to the remaining DMSP satellites to reduce risk of mission failure due to those gyro problems. In addition, a number of systemic problems have also been identified with the new suite of microwave and ultraviolet sensors flying on this final block of DMSP satellites. These problems are being mitigated via sensor modifications and repairs for the satellites that remain to be launched. In addition, the program office is executing a service life extension program on DMSP F19 and F20 to increase projected lifetime from 4 to 5 years. DMSP F18 was launched in Oct 09 on an Atlas V booster. Overhead efficiencies of \$1.111M in FY12. PE35160F, P-23.

#### **FY 2012 Program Justification**

Funding continues to support spacecraft integration & test and sensors support & services contracts including:

- DMSP F19 EELV mission unique support, integration, and test
- Spacecraft and sensor integration and test, engineering analysis, anomaly resolution, and related support activities for satellites in storage and on-orbit
- Independent Validation/Verification of DMSP flight software and anomaly support
- Repair/replacement/testing of shelf life limited components including but not limited to pyrotechnics and spacecraft batteries
- Complete on-orbit calibration/validation of DMSP F18 sensors
- Repairs to correct multiple spacecraft and sensors life and performance limiting deficiencies
- Program management support (to include conducting studies and analyses, develop strategies or plans for continuity of environmental data collection)
- Perform Service Life Extension Program (SLEP) reliability improvements to DMSP F19 and F20

P-1 Shopping List Item No. 22

Budget Item Justification Exhibit P-40, page 1 of 5

Exhibit P-5, Weapon System Cost Ana	lysis									Date: Fel	oruary 2	2011	
Appropriation (Treasury) Code/CC/BA/BSA/Item Co								P-1	Line Item No				
Missile Procurement, Air Force,		ctivity	, 05 Otl	or Sunr	ort li	om No	22			leteorolo	naical	Satallit	^
wissie Frocurement, An Force,	Buuget A	Clivity	y 03, Oti	iei Supp	JOIL, II	em No.	<b></b>		ogram (		gicai	Satemi	<b>5</b>
									ogram (	DIVIOI )			
Weapon System	Ident					Total	Cost in Mi	lliona o	f Dollars				
Cost Elements	Code					10141	Cost III IVII	1110115 0	Donais				
Cost Elements			Prior Yea	rs		FY 2010	)		FY 201	1		FY 2012	2
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
LAUNCH & OPERATIONS	A												
VAFB Launch Base Support	A						0.081			0.575			1.761
EELV Mission Unique Hardware	A									1.650			2.640
TOTAL LAUNCH & OPERATIONS		[0]		[0.000]	[0]		[0.081]	[0]		[2.225]	[0]		[4.401]
SATELLITE READINESS	A												
LM Spacecraft Integration & TestCLIN 1	A						39.853			36.763			40.220
LM Spacecraft Battery Option/SAFT CLIN 2	A						0.412			0.388			0.027
LM Spacecraft Integ & TestTotal Awd Fee	A						5.066			4.956			5.072
LM Spacecraft Orbital Incentives	A												
Independent Verif & Validation Tech Spt	A						1.299			1.334			1.394
TOTAL SATELLITE READINESS		[0]		[0.000]	[0]		[46.630]	[0]		[43.441]	[0]		[46.713]
SENSOR READINESS	A												
NGC Cons Sensor Factory & FieldCLIN 1	A						18.970			16.967			18.529
NGC Hardware Sensor SptCLIN 2	A						3.710			2.936			9.846
NGC Launch & Early Orbit SptCLIN 3	A						0.633			0.161			0.879
NGC Total Award Fee	A						2.707			1.797			1.169
NGC Orbital Incentives	A												
Sensor Lab Support	A						7.153			3.262			1.394
TOTAL SENSOR READINESS		[0]		[0.000]	[0]		[33.173]	[0]		[25.123]	[0]		[31.817]
PROGRAM SUPPORT	A												
FFRDC (Tech)	A						12.278			12.646			13.026
Program Management	A						4.393			5.284			5.440
TOTAL PROGRAM SUPPORT		[0]		[0.000]	[0]		[16.671]	[0]		[17.930]	[0]		[18.466]
TOTAL PROGRAM:				0.000			96.555			88.719			101.397
D 1													
Remarks													
			5.1	Ola a m	1.1-7.11	NI- 00				107	- O 1		A 1 ·
			P-1	Shopping	List Ite	m No. 22							Analysis
										E	tilidit F	P-5, page	2 01 5

Exhibit P-5, Weapon System Cost Analysis		Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number		P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other	er Support, Item No. 22	Defense Meteorological Satellite Program (DMSP)
P-1 S	hopping List Item No. 22	Weapon System Cost Analysis
		Exhibit P-5, page 3 of 5

Exhibit P-5, Weapon System Cost Ana	lysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Co		ctivity	/ 05, Otl	her Supp	ort, It	em No.	22	P-1 Line Item Nomenclature  Defense Meteorological Satellite Program (DMSP)
Weapon System Cost Elements	Ident Code							ions of Dollars
		Qty	FY 2012 O	CO Total Cost	Qty	Ost to Com	plete Total Cost	
LAUNCH & OPERATIONS	A	Qiy	Omit Cost	Total Cost	Qty	Omit Cost	Total Cost	
VAFB Launch Base Support	A						2.000	
EELV Mission Unique Hardware	A						2.930	
TOTAL LAUNCH & OPERATIONS	71	[0]		[0.000]	[0]		[4.930]	
SATELLITE READINESS	A	[^]		[0.000]	[0]		[1.550]	
LM Spacecraft Integration & TestCLIN 1	A						135.761	
LM Spacecraft Battery Option/SAFT CLIN 2	A							
LM Spacecraft Integ & TestTotal Awd Fee	A						17.402	
LM Spacecraft Orbital Incentives	A						6.704	
Independent Verif & Validation Tech Spt	A						4.645	
TOTAL SATELLITE READINESS		[0]		[0.000]	[0]		[164.512]	
SENSOR READINESS	A							
NGC Cons Sensor Factory & FieldCLIN 1	A						83.697	
NGC Hardware Sensor SptCLIN 2	A						1.094	
NGC Launch & Early Orbit SptCLIN 3	A							
NGC Total Award Fee	A						4.986	
NGC Orbital Incentives	A						2.926	
Sensor Lab Support	A						8.229	
TOTAL SENSOR READINESS		[0]		[0.000]	[0]		[100.932]	
PROGRAM SUPPORT	A							
FFRDC (Tech)	A						39.575	
Program Management	A						16.564	
TOTAL PROGRAM SUPPORT		[0]		[0.000]	[0]		[56.139]	
TOTAL PROGRAM:				0.000			326.513	

P-1 Shopping List Item No. 22

Weapon System Cost Analysis Exhibit P-5, page 4 of 5

Exhibit P-5A, Procure	ment His	tory and Pl	anning						Date: F	ebruary 201	1
Appropriation (Treasury) Code Missile Procureme				∕ity 05, Ot	her Supp	ort, Item	No. 22	De	Line Item Nomeno efense Meteo Itellite Progi	orologica	
Weapon System					Subline Ite	m					
DMSP											
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Da	Date of First Delivery.	Specs Available Now?	Date Revision Available?
Spacecraft Integration and Test						+	/				
	0		LAAFB, CA		SS	CPAF	Lockheed Martin / Sunnyvale, CA	Jul-02	N/A	Y	
Consolidated Sensor Support & Services							/				
	0		LAAFB, CA		SS	CPAF	Northrop Grumman Baltimore / MD	Nov-04	N/A	Y	
Independent Flight Software Validation and Verification							/				
	0		LAAFB, CA		С	Other	Integral Systems / Lanham, MD	Jun-02	N/A	Y	
FFRDC (Tech)							/				
	0		LAAFB, CA		SS	Other	Aerospace Corp / El Segundo, CA	Oct-04	N/A	Y	
SETA (Tech/Mgt/Fin)							/			,	
	0		LAAFB, CA		С		Various /	Jul-05	N/A	Y	
Remarks											
				Р	2-1 Shopping	List Item N	No. 22	Г	Procurement I Exhib	History and bit P-5A, pa	

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
The state of the s	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 23	Evolved Expendable Launch Vehicle(EELV)

Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments	0	604853F (	RDT&E A	F)	
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A	21	3	3	4	0	4	4	5	5	5	100	150
Cost(\$ M)		5449.653	1094.787	1153.976	1740.222		1740.222	1744.243	2034.102	2098.865	2222.604	TBD	TBD
Advance Proc Cost(\$ M)		0.000					0.000					0.000	0.000
Weapon System Cost(\$ M)		5449.653	1094.787	1153.976	1740.222	0.000	1740.222	1744.243	2034.102	2098.865	2222.604	TBD	TBD
Initial Spares(\$ M)		0.000					0.000					0.000	0.000
Total Proc Cost(\$ M)		5449.653	1094.787	1153.976	1740.222	0.000	1740.222	1744.243	2034.102	2098.865	2222.604	TBD	TBD
Flyaway Unit Cost(\$ M)							0.000						0.000
Wpn Sys Unit Cost(\$ M)							0.000						0.000

#### **Description**

The program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$10.208M in FY12.

The program funding includes reductions for EELV procurement efficiencies that are not intended to impact program content. Reductions for efficiencies may be spread to other Air Force programs at a later date. Amounts of the reductions are: \$98M/FY13; \$103M/FY14; \$105M/FY15; and \$114M/FY16.

This program does not require and does not include advance procurement or initial spares. Flyaway Unit Cost and Weapon System Unit Cost are not applicable due to the mix (medium through heavy) of vehicles in the program. Evolved Expendable Launch Vehicle (EELV) procures launch services, and is not a weapon system. The 'To Complete' cost value is TBD because of the different launch vehicle classes possible due to changing payload weights and volumes by mission, mission-unique services, and other variables.

The EELV program is a space launch system providing two families of launch vehicles, Delta IV & Atlas V. The program satisfies the Government's National Launch Forecast (NLF) requirements.

The EELV system includes launch vehicles, launch capability, a standard payload interface, support systems, mission integration (includes mission unique requirements), flight instrumentation and range interfaces, special studies (mission feasibility analysis, secondary payloads, dual manifesting, dual integration, special flight instrumentation, loads analysis, etc.), post-flight data evaluation and analysis, mission assurance, assured access (infrastructure, critical component engineering, etc.), Government Mission Director, system/process and reliability improvements, training, and technical support. The system also includes launch site/operations activities in support of assured access, systems integration and tests, and other related support activities.

The EELV concept of launch vehicle families emphasizes commonality of hardware,infrastructure, and economies of scale to enhance production, operations, and support efficiencies. The Air Force is responsible for funding its own missions. All non-Air Force EELV launch services are funded within their respective entities (e.g. NRO, Navy, etc.). Air Force Research, Development, Test and Evaluation (RDT&E) funding breakout for EELV is in the RDT&E, AF documentation (PE 0604853F).

P-1 Shopping List Item No. 23

Budget Item Justification Exhibit P-40, page 1 of 10

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 23	Evolved Expendable Launch Vehicle(EELV)

#### **Description Continued**

The current acquisition strategy, implemented in FY06, separates the launch service price from the infrastructure costs. EELV Launch Services (ELS) include all of the necessary vehicle hardware, related touch labor, and software on a fixed price contract. EELV launch services are ordered No-Later-Than 24 calendar months prior to the planned mission. EELV launch services may be ordered earlier than the standard 24 calendar months to allow a longer integration period for first-time or complex integrations.

EELV Launch Capability (ELC) costs, including facility and facility support costs, launch and range operations, mission integration, mission unique development and integration, subcontract support engineering, factory engineering, etc., are funded on an annual basis. The acquisition approach supports the 2004 National Space Transportation Policy, caps Government development costs, and allows partnership with industry. The Air Force is evaluating the addition of other potential suppliers. Non-recurring integration is the responsibility of the particular Air Force or other agency payload program office.

In 2006, the existing EELV providers, The Boeing Company and Lockheed Martin, initiated a joint venture, the United Launch Alliance (ULA), with the approval of the Federal Trade Commission. ULA will continue mission success and assure access to space with two launch vehicle systems by combining Delta IV/Atlas V management and engineering in Denver, CO; combining most of the manufacturing in Decatur, AL; and combining launch teams at both launch sites. Existing contracts were novated to ULA in November 2008, making ULA responsible for contract performance vice Boeing and Lockheed Martin.

As of 21 Aug 2007, the EELV Program has formally entered the sustainment phase. AFSPC Routine Spacelift Enabling Concept, 31 Oct 2007, formally extended the EELV Program an additional 10 years from 2020 through 2030.

#### **FY 2012 Program Justification**

EELV FY 2012 procurement funds are required for annual launch capability tasks to include systems engineering, program management, infrastructure, systems integration and tests, launch site and launch operations activities, post mission analysis, and other related activities to support mission requirements, to include mission assurance for previously procured AF missions working toward launch and to mitigate effects of diminishing manufacturing sources. Funds are also required to procure four launch services within the medium and intermediate classes to be completed as early as FY 2014, and support international partner launch services. Current Launch Services procurements will no longer be based on a mission-assigned tail concept. The revised procurement process will be based on a yearly launch service block buy. The Air Force will then assign missions on priority-need or first availability. There are no FY 2012 Overseas Contigency Operations (OCO) funds.

P-1 Shopping List Item No. 23

Budget Item Justification Exhibit P-40, page 2 of 10

Exhibit P-5, Weapon System Cost Ana	lysis									Date: Fel	oruary 2	2011			
Appropriation (Treasury) Code/CC/BA/BSA/Item Co	ntrol Number							P-1	Line Item No	menclature					
Missile Procurement, Air Force,	Budget A	ctivity	y 05, Otl	her Supp	ort, It	em No.	23		olved E ELV)	xpendak	le La	unch Ve	hicle		
Weapon System Cost Elements	Cost Elements Code														
			Prior Yea	rs		FY 2010	)		FY 201	1		FY 2012	,		
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
Launch Services	A	21		1879.162	3		275.480	3		296.109	4		715.523		
Program Management & Other Support Costs	A			63.051			10.002			10.385			15.827		
SETA	A			105.396			20.607			21.304			22.285		
FFRDC Mission Assurance	A			270.297			52.900			55.641			58.418		
Assured Access	A			479.650			0.000			0.000					
Launch Capability	A			2652.097			735.798			770.537			928.169		
TOTAL PROGRAM:				5449.653			1094.787			1153.976			1740.222		

#### Remarks

Launch Service unit costs are not applicable for this program due to the mix (medium through heavy lift) of vehicles in the program.

All non-Air Force launch services are funded by their respective agencies.

Air Force Research Development Test and Evaluation (RDT&E) funding breakout for EELV is in the RDT&E, AF documentation (PE 0604853F).

P-1 Shopping List Item No. 23

Weapon System Cost Analysis Exhibit P-5, page 3 of 10

Exhibit P-5, Weapon System Cost Analysis								Date: February 2011	
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number								P-1 Line Item Nomenclature  Evolved Expendable Launch Vehicle (EELV)	
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 23									
Weapon System Cost Elements	Ident Code	Total Cost in Millions of Dollars							
		FY 2012 OCO			Cost to Complete				
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
Launch Services	A				100		TBD		
Program Management & Other Support Costs	A								
SETA	A								
FFRDC Mission Assurance	A								
Assured Access	A								
Launch Capability	A								
TOTAL PROGRAM:				0.000			TBD		

P-1 Shopping List Item No. 23

Weapon System Cost Analysis Exhibit P-5, page 4 of 10

ment His	tory and Pl	anning						Date: F	ebruary 201	1
			vity 05, Ot	her Supp	ort, Item	No. 23	Evol	ed Expe	ndable La	aunch
				Subline Iter	n					
Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
						/				
		SMC	Feb-07	SS	CPAF	United Launch Alliance (ULA) / CO	Oct-07	Oct-07		
						/				
0	0.000	SMC	Jan-10	SS	CPIF	United Launch Alliance (ULA) / CO	Mar-11	Mar-11	Y	
						/				
3	TBD	SMC	Jan-09	SS	FFP	United Launch Alliance (ULA) / CO	Jan-10	Jan-12	Y	
4	TBD	SMC	Jan-10	SS	FFP	United Launch Alliance (ULA) / CO	Nov-10	Nov-12	Y	
4	TBD	SMC	Jan-11	SS	FFP	United Launch Alliance (ULA) / CO	Dec-11	Dec-13	Y	
-	Qty.	Qty. Unit Cost  0 0.000  TBD	Qty. Unit Cost Location of PCO  SMC  0 0.000 SMC  3 TBD SMC	Qty. Unit Cost Cost PCO REPLIENCE  Output  Date  Location of PCO Date  SMC Feb-07  SMC Jan-10  TBD SMC Jan-10	de/CC/BA/Bs/Item Control Number:  ent, Air Force, Budget Activity 05, Other Suppose  Subline Item  Outy. Unit Cost PCO RFP Issue Date Contract Method  SMC Feb-07 SS  SMC Feb-07 SS  TBD SMC Jan-10 SS  TBD SMC Jan-10 SS	de/CC/BA/Bs/Item Control Number:  ent, Air Force, Budget Activity 05, Other Support, Item    Subline Item	Subline Item   Subline Item   Subline Item   Contract   Contract   Type   Contract   Contract   Type   Contract   Contr	De/CC/BA/Bs/Item Control Number:  ent, Air Force, Budget Activity 05, Other Support, Item No. 23  Subline Item    Other Support	Be/CC/BA/Bs/Item Control Number: Bent, Air Force, Budget Activity 05, Other Support, Item No. 23    Subline Item	P-1 Line Item Nomenclature:   P-1 Line Item Nomenclature:   Evolved Expendable Lavehicle (EELV)

All launches will be ordered at least 24 months prior to the scheduled launch. Launch Service unit costs are not applicable for this program due to the mix (medium through heavy) of vehicles in the program.

P-1 Shopping List Item No. 23

Procurement History and Planning Exhibit P-5A, page 5 of 10

Continue	xhi	bit P	-21, P	roduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
		•	•	• /																										
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	/lis	sile	Proc	urem	ent, <i>A</i>	Air F	orce	, Bu	dget	Act	ivity	- 05,	, Oth	er S	upp	ort, I	tem	No.	23					kpen	dab	le La	unc	h Ve	hicl	е
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				ACCEP	BALAN					F	ISCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	)11					L
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ROC		PROC	PRIOR	CE DUE		2009						CAI	LENDAF	R YEAR	2010								CALEN	DAR YE	AR 201				A
2006 USAF 1 0 0 1 1 1		SERV.		1 OCT.	1 OCT		0	Е			A	P	Α	-		U	E		0	E			Α	P	A	_	J U L	U	S E P	T E R
2007   USAF   3	005	USAF	2	0	2										1					1										0
2008 USAF 4 0 4	006	USAF	1	0	1	1																								0
2009         USAF         2         0         2         I<	008 USAF 4 0 4 4 0 4																													
2010   USAF   3	800	08 USAF 4 0 4																												
2011 USAF 3 0 3 USAF 4 0 4 USAF 3 USAF 4 USAF 4 USAF 4 USAF 4 USAF 5 USA	2009 USAF 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2																													
2012 USAF 4 0 4 1 0 4 1 0 1 0 1 0 1 0 1 0 0 0 0 0	2010 USAF 3 0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3																													
2013 USAF 4 0 4	2011 USAF 3 0 3																													
2014 USAF 5 0 5 USAF	012	USAF	4	0	4																								<u> </u>	4
2015 USAF 5 0 5 USAF 5 U	013			0	4																								<u> </u>	4
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	014			0																									<u> </u>	5
TOTAL 41 0 41 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	015			0																									<u> </u>	5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$																													<u> </u>	5
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	TOT	TAL	41	0	41	1	<u> </u>	<del></del>	0	<u> </u>		<u> </u>		0	1	0		<del></del>	<u> </u>	1	0	1	<u> </u>	1	_	0	0		0	36
						_		Е		E	1		Α			U	E			E		E		A P R	A	-	J U L	U	S E P	
PRODUCTION RATES PROCUREMENT LEAD TIME									PR	ODUCT	ION RA	TES								PRO	CURE	MENT L	EAD TII	ME				•		
ITEM/MANUFACTURER'S NAME LOCATION MSR ECON MAX ADMIN LEAD TIME MFG. TOTAL AFTER	ITEI	M/MAN	UFACTL	IRER'S N	AME	LOCA	ATION	М	ISR	EC	ON	M	AX				ADMI	N LEAD	TIME		МЕ	-G	TO	TAL AF	TFR					
United Launch Alliance (ULA)         CO         4         10         PRIOR 1 OCT         AFTER 1 OCT         PLT 1 OCT	U	7. 12.1																												
INITIAL																ļ .	<u> </u>		- 1			· F		26						
REMARKS		DI/O												KEOK	DEK	L		l	1		2	:5		26		l				

P-1 Shopping List Item No. 23

Production Schedule Exhibit P-21, page 6 of 10

Exhi	bit P-	21, Pr	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	propriation (Treasury) Code/CC/BA/BSA/Item Control Number  issile Procurement, Air Force, Budget Activity - 05, Other Support, Item No. 23  Evolved Expendable Launch Vehicle																												
										vitv	- 05	Oth	er S	unn	ort l	tem	No '	23		lev	olve	d Fa	men	dah	le I a	unc	h Ve	hick	6
14110				Jiit, 7	<u> </u>		, <b>D</b> a		7101	·Vicy				ирр.	J. C, 1						ELV)		.роп						
			ACCEP.	BALAN					Fl	ISCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC.		PROC.	PRIOR			2011						CAI	ENDAR	YEAR	2012							. (	CALEN	DAR YE	AR 2013	3			A
YEAR	SERV.	QTY.	TO 1 OCT.	AS OF 1 OCT	0	N	D	J	F	M	A	M	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	Т
			2011	2011	C T	O V	E C	A N	E B	A R	R R	A Y	U N	U L	U G	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	R
2007	USAF	3	2	1							1																		0
2008	2008 USAF 4 0 4 1 1 1 1 1 1 0 0																												
2009	2009 USAF 2 0 2 1 1 1																												
2010	010 USAF 3 0 3 1 1 1 1 1 0																												
2011	011 USAF 3 0 3 1 1 1 1 1 0																												
2012	011 USAF 3 0 3 0 1 1 1 1 1 0 0 0 1 1 USAF 4 0 4 0 4 0 4 0 4 0 4 0 0 4 0 0 0 0 0																												
2013	012 USAF 4 0 4																												
2014	USAF	5	0	5																							<u> </u>	—	5
2015	USAF	5	0	5										<u> </u>				<u> </u>									<b></b>	<b>└</b>	5
2016	USAF	5	2	5			<b>.</b>	0				_		0		0						0	_		0				5
10	ΓAL	38	2	36	1	0 N	D D	0	I E	0 M	3	0 M	l T	0	0	0	1	2 N	D D	l T	0 F	0 M	0	0 M	0	0	0	0 S	24
					O C	O	E	A	E	A	A P	A	U	U	A U	S E	O C	O	E	A	F E	M A	A P	M A	U	U	A U	E	
					Ť	V	Č	N	В	R	R	Y	N	Ĺ	Ğ	P	T	V	C	N	В	R	R	Y	N	Ĺ	Ğ	P	
								PR	ODUCT	ION RA	TES								PRO	CURE	ΛΕΝΤ L	EAD TII	ИΕ						
ITE	M/MANU	IFACTU	RER'S NA	AME	LOCA	NOITA	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	G.	то	TAL AF	TER					
L	United Launch Alliance (ULA)         CO         4         10         PRIOR 1 OCT         AFTER 1 OCT													l	Pl	_T		1 OCT											
													INITIAL																
			_										REORI	DER	2	2		1		2	5		26						
REMA	RKS																												
Current	Launch	Services	procure	ments w	ill no lo	nger ba	sed on	a missio	n-assig	ned tail	concep	t startin	g in FY	2012.	The rev	ised pro	cureme	nt proc	ess will	be base	d on a	vearly la	aunch s	ervice l	olock bu	ıv for th	e Air F	orce w	ith

Current Launch Services procurements will no longer based on a mission-assigned tail concept starting in FY2012. The revised procurement process will be based on a yearly launch service block buy for the Air Force with estimated delivery two years later. The Air Force will then assign missions on priority-need or first availability. Estimated delivery month will become more accurate as the delivery year approaches.

P-1 Shopping List Item No. 23

Production Schedule Exhibit P-21, page 7 of 10

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol l	Numbe	r											P-1	Line Ite	em Noi	mencla	ature					
Mis	sile F	Procu	ırem	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	23			olve ELV)		cpen	dab	le La	unc	h Ve	hicl	е
			ACCEP	BALAN					FI	SCAL Y	EAR 20	14									FI	SCAL Y	EAR 20	15					L
PROC.		PROC.	PRIOR	CE DUE		2013						CAI	ENDAR	YEAR	2014							(	CALEN	DAR YE	AR 2015	5			A
YEAR	SERV.	QTY.	TO 1 OCT. 2013	AS OF 1 OCT 2013	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2012	12 USAF 4 0 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																												
2013	013 USAF 4 0 4 0 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0																												
2014	14 USAF 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5																												
2015	15 USAF 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5																												
2016	16 USAF 5 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5																												
TO	ΓAL	23	0	23	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	15
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ON RA	ΓES								PRC	CUREN	1ENT LI	EAD TI	ME					1	
ITE	M/MANU	IFACTUF	RER'S N	AME	LOCA	ATION	MS	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	G.	TO	TAL AF	TER					
U	nited Lau	unch Allia	ance (UL	A)	С	0	4	4	1	0						IOR OCT		AFTER 1 OCT		PL	.T		1 OCT						
													INITIAL REORI			2		1		2:	5		26						
REMAR	RKS																												

Current Launch Services procurements will no longer based on a mission-assigned tail concept starting in FY2012. The revised procurement process will be based on a yearly launch service block buy for the Air Force with estimated delivery two years later. The Air Force will then assign missions on priority-need or first availability. Estimated delivery month will become more accurate as the delivery year approaches.

P-1 Shopping List Item No. 23

Production Schedule Exhibit P-21, page 8 of 10

Exh	bit P-2	21, Pro	oducti	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasu	ıry) Coc	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em Nor	mencla	ture					
Mis	sile F	Procu	ireme	ent, A	Air F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	uppo	ort, I	tem	No. 2	23			olve ELV)		cpen	dabl	le La	unc	h Ve	hicl	е
			ACCEP.	BALAN					Fl	SCAL Y	EAR 20	16									FI	SCAL Y	EAR 20	17					L
PROC.		PROC.		CE DUE		2015						CAL	ENDAR	YEAR	2016							(	CALENI	DAR YE	AR 2017	7			Α
YEAR	SERV.	QTY.	TO 1 OCT. 2015	AS OF 1 OCT 2015	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	T E R
2014	5 USAF 5 0 5 5 0 5																												
2015	5 USAF 5 0 5 5 0 5																												
2016	USAF 5 0 5 5																												
TO	TOTAL 15 0 15 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0																												
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						•		PRO	DDUCT	ON RA	ΓES								PRC	CUREN	IENT L	EAD TIN	ИE						
ITE	M/MANU	FACTUF	RER'S NA	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMII	N LEAD	TIME		MF	G.	то	TAL AF	TER					
l	United Launch Alliance (ULA)         CO         4         10         PRIOR         AFTER           1 OCT         1 OCT         1 OCT														PL	Т.		1 OCT											
	INITIAL REORDER 2 1												2	5		26													
REMA	RKS																												

Current Launch Services procurements will no longer based on a mission-assigned tail concept starting in FY2012. The revised procurement process will be based on a yearly launch service block buy for the Air Force with estimated delivery two years later. The Air Force will then assign missions on priority-need or first availability. Estimated delivery month will become more accurate as the delivery year approaches.

P-1 Shopping List Item No. 23

Production Schedule Exhibit P-21, page 9 of 10

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Febi	ruary	2011			
Appro	priation	(Treasi	ury) Cod	de/CC/B	A/BSA	/Item C	ontrol	Numbe	r											P-1	Line Ite	em Noi	mencla	ture					
Mis	sile F	Procu	ırem	ent, A	ir F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	uppo	ort, I	tem	No. 2	23			olve ELV)		cpen	dabl	e La	unc	h Ve	hicl	e
			ACCEP	BALAN					FI	SCAL Y	EAR 20	18									FIS	SCAL Y	EAR 20	19					L
PROC.		PROC.	PRIOR	CE DUE		2017						CAL	ENDAR	YEAR :	2018							(	CALENI	OAR YE	AR 2019	)			A
YEAR	1 OCT 1 OCT   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   A   E   A   P   A   U   U   U   U   U   E   E   A   E   A   P   A   U   U   U   U   U   U   U   U   U																												
2015	5 USAF 5 5 0 0 0																												
2016	6 USAF 5 0 5 5 0 0 5 0 5 0 0 0 0 0 0 0 0 0 0																												
TO	6 USAF 5 0 5 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0																												
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						•		PR	DDUCT	ON RA	ΓES								PRC	CUREN	IENT LI	EAD TI	ME						
ITE	M/MANU	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME		MF	G.	TO <sup>-</sup>	TAL AF	TER					
United Launch Alliance (ULA) CO 4 10 PRIOR AFTER											PL			1 OCT															
	1 OCT 1 OCT																												
	INITIAL																												
													REORE	DER	2	2		1		2	5		26						
REMA	RKS																												

Current Launch Services procurements will no longer based on a mission-assigned tail concept starting in FY2012. The revised procurement process will be based on a yearly launch service block buy for the Air Force with estimated delivery two years later. The Air Force will then assign missions on priority-need or first availability. Estimated delivery month will become more accurate as the delivery year approaches.

P-1 Shopping List Item No. 23

Production Schedule Exhibit P-21, page 10 of 10

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 14	Space Based Infrared System (SBIRS) High

Program Element for Code B Items:	: N/A						Other	Related Progr	am Elements:	0603430F	
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	To Complete	Total
Proc Qty	A	2	1	1		2					6
Annual Appropriation											
Cost (\$ M)		1,652.135	305.350	700.704	81.189	448.770	91.868	79.568	97.539		3,457.123
Adv Proc Cost (\$ M)		567.815	158.545	270.000	243.700	-					1,240.060
Total Proc Cost (\$ M)		2,219.950	463.895	970.704	324.889	448.770	91.868	79.568	97.539	-	4,697.183
Advance Appropriations											
GEO Satellites 5 & 6 (\$ M)							412.600	413.000	396.300	1,423.900	2,645.800
Total Proc Cost (\$M)		2,219,950	463.895	970,704	324.889	448.770	504.468	492,568	493.839	1,423,900	7,342,983

#### Description

The program funding includes overhead reductions for efficiencies that are not intended to impact program content. The efficiencies reductions total \$3.090M in FY12.

Totals include funding for PRCP Program Number 210, Space-Based Infrared System (SBIRS). This P-40 describes SBIRS funding in PE0305915F. Associated RDT&E funding is in PE 0604441F.

SBIRS's primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces and its allies. SBIRS will incorporate new technologies to enhance detection and improve reporting of intercontinental ballistic missiles, submarine launched ballistic missiles, and tactical ballistic missiles. SBIRS provides increased detection and tracking performance in order to meet requirements in US Space Command's Capstone Requirements Document and Operational Requirements Document (ORD). SBIRS will consist of satellites in Geosynchronous Earth Orbit (GEO) and payloads in Highly Elliptical Orbit (HEO) with an integrated centralized ground station serving all SBIRS space elements, Defense Support Program (DSP) satellites and other program related support activities. The HEO payloads operate on a classified host.

SBIRS GEO-3 and 4 satellites are derivatives of the first two GEO satellites which were delivered on the SBIRS Engineering and Manufacturing Development (EMD) contract (RDT&E funded). The GEO-3 and 4 satellite production efforts are necessary to meet constellation requirements. The Acquisition Decision Memorandum (ADM) signed 1 Dec 2008 approved the acquisition of the GEO-3 and 4 satellites and the HEO-3 and 4 payloads using a Cost-Plus contract.

The program is pursuing an ADM in spring 2011 for authority to procure GEO-5 and 6 under a fixed price contract. GEO-5 and 6 satellites are planned as derivatives of the GEO-3 and 4 satellites. GEO-5 and 6 will be procured through the Department of Defense Evolutionary Acquisition for Space Efficiency (EASE) approach which seeks stable production and strategic sub-tier management through the block buy of two space vehicles employing fixed-priced contracting. The block buy of satellites enables savings by reducing the effect of obsolescence and production breaks and by optimizing production "learning." Additionally, EASE seeks cost efficiencies with the prime and subcontractor team through Economic Order Quantities (EOQ) and a healthy space industrial base.

SBIRS HEO-3 and 4 payloads are replenishments for HEO-1 and 2 payloads, which were delivered on the SBIRS Engineering and Manufacturing Development (EMD) contract using RDTE funds. The HEO-1 and 2 payloads are accepted and certified for Integrated Tactical Warning/Attack Assessment (ITW/AA) missile warning operations and certified for technical intelligence operations.

Total program cost estimates (to include to-complete cost) are pending the Service Cost Position to be completed spring 2011.

P-1 Shopping List Item No. 24

Budget Item Justification Exhibit P-40 page 1 of 16

	ID 4 5 1 0044
Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 14	P-1 Line Item Nomenclature Space Based Infrared System (SBIRS) High
FY 2012 Program Justification	
FY12 funding provides for continued procurement of the GEO-5 and follow-on satellites and on-orbit test and support of HI related support activities, such as, but not limited to Systems Engineering and Integration.	EO-1/2 satellites. Continues funding Program Office and
EASE Implementation FY12 completes the second and last year of GEO advanced procurement. FY13 is the year of full funding for GEO-5 and 6 as requested in the EASE Legislative Proposal for the FY12 National Defense Authorization Act. The advanced appropriation program related support costs will be requested as an annual appropriation.	
FY13 through completion costs are based on a fall 2010 OSD CAPE estimate. OSD CAPE estimated that under the tradition NEI and Fee), would have been \$3.551M (or an average unit cost of \$1.775M each). Using the EASE block-buy approach, estimated to be \$3.030M (or an average unit cost of \$1.515M each). The expected savings of the EASE approach is \$521M	the GEO-5/6 contract cost (including NEI and Fee) is
P-1 Shopping List Item No. 24	Budget Item Justification Exhibit P-40 page 2 of16

Exhibit P-5, Weapon System Cost A	nalysis									Date: Fel	oruary 2	2011	
Appropriation (Treasury) Code/CC/BA/BSA/Iten	n Control Number							P-1 I	_ine Item No	menclature			
Missile Procurement, Air Ford	ce, Budget A	ctivity	/ 05, Oth	ner Supp	ort, It	tem No.	24	Sp. Hig		ed Infra	red Sy	/stem (S	BIRS)
Weapon System Cost Elements	Ident Code					Total	Cost in Mi	llions of	Dollars				
	Prior Years FY 2010												2
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
GEO 3 - 6	A												
Flyaway Costs	A												
Hardware-Recurring	A	1		546.031			0.000	1		528.182			
Integration and Assembly	A			356.429			0.000			260.200			
Non-Recurring & Ancillary Costs	A			534.460			0.000			98.053			
TOTAL FLYAWAY COST		[1]		[1436.920]	[0]		[0.000]	[1]		[886.435]	[0]		[0.000]
Checkout & Launch	A												
Integration and Checkout (NEI)	A									0.302			1.257
TOTAL CHECKOUT & LAUNCH		[0]		[0.000]	[0]		[0.000]	[0]		[0.302]	[0]		[1.257]
Support Cost	A												
Technical Support (FFRDC)	A			11.121						31.939			20.998
Program Support (OGC's)	A			16.257			18.856			32.967			25.996
TOTAL SUPPORT COST		[0]		[27.378]	[0]		[18.856]	[0]		[64.906]	[0]		[46.994]
Less Advance Procurement GEO 3 - 6	A			-270.170						-278.545			

Less Advance Appropriations

Plus Advance Procurement GEO 3 - 6

Non-recurring & Ancillary Costs (Ground)

For FY14

For FY15

For FY16 For FY17

For FY18

HEO 3 & 4

Flyaway Costs

Hardware-Recurring

Integration and Assembly

TOTAL FLYAWAY COST

A

A

Α

A

A

Α

Α

Α

A

A

A

[1]

P-1 Shopping List Item No. 24

390.170

119.687

67.800

217.292

[404.779]

Weapon System Cost Analysis Exhibit P-5, page 3 of 16

[0]

243.500

[0.000]

270.000

[0.000]

[1]

158.545

174.388

97.383

[271.771]

[0]

Exhibit P-5, Weapon System Cost Analysis	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number	P-1 Line Item Nomenclature
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 24	Space Based Infrared System (SBIRS) High

Weapon System Cost Elements	Ident Code					Total	Cost in Mi	llions of	Dollars				
Cost Elements	Code		Prior Yea	rs		FY 2010	)		FY 2011			FY 2012	2
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
Checkout & Launch	A												
Integration and Checkout (incl. HEO Host)	A			165.300			59.878			3.615			3.741
Integration and Checkout (NEI)	A						0.604			3.120			9.257
TOTAL CHECKOUT & LAUNCH COST		[0]		[165.300]	[0]		[60.482]	[0]		[6.735]	[0]		[12.998]
Support Cost	A												
Technical Support (FFRDC)	A			4.766						6.743			8.999
Program Support (OGCs)	A			6.967			8.081			14.129			11.141
TOTAL SUPPORT COST		[0]		[11.733]	[0]		[8.081]	[0]		[20.872]	[0]		[20.140]
Less Advance Procurement	A			-123.804			-53.841						
Plus Advance Procurement (HEO 3 & 4)	A			177.645									
TOTAL PROGRAM:				2219.951			463.894			970.705			324.889

#### Remarks

FY08 funding provides for advance procurement of the GEO-3 satellite. FY09 funding provides for full funding of the GEO-3 satellite and advance procurement of the GEO-4 satellite. FY10 funding provides for continued advance procurement of the GEO-5 and subsequent satellites. FY12 funding provides for continued advance procurement of the GEO-5 and follow-on satellites. FY13 funding provides for continued procurement of the GEO-5 and follow-on satellites. FY14 funding provides for continued procurement of the GEO-5 and follow-on satellites. FY15 funding provides for continued procurement of the GEO-5 and follow-on satellites. FY16 funding provides for continued procurement of the GEO-5 and follow-on satellites. Program related support costs are budgeted on an annual basis and reflected in the fiscal year during which the requirement is projected to execute.

FY08 funding provides for advance procurement of the HEO-3 payload. FY09 funding provides for full funding of the HEO-3 payload and advance procurement of the HEO-4 payload. FY10 funding provides for full funding of the HEO-4 payload. FY11 and FY12 provide for host costs and on-orbit test and contractor support. Program related support costs are budgeted on an annual basis and reflected in the fiscal year during which the requirement is projected to execute.

P-1 Shopping List Item No. 24

Weapon System Cost Analysis Exhibit P-5, page 4 of 16

Exhibit P-5, Weapon System Cost Analy	ysis							Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Cor	ntrol Number							P-1 Line Item Nomenclature
Missile Procurement, Air Force,	Budget A	ctivity	/ 05, Oth	ner Supp	ort, It	tem No.	24	Space Based Infrared System (SBIRS) High
Weapon System	Ident					Total	Cost in Milli	ions of Dollars
Cost Elements	Code							
		I	FY 2012 O			ost to Com	•	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
GEO 3 - 6	A							
Flyaway Costs	A							
Hardware-Recurring	A			0.000			TBD	
Integration and Assembly	A			0.000			TBD	
Non-Recurring & Ancillary Costs	A						TBD	
TOTAL FLYAWAY COST		[0]		[0.000]	[0]		TBD	
Checkout & Launch	A							
Integration and Checkout (NEI)	A						TBD	
TOTAL CHECKOUT & LAUNCH		[0]		[0.000]	[0]	TBD	TBD	
Support Cost	A							
Technical Support (FFRDC)	A						TBD	
Program Support (OGC's)	A						TBD	
TOTAL SUPPORT COST		[0]		[0.000]	[0]	TBD	TBD	
Less Advance Procurement GEO 3 - 6	A							
Less Advance Appropriations	A							
For FY14	A							
For FY15	A							
For FY16	A							
For FY17	A							
For FY18	A							
Plus Advance Procurement GEO 3 - 6	A							
HEO 3 & 4	A							
Flyaway Costs	A							
Hardware-Recurring	A							
Integration and Assembly	A							
Non-recurring & Ancillary Costs (Ground)	A							
TOTAL FLYAWAY COST		[0]		[0.000]	[0]		[0.000]	

Exhibit P-5, Weapon System Cost And	alysis	·	Date: February 2011					
Appropriation (Treasury) Code/CC/BA/BSA/Item C	Control Number		P-1 Line Item Nomenclature					
Missile Procurement, Air Force	, Budget A	Activity	y 05, Oth	ner Supp	ort, I	em No.	24	Space Based Infrared System (SBIRS) High
Weapon System Cost Elements	Ident Code					Total	Cost in Milli	ions of Dollars
		plete						
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
Checkout & Launch	A							
Integration and Checkout (incl. HEO Host)	A			0.000			TBD	
Integration and Checkout (NEI)	A							
TOTAL CHECKOUT & LAUNCH COST		[0]		[0.000]	[0]	TBD	TBD	
Support Cost	A							
Technical Support (FFRDC)	A						TBD	
Program Support (OGCs)	A						TBD	
TOTAL SUPPORT COST		[0]		[0.000]	[0]	TBD	TBD	
Less Advance Procurement	A							
Plus Advance Procurement (HEO 3 & 4)	A							
TOTAL PROGRAM:				0.000			TBD	

P-1 Shopping List Item No. 24

Weapon System Cost Analysis Exhibit P-5, page 6 of 16

Exhibit P-40A, Budget item Justine	ation for Aggre	egateu				Date. Fel	oruary 2	2011							
Appropriation (Treasury) Code/CC/BA/BSA/Iter	m Control Number			P-1	Line Item No	menclature									
Missile Procurement, Air Ford	ce, Budget A	24	Sp Hi	ace Bas gh	ed Infra	red S	ystem (S	SBIRS)							
Weapon System Cost Elements	Weapon System Ident Total Cost in Millions of Dollars														
			FY 201	1		FY 2012	2								
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost		
GEO 3 satellite	A	1		1464.298			18.856			24.652			24.554		
GEO 4 satellite	A			120.000			158.545	1		648.446			23.497		
GEO 5&6 satellites*	A									270.000			243.700		
HEO 3 payload	A	1		581.811			5.866			15.364			21.197		
HEO 4 payload	A			53.841	1		280.628			12.242			11.941		
TOTAL PROGRAM:				2219.950			463.895			970.704			324.889		

#### Remarks

Exhibit P-40A Rudget Item Justification for Aggregated Items

The Acquisition Decision Memorandum (ADM) signed 1 Dec 2008 approved the acquisition of the GEO-3 and 4 satellites and the HEO-3 and 4 payloads using a Cost-Plus contract. Furthermore, this ADM directed the SBIRS Program Office to negotiate undefinitized contract options for GEO-5 and 6 satellites and definitize these options at a later date on a Fixed Price contract. GEO-5 and 6 satellites are planned as derivatives of GEO-3 and 4 satellites.

\*The program is pursuing an ADM in spring 2011 for authority to procure GEO-5 and 6 under a fixed price contract. GEO-5 and 6 satellites are planned as derivatives of the GEO-3 and 4 satellites. GEO-5 and 6 will be procured through the Department of Defense Evolutionary Acquisition for Space Efficiency (EASE) approach which seeks stable production and strategic sub-tier management through the block buy of two space vehicles employing fixed-priced contracting. The block buy of satellites enables savings by reducing the effect of obsolescence and production breaks and by optimizing production "learning." Additionally, EASE seeks cost efficiencies with the prime and subcontractor team through Economic Order Quantities (EOQ) and a health space industrial base.

Total program cost estimates (to include to-complete costs) pending OSD CAPE independent cost estimate (ICE) and Defense Acquisition Board (DAB) for GEO-5/6 due to be completed spring 2011.

P-1 Shopping List Item No. 24

Budget Item Justification for Aggregated Items
Exhibit P-40A, page 7 of 16

Date: February 2011

Exhibit P-40A, Budget Item Justifica	ation for Aggre	egated		Date: February 2011				
Appropriation (Treasury) Code/CC/BA/BSA/Item	n Control Number			P-1 Line Item Nomenclature				
Missile Procurement, Air Forc	e, Budget A	Activity	y 05, Otl	ner Supp	ort, Ite	em No.	24	Space Based Infrared System (SBIRS) High
Weapon System Cost Elements	Ident Code					Total	Cost in Mill	lions of Dollars
2000		plete						
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
GEO 3 satellite	A						TBD	
GEO 4 satellite	A						TBD	
GEO 5&6 satellites*	A						TBD	
HEO 3 payload	A						TBD	
HEO 4 payload	A						TBD	
TOTAL PROGRAM:				0.000			TBD	

P-1 Shopping List Item No. 24

Budget Item Justification for Aggregated Items
Exhibit P-40A, page 8 of 16

Exhibit P-5A, Procus Appropriation (Treasury) C Missile Procuren	ode/CC/BA/Bs	s/Item Control N	Number:	vity 05, O	ther Supp	ort, Item	No. 24	Spac	e Item Nomeno	ebruary 201 clature: Infrared \$	
Weapon System					Subline Ite	m		•			
SBR H		<u> </u>	T	<u> </u>	<u> </u>	<u> </u>		1	Date of	T 0	
WBS Cost Elements	Qty.	Unit Cost	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	First Delivery.	Specs Available Now?	Date Revision Available?
GEO 3 Satellite							/				
(2009)	1	1464.298	SMC, LA AFB, El Segundo, CA	Jul-07	SS	CPAF	Lockheed Martin Space Systems / Sunnyvale, CA	Mar-08	Oct-14	Y	
GEO 4 Satellite							/				
(2011)	1	926.991	SMC, LA AFB, El Segundo, CA	Jul-07	SS	CPAF	Lockheed Martin Space Systems / Sunnyvale, CA	Jul-09	Oct-15	Y	
GEO 5&6 Satellites							/				
(2013)	1	1771.750	SMC, LA AFB, El Segundo, CA	Aug-11	SS	FP	TBD / TBD	Feb-12	Jun-19	Y	
(2013)	1	1771.750	SMC, LA AFB, El Segundo, CA	Aug-11	SS	FP	TBD / TBD	Feb-12	Jun-20	Y	
HEO 3 Payload							/				
(2009)	1	581.812	SMC, LA AFB, El Segundo, CA	Jul-07	SS	CPAF	Lockheed Martin Space Systems / Sunnyvale, CA	Mar-08	Aug-12	Y	
HEO 4 Payload							/				
	· ·	1		F	P-1 Shopping	List Item N	lo. 24	Pro	curement	History and	l Planning

**UNCLASSIFIED PAGE 05 -85** 

Procurement History and Planning Exhibit P-5A, page 9 of 16

								Date. I	ebruary 201	I
ppropriation (Treasury) Code/CC  Missile Procurement,			vity 05, Ot	ther Supp	ort, Item	No. 24	Spac	e Item Nomeno e Based RS) High	elature: Infrared S	System
Veapon System				Subline Ite	m		-			
BR H										
WBS Cost Elements	Qty. Unit Co	Location of PCO	RFP Issue Date	Contract Method	Contract Type	Contractor and Location	Award Date	Date of First Delivery.	Specs Available Now?	Date Revision Available?
(2010)	334.469	SMC, LA AFB, El Segundo, CA	Jul-07	SS	CPAF	Lockheed Martin Space Systems / Sunnyvale, CA	Jul-09	Jan-15	Y	
Remarks	•	•	•		•		•	•	•	•
Acquisition strategy pending for GEO-3 and 4 satellites an								t costs beyon	nd year of ful	l funding

P-1 Shopping List Item No. 24

Procurement History and Planning Exhibit P-5A, page 10 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treasi	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	r											P-1	Line It	em No	mencla	ature					
Mis	sile F	Procu	irem	ent, A	Air F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No.	24		Sp Hi		Bas	ed lı	nfrar	ed S	yste	m (S	BIF	RS)
			ACCEP	BALAN					Fl	SCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					Ι.
PROC.		PROC.	PRIOR	CE DUE		2009						CAL	ENDAR	YEAR	2010								CALEN	DAR YE	AR 201	1			A
YEAR	SERV. QTY. 10 AS OF O N D J F M A M J J J A S O N D J F M A P A U U U E C O E A E A P A P T V C N B R R C T O C N B R R C T O C N B R C T O C N B C N B C T O C N B C T O C N B C T O C N C N C N C N C N C N C N C N C N C															M A Y	J U N	J U L	A U G	S E P	T E R								
2009	1 OCT   1 OCT   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   E   C   O   E   A   E   A   P   A   U   U   U   E   E   E   E   E   E   E															1													
2011	2009 USAF 1 0 1															1													
2013	2009 USAF 1 0 1																1												
2013	2011         USAF         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0 </td <td></td> <td>1</td>																1												
TO	ΓAL	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ION RA	ΓES					•		•	PRC	CURE	ΛΕΝΤ L	EAD TII	ME	•	•				•
ITE	M/MANU	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME											
GEO 3		tellites / L Systems		Martin	Sunnyv	/ale, CA										IOR OCT		AFTER 1 OCT	!	MF PI		10	TAL AF	IER					
													INITIAL REORE			4		3		7	7		72						
REMAI	RKS				1								•		•														

SBIRS GEO-3 is scheduled for delivery in Dec 2014. SBIRS GEO-4 is scheduled for delivery in Oct 2015. SBIRS GEO-5 is scheduled for delivery in June 2019. SBIRS GEO-6 is scheduled for delivery in June 2020.

P-1 Shopping List Item No. 24

Production Schedule Exhibit P-21, page 11 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	priation	(Treası	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	er											P-1	Line Ite	em No	mencla	ture					
Mis	sile F	Procu	irem	ent, A	Air F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No. 2	24		Sp Hi		Bas	ed Ir	nfrar	ed S	yste	m (S	BIR	RS)
			ACCEP	BALAN					Fl	SCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC.		PROC.	PRIOR	CE DUE		2011						CAI	ENDAR	YEAR	2012							(	CALENI	DAR YE	AR 2013	3			A
YEAR	AR SERV. QTY. 10 AS OF 1 OCT 1 OCT 2011 T V C N B R R Y N L G P T V C N B R R Y N  USAF 1 0 1 0 1															J U L	A U G	S E P	T E R										
2009	2011 2011 T V C N B R R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P F T V C N B R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G P F T V C N B R R R R Y N L G R T V C N B R R R R Y N L G R T V C N B R R R R Y N L G R T V C N B R R R R Y N L G R T V C N B R R R R Y N L G R T V C N B R R R R Y N L G R T V C N B T V C N B T															1													
2011	2009 USAF 1 0 1															1													
2013	2009 USAF 1 0 1															1													
2011         USAF         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0 </td <td></td> <td>1</td>																1													
TO	ΓAL	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
								PRO	DDUCT	ION RA	ΓES								PRC	CURE	IENT L	EAD TII	ИE						
ITE	M/MANU	JFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	M	ΑX				ADMI	N LEAD	TIME				<b>T</b> 0							
GEO:		tellites / L Systems		Martin	Sunnyv	ale, CA									PR 1 C	IOR OCT		AFTER 1 OCT		MF Pl		10	TAL AF	IER					
													INITIAL REORE		4	4		3		7	7		72						
REMA	RKS				ı		•								•										•				

SBIRS GEO-3 is scheduled for delivery in Dec 2014. SBIRS GEO-4 is scheduled for delivery in Oct 2015. SBIRS GEO-5 is scheduled for delivery in June 2019. SBIRS GEO-6 is scheduled for delivery in June 2020.

P-1 Shopping List Item No. 24

Production Schedule Exhibit P-21, page 12 of 16

Exhi	bit P-2	21, Pr	oduct	ion Sc	hedu	le																	Date	: Feb	ruary	2011			
Appro	oriation	(Treasi	ury) Cod	le/CC/B	A/BSA	/Item C	ontrol	Numbe	r											P-1	Line Ite	em No	mencla	ture					
Miss	sile F	Procu	ırem	ent, A	Air F	orce	, Bu	dget	Acti	vity	- 05,	Oth	er S	upp	ort, I	tem	No. 2	24		Sp Hi		Bas	ed Ir	nfrar	ed S	yste	m (S	BIR	RS)
			ACCEP	BALAN					FI	SCAL Y	EAR 20	14									FI	SCAL Y	EAR 20	15					L
PROC.		PROC.	PRIOR	CE DUE		2013						CAL	ENDAR	YEAR	2014							(	CALENI	DAR YE	AR 2015	5			A
YEAR	YEAR SERV. QTY. 10 AS OF 1 OCT. 2013 T V C N B R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P T V C N B R R R Y N L G P T V C N L G P T															A U G	S E P	T E R											
2009	2013 2013 T V C N B R R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P T V C N B R R Y N L G P R 2009 USAF 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0															0													
2011	2009 USAF 1 0 1															1													
2013	2009         USAF         1         0         1         1         1         1         2011         USAF         1         0         1         <														1														
2013	2011         USAF         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0         1         0 </td <td>1</td>															1													
TOT	ΆL	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
						•		PRO	DDUCT	ON RA	ΓES								PRC	CURE	IENT L	EAD TII	ME			•			
ITE	л/MANU	IFACTUF	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	MA	ΑX				ADMI	N LEAD	TIME											
GEO 3		ellites / L Systems	ockheed (LSSC)	Martin	Sunnyv	ale, CA									PR 1 C			AFTER 1 OCT		MF Pl		10	TAL AF	TER					
													INITIAL REORE		4	4		3		7	7		72						
REMAF	RKS				ı		ı								•							1			•				

SBIRS GEO-3 is scheduled for delivery in Dec 2014. SBIRS GEO-4 is scheduled for delivery in Oct 2015. SBIRS GEO-5 is scheduled for delivery in June 2019. SBIRS GEO-6 is scheduled for delivery in June 2020.

P-1 Shopping List Item No. 24

Production Schedule Exhibit P-21, page 13 of 16

Exh	bit P-	21, Pr	oduct	ion Sc	hedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	ury) Cod	de/CC/E	A/BSA	/Item C	Control	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	Procu	ırem	ent, A	Air F	orce	, Bu	dget ——	Act	ivity	- 05	Oth	ner S	upp	ort, I	tem	No.	24		Sp Hi		Bas	ed lı	nfrar	ed S	yste	em (S	BIR	≀S)
			ACCEP	BALAN					F	ISCAL Y	EAR 20	10									FI	SCAL Y	EAR 20	11					L
PROC.		PROC.		CE DUE		2009						CAI	LENDAR	YEAR	2010								CALEN	DAR YE	AR 201	1			Α
YEAR	COC. CATY. TO AS OF 1 OCT 2009 T V C N B R R R Y N L G P T V C N B R R R Y N L G P T T V C N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N B R R R Y N L G P R COC. N C N B R R R Y N L G P R COC. N C N B R R R Y N L G P R COC. N C N B R R R Y N L G P R COC. N C N C N C N C N C N C N C N C N C N																												
2009	EAR																												
2010	Composition   Composition																												
TO	009 USAF 1 0 1																												
	010 USAF 1 0 1 1 1																												
						•		PR	ODUCT	ION RA	TES	•		•	•	•	•	•	PRO	CURE	/ENT L	EAD TII	ME	•					
ITE	M/MANL	JFACTUI	RER'S N	AME	LOCA	ATION	М	ISR	EC	ON	М	AX				ADMI	N LEAD	TIME											
HEO:		loads / I Systems	ockheed (LSSC)	Martin	Sunny	/ale, CA										IOR OCT		AFTEF 1 OCT	-	MF PI		TO	TAL AF 1 OCT	TER					
													INITIAL			4		3		5	3		50						
DE1.44	2140												REORI	DER															
REMA																													
SBIRS	НЕО-3 і	is schedu	iled for d	lelivery i	n Aug 2	2012. S	BIRS F	IEO-4 is	s sched	ıled for	deliver	y in Jar	ı 2015.																

P-1 Shopping List Item No. 24

Production Schedule Exhibit P-21, page 14 of 16

Exhi	bit P-	21, Pr	oduct	ion Sc	chedu	ıle																	Date	: Feb	ruary	2011			
Appro	priation	(Treas	sury) Co	de/CC/B	BA/BSA	/Item C	Control	Numbe	er											P-1	Line It	em No	mencla	ature					
Mis	sile F	Proci	urem	ent, A	Air F	orce	, Bu	dget	Act	ivity	- 05	, Oth	ner S	upp	ort, I	tem	No.	24		Sp Hi		Bas	ed lı	nfrar	ed S	syste	em (S	BIR	RS)
			ACCEP	BALAN					F	ISCAL Y	EAR 20	12									FI	SCAL Y	EAR 20	13					L
PROC.		PROC				2011						CAl	LENDAR	YEAR	2012								CALEN	DAR YE	AR 201	3			Α
YEAR	OC. GAR SERV. PROC. QTY. TO AS OF 1 OCT. 2011 T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P R														E R														
2009	AR   QIY   1 OCT   1 OCT   1 OCT   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   U   E   E   A   B   A   B   A   B   A   B   B   B														0														
2010															1														
TO	No.   Control   Control														1														
	009 USAF 1 0 1																												
								PR	ODUCT	ION RA	TES								PRO	CURE	/ENT L	EAD TII	ME					•	
ITE	M/MANL	JFACTU	RER'S N	AME	LOCA	ATION	M	SR	EC	ON	М	AX				ADMI	N LEAD	TIME											
HEO:			Lockheed s (LSSC)		Sunny	/ale, CA										IOR OCT		AFTER 1 OCT		MF PI		10	TAL AF 1 OCT	TER					
													INITIAL	_		4		3		5	3		50		İ				
													REORI	DER															
REMA	RKS																												
SBIRS	HEO-3 i	is schedi	uled for o	lelivery i	n Aug 2	2012. S	BIRS H	IEO-4 i	s schedi	ıled for	deliver	y in Jar	n 2015.																

P-1 Shopping List Item No. 24

Production Schedule Exhibit P-21, page 15 of 16

Exh	ibit P-	Q1Y.   1 OCT.   1 OCT   C   C   O   E   A   E   A   P   A   U   U   U   E   C   C   C   N   B   R   R   Y   N   L   G   P   T																			Date	: Feb	ruary	2011					
Appro	priation	(Treas	ury) Co	de/CC/B	A/BSA	/Item C	Control	Numbe	r											P-1	Line It	em No	mencla	ature					
Mis	sile l	Proci	ırem	ent, <i>A</i>	ir F	orce	, Bu	dget	Act	ivity	- 05,	, Oth	er S	upp	ort, I	tem	No.	24		Sp Hi		Bas	ed lı	nfrar	ed S	Syste	em (S	SBIF	<b>≀</b> S)
			ACCEP	BALAN					F	ISCAL Y	EAR 20	14									Fl	ISCAL Y	EAR 20	15					L
PROC.		PROC				2013						CAI	LENDAR	YEAR	2014								CALEN	DAR YE	AR 201	5			Α
YEAR	SERV.	ERV. PROC. QTY. TO AS OF 1 OCT. C O E A E A E A P A U U U E C O E A E A E A E A E A E A E A E A E A E														M A R	A P R	M A Y	J U N	J U L	A U G	S E P	E R						
2009	R QTY. 1 OCT. 1 OCT C O E A E A P A U U U E C O E A E A P A P A O U U U E C O N B R R Y N L G P T V C N B R R Y O U U U E C N B R R Y O U U U U U U U U U U U U U U U U U U																			0									
2010	C   2013   2013   T   V   C   N   B   R   R   Y   N   L   G   P   T   V   C   N   B   R   R   Y   N   L   G   P   R   R   Y   N   L   G   P   R   R   Y   N   R   R   Y   N   R   R   R   Y   N   R   R   R   Y   N   R   R   R   Y   N   R   R   R   R   R   R   R   R   R														0														
TC	009 USAF 1 1 0 1														0														
	010 USAF 1 0 1																												
								PRO	DDUCT	ION RA	TES			•			•		PR	CURE	/ENT L	EAD TI	ME						
ITE	M/MANU	JFACTU	RER'S N.	AME	LOCA	ATION	М	SR	EC	ON	M	AX				ADMI	N LEAD	TIME											
HEO			ockheed (LSSC)	l Martin	Sunny	vale, CA									PR 1 C	IOR OCT		AFTEF 1 OCT	-	MF Pi		10	TAL AF	TER					
													INITIAL	_	_	4		3		5	3		50						
													REORI	DER															
REMA	RKS	•		•		, and the second													, and the second				, and the second	, and the second		, and the second			
SBIRS	HEO-3	is schedu	iled for d	lelivery i	n Aug 2	2012. S	BIRS I	IEO-4 is	schedi	ıled for	deliver	y in Jan	2015.																

P-1 Shopping List Item No. 24

Production Schedule Exhibit P-21, page 16 of 16

Exhibit P-40, Budget Item Justification	Date: February 2011
Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 25	P-1 Line Item Nomenclature  Space Based Infrared System (SBIRS) High  Advance Procurement

Program Element for Code B Items	N/A		Other Related Program Elements PE 0604441F										
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	A						0						0
Cost(\$ M)			0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000		0.000
Advance Proc Cost(\$ M)		567.815	158.545	270.000	243.500	0.000	243.500	0.000	0.000	0.000	0.000	0.000	1239.860
Weapon System Cost(\$ M)		567.815	158.545	270.000	243.500	0.000	243.500	0.000	0.000	0.000	0.000	0.000	1239.860
Initial Spares(\$ M)							0.000						0.000
Total Proc Cost(\$ M)		567.815	158.545	270.000	243.500	0.000	243.500	0.000	0.000	0.000	0.000	0.000	1239.860
Flyaway Unit Cost(\$ M)						•	0.000	·					0.000
Wpn Sys Unit Cost(\$ M)						•	0.000	·					0.000

#### **Description**

Totals include funding for PRCP Program Number 210, Space-Based Infrared System (SBIRS).

The program funding includes Overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$3.090M in FY12.

This program has associated RDT&E funding in PE 0604441F.

SBIRS's primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces and its allies. SBIRS will incorporate new technologies to enhance detection and improve reporting of intercontinental ballistic missiles, submarine launched ballistic missiles, and tactical ballistic missiles. SBIRS provides increased detection and tracking performance in order to meet requirements in US Space Command's Capstone Requirements Document and Operational Requirements Document (ORD). SBIRS will consist of satellites in Geosynchronous Earth Orbit (GEO) and payloads in Highly Elliptical Orbit (HEO) with an integrated centralized ground station serving all SBIRS space elements, Defense Support Program (DSP) satellites and other program related support activities. The HEO payloads operate on a classified host.

SBIRS GEO-3 and 4 satellites are derivatives of the first two GEO satellites which were delivered on the SBIRS Engineering and Manufacturing Development (EMD) contract (RDT&E funded). The GEO-3 and 4 satellite production efforts are necessary to meet constellation requirements. The Acquisition Decision Memorandum (ADM) signed 1 Dec 2008 approved the acquisition of the GEO-3 and 4 satellites and the HEO-3 and 4 payloads using a Cost-Plus contract.

The program is pursuing an ADM in spring 2011 for authority to procure GEO-5 and 6 under a fixed price contract. GEO-5 and 6 satellites are planned as derivatives of the GEO-3 and 4 satellites. GEO-5 and 6 will be procured through the Department of Defense Evolutionary Acquisition for Space Efficiency (EASE) approach which seeks stable production and strategic sub-tier management through the block buy of two space vehicles employing fixed-priced contracting. The block buy of satellites enables savings by reducing the effect of obsolescence and production breaks and by optimizing production "learning." Additionally, EASE seeks cost efficiencies with the prime and subcontractor team through Economic Order Quantities (EOQ) and a healthy space industrial base.

P-1 Shopping List Item No. 25

Budget Item Justification Exhibit P-40, page 1 of 5

Exhibit P-40, Budget Item Justification	Date: February 2011
	P-1 Line Item Nomenclature Space Based Infrared System (SBIRS) High Advance Procurement

## **Description Continued**

SBIRS HEO-3 and 4 payloads are replenishments for HEO-1 and 2 payloads, which were delivered on the SBIRS Engineering and Manufacturing Development (EMD) contract using RDTE funds. The HEO-1 and 2 payloads are accepted and certified for Integrated Tactical Warning/Attack Assessment (ITW/AA) missile warning operations and certified for technical intelligence operations.

## Changes since FY11 PB:

FY12 AP funding increased by \$58.5M for additional long lead component procurement for GEO-5 and subsequent satellites. FY12 and FY14 AP funding has been moved within SBIRS to the EASE procurement funding profile.

## **FY 2012 Program Justification**

FY12 funding provides for continued advanced procurement of the GEO-5 and follow-on satellites.

P-1 Shopping List Item No. 25

Budget Item Justification Exhibit P-40, page 2 of 5

(Page 1 – Funding Appropriation (Treasury Missile Procur	Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 25										P-1 Line Item Nomenclature Space Based Infrared System (SBIRS)High Advance Procurement						
Weapon System				First Syste	m Award Da	ite	First System Completion Date Interval Between S					tween Syster	ns				
SBR HA				Nov-96			Mar-06										
				•		(\$ in Millio	ons)										
Description	<u>PLT</u>	When Rqd	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	<u>Total</u>				
End Item Qty			2	1	1			2					6				
CFE													0.000				
Engines													0.000				
GFE													0.000				
012																	
EOQ													0.000				
Design													0.000				
Term Liability													0.000				
Other-GEO 3 Long Lead			270.170										270.170				
Other-GEO 4 Long Lead			120.000	158.545									278.545				
Other-GEO 5 & 6 Long Lead					270.000	243.500							513.500				
Other-HEO 3 Long Lead			123.804										123.804				
Other-HEO 4 Long Lead			53.841										53.841				
TOTAL AP		1	567.815	158.545	270.000	243.500	0.000	0.000	0.000	0.000	0.000	0.000	1239.860				

P-1 Shopping List Item No. 25

Advance Procurement Requirements Analysis (Page 1 - Funding) Exhibit P-10, p. 1, page 3 of 5

	Exhibit P-10 p.2. Advance Procurement Requirements Analysis (Page 2 – Budget Justification)										Date: February 2011						
Appropriation (Treas					tivity 05	, Other S	Suppor	t, Item N	lo. 25	P-1 Line Item Nomenclature  Space Based Infrared System (SBIRS)High  Advance Procurement							
Weapon System										-							
SBR HA																	
						(TO	A, \$ in Mi	illions)									
Description End Item	<u>PLT</u>	<u>QPA</u>	<u>Unit</u> <u>Cost</u>	2010 QTY	2010 Contract Forecast Date	2010 Total Cost Request	2011 QTY	2011 Contract Forecast Date	2011 Total Cost Request	2012 QTY	2012 Contract Forecast Date	2012 Total Cost Request	2012 OCO QTY	2012 OCO Contract Forecast Date	2012 OCO Total Cost Request		
End Item																	
CEE	1				1	1		1						1			
CFE																	
GFE																	
700	1		1			I I		1	<u> </u>					1			
EOQ																	
Design																	
Term Liability																	
Other-Long Lead																	
Other-GEO 3																	
Long Lead Other-GEO 4 Long Lead					Jul-09	158.545											
Other-GEO 5 & 6 Long Lead								Feb-12	270.000			243.500					
Other-HEO 3 Long Lead																	

P-1 Shopping List Item No. 25

Advance Procurement Requirements Analysis (Page 2 - Budget Justification) Exhibit P-10, p. 2, page 4 of 5

	Exhibit P-10 p.2. Advance Procurement Requirements Analysis (Page 2 – Budget Justification)											Date: Fe	bruary 20	)11			
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 25									Spa	P-1 Line Item Nomenclature Space Based Infrared System (SBIRS)Hig Advance Procurement							
Weapon System										-							
SBR HA																	
						(TC	OA, \$ in Mi	llions)									
			<u>UnitCost</u>	2010QTY	2010Co ntractF orecast Date	2010 Total Cost	2011QTY	2011Co ntractF orecast Date	2011 TotalCos Request	Ī	2012 Contract Forecast	2012 TotalCost Request		2012 OCOCo ntractF orecast	2012 OCO Total Cost		
<u>Description</u>	<u>PLT</u>	<u>QPA</u>				Request					<u>Date</u>	_	QTY	<u>Date</u>	Request		
Other-HEO 4 Long Lead																	
TOTAL AP						158.545			270.000			243.500			0.000		
Decemention		I				1		1	1					1			

**Description** 

P-1 Shopping List Item No. 25

Advance Procurement Requirements Analysis (Page 2 - Budget Justification) Exhibit P-10, p. 2, page 5 of 5

# THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit P-40, Budget Item Justification	Date: February 2011
FF -F ( 7/	P-1 Line Item Nomenclature  National Polar-Orbiting Op Env Satellite

Program Element for Code B Items	N/A				Other	Related Pr	ogram Ele	ments	0	305178F, (	)305953F		
	ID Code	Prior Years	FY 2010	FY 2011	FY 2012	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	To Comp	Total
Proc Qty	Α	0	0	0	0		0	0				0	0
Cost(\$ M)		0.000	3.889	26.308	0.000		0.000	0.000	0.000	0.000	0.000	0.000	30.197
Advance Proc Cost(\$ M)			0.000	0.000	0.000		0.000	0.000				0.000	0.000
Weapon System Cost(\$ M)		0.000	3.889	26.308	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.197
Initial Spares(\$ M)		0.000	0.000	0.000			0.000					0.000	0.000
Total Proc Cost(\$ M)		0.000	3.889	26.308	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	30.197
Flyaway Unit Cost(\$ M)							0.000						0.000
Wpn Sys Unit Cost(\$ M)							0.000						0.000

#### **Description**

Totals include funding for PRCP Program Number 239, NPOESS.

The program funding includes overhead reduction efficiencies that are not intended to impact program content. The efficiencies reductions total \$24.699M in FY12.

This program has associated Research Development Test and Evaluation funding in PE 0305178F and procurement funding in 0305953F (EELV). Starting in FY12 all procurement funds in this exhibit have been reprogrammed to RDT&E (PE 0305178F) due to the NPOESS restructure.

Presidential Decision Directive/National Science and Technology Council-2 (PDD/NSTC-2) (May 1994) directed the DoD, Department of Commerce (DOC), and the National Aeronautics and Space Administration (NASA) to establish a converged national polar-orbiting weather satellite program. The converged program, the National Polar-orbiting Operational Environmental Satellite System (NPOESS), combined the follow-on to DoD's Defense Meteorological Satellite Program (DMSP) and the DOC's Polar-orbiting Operational Environmental Satellite (POES) program to provide timely, high-quality weather and environmental information to military commanders enabling effective conduct of operations and to civil leaders for the protection of citizens, national resources and commerce.

On 1 February 2010, the Executive Office of the President announced the restructuring of the NPOESS program. The restructure will continue the observational requirements of NPOESS with separate procurement and management of the DoD Defense Weather Satellite Program (DWSS) and the DOC Joint Polar Satellite System program (JPSS). Under this restructure, DoD will be responsible for the early morning orbit and DOC, with NASA as their acquisition agent, will be responsible for the afternoon orbit. The DWSS and JPSS programs will continue to share a common ground system based on the design of the NPOESS program.

#### **FY 2012 Program Justification**

P-1 Shopping List Item No. 26

Budget Item Justification Exhibit P-40, page 1 of 4

Exhibit P-40, Budget Item Justification	Date: February 2011
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 26	P-1 Line Item Nomenclature  National Polar-Orbiting Op Env Satellite
No FY 2012 funding requested.	
P-1 Shopping List Item No. 26	Budget Item Justification Exhibit P-40, page 2 of 4

Exhibit P-5, Weapon System Cost													Date: February 2011						
	Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number  Missile Procurement, Air Force, Budget Activity 05, Other Support, Item No. 26												P-1 Line Item Nomenclature  National Polar-Orbiting Op Env Satellite						
Weapon System Cost Elements  Code  Prior Years  Total Cost in Millions of Dollars FY 2010  FY 201																			
						FY 2010	)		FY 201	1	FY 2012								
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost						
DWSS Satellites	A						3.889			26.308									
	A																		
	A																		
	A												ļ						
	A																		
	A											-	-						
	A											-							
	A																		
	A																		
	A																		
	A																		
TOTAL PROGRAM:				0.000			3.889			26.308			0.000						

#### Remarks

No procurement funds were allocated or executed in FY10 and FY11 to NPOESS or DWSS. Starting in FY12 all procurement funds in this exhibit have been reprogrammed to RDT&E (PE 0305178F) due to the NPOESS restructure.

The DWSS program will satisfy DoD's environmental monitoring requirements in the early morning orbit by developing and launching two satellites [flight-1 (F1) and flight-2 (F2)], each with a Visible Infrared Imager Radiometer Suite (VIIRS), Space Environment Monitor (SEM-N), and Microwave Imager/Sounder (MIS) sensor suite with an initial launch capability no earlier than 2018.

P-1 Shopping List Item No. 26

Weapon System Cost Analysis Exhibit P-5, page 3 of 4

Exhibit P-5, Weapon System Cost	Analysis		Date: February 2011					
Appropriation (Treasury) Code/CC/BA/BSA/Iter Missile Procurement, Air Fore		26	P-1 Line Item Nomenclature  National Polar-Orbiting Op Env Satellite					
Weapon System Cost Elements	Ident Code					Total	Cost in Mill	ions of Dollars
			FY 2012 O	CO	(	Cost to Com	plete	
		Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	
DWSS Satellites	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
	A							
TOTAL PROGRAM:				0.000			0.000	

P-1 Shopping List Item No. 26

Weapon System Cost Analysis Exhibit P-5, page 4 of 4