	RDT&E BUDGET ITEM	DATE	DATE June 2001								
	et activity Engineering and Manufacturing De		PE NUMBER AND TITLE 0604226F B-1B						PROJECT 4596		
	COST (\$ in Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4596	Conventional Mission Upgrades	155,668	156,671	194,507	95,299	78,753	17,250	0	0	0	1,648,348
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0	0

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

(U) A. Mission Description

(U) This Program Element provides RDT&E funding for the B-1B Conventional Mission Upgrade Program (CMUP). Funding in the FYDP includes integration of advanced conventional weapons including variants of the Joint Direct Attack Munition (JDAM), Wind Corrected Munitions Dispenser (WCMD), Joint Stand-Off Weapon (JSOW), and Joint Air to Surface Stand-Off Missile (JASSM). Funding for upgrades to the Electronic Countermeasures (ECM) suite is also in the FYDP. Additional efforts include an upgrade to the avionics computers to enable simultaneous carriage of multiple weapon types, provide growth capability, and reduce support costs; development of the B-1B mission planning interface to the Air Force Mission Support System (AFMSS); and upgrades to the B-1B training systems to keep them current with the aircraft's configuration. The development efforts to improve the display of threat data and situational awareness (S/A) information to the aircrew; to design fixes that address near term reliability, maintainability, diminishing manufacturing sources (DMS), and performance deficiencies on selected line replaceable units (LRUs) of the ALQ-161A defensive system; to integrate replacement pilot station displays; and upgrade the diagnostics and power distribution subsystems to address reliability, maintainability and diminishing manufacturing sources are also included. Funding is also provided for preliminary engineering and planning studies for potential future weapon system enhancements (weapons, sensors, and avionics); and weapon system operational/safety, supportability, maintainability, reliability, and Total Ownership Cost (TOC) support improvements.

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

(U) \$121,496 Continued Conventional Mission Upgrade Program (CMUP) contractual efforts

(U) \$678 Government Furnished Equipment (GFE)

(U) \$22,906 Government flight test, Live Fire Test & Evaluation and General Test Support

(U) \$4,685
 (U) \$2,871
 (U) \$3,032
 Advisory and Assistance Services (A&AS)
 Modeling & Simulation / Studies & Analyses
 Program Management & Administration (PMA)

(U) \$155,668 Total

Project 4596 Page 1 of 9 Pages Exhibit R-2 (PE 0604226F)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) BUDGET ACTIVITY 05 - Engineering and Manufacturing Development (U) A. Mission Description Continued DATE PROJECT 0604226F B-1B DATE PROJECT 4596

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

(U) \$107,211 Continued Conventional Mission Upgrade Program (CMUP) contractual efforts

(U) \$453 Government Furnished Equipment (GFE)

(U) \$37,588 Government flight test, Live Fire Test & Evaluation and General Test Support

(U) \$4,943 Advisory and Assistance Services (A&AS)
 (U) \$2,950 Modeling & Simulation / Studies & Analyses
 (U) \$3,526 Program Management & Administration (PMA)

(U) \$156,671 Total

The following net transactions are not reflected in the FY01 program total: SBIR= (-\$5,230), and BTR= (-\$2,205). These transactions are not reflected in other sections of the R-docs where an FY01 total is shown.

(U) FY 2002 (\$ in Thousands)

(U) \$150,671 Continued Conventional Mission Upgrade Program (CMUP) contractual efforts

(U) \$332 Government Furnished Equipment (GFE)

(U) \$33,462 Government flight test, Live Fire Test & Evaluation and General Test Support

(U) \$4,631 Advisory and Assistance Services (A&AS)
 (U) \$1,200 Modeling & Simulation / Studies & Analyses
 (U) \$4,211 Program Management & Administration (PMA)

(U) \$194,507 Total

(U) B. Budget Activity Justification

(U) The B-1 CMUP program is included in Budget Activity 5, Engineering and Manufacturing Development. The CMUP program provides new capabilities to the B-1B weapon system, including GPS, Near-Precision Weapons, enhanced computers and upgraded ECM. These capabilities require significant software development and testing.

Project 4596 Pages Exhibit R-2 (PE 0604226F)

	RDT&E BU	DGET IT	EM JUS	STIFICA	TION SH	IEET (R	-2 Exhib	oit)	DA	ATE June :	2001
	GET ACTIVITY Engineering and Man	ufacturing	g Develop	ment		NUMBER AND 04226F					PROJECT 4596
(U)	C. Program Change Summa	ry (\$ in Tho	ısands)								
(U)	Previous President's Budget (I	FY 2001 PBR)			1	<u>76,218</u>	<u>FY 2001</u> 168,122	135	<u>2002</u> 5,677	<u>Total Cost</u> 1,491,938
(U) (U)	Appropriated Value Adjustments to Appropriated	Value				1	78,544	158,122			
	a. Congressional/General Red						-1,132	-1,107			
	b. Small Business Innovative	Research					-5,098				
	c. Omnibus or Other Above T	hreshold Rep	rogram			-	-13,000				
	d. Below Threshold Reprogram	m					-2,623				
	e. Rescissions						-698	-344			
(U)	Adjustments to Budget Years		1 PBR				-325			3,830	138,340
(U)	Current Budget Submit/FY 20	002 PBR				1	55,668	156,671	194	1,507	1,648,348
(U)	(U) FY00: (-\$325) Adjustmen Rescissions, (-\$5,098) for SBI D. Other Program Funding S	IR, and (-\$1,1	32) for reduc	etions.	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
		Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
(U)	Appn 10, PE 0101126F, B-1B, Aircraft Procurement BP11, Mods	125,543	48,348	95,493	62,511	64,369	30,403	75,048	64,139	25,635	591,489
(U)	Appn 10, PE 0101126F, B-1B, Aircraft Procurement BP16, Initial Spares	32,187	14,495	15,363	7,938	5,882	21,058	29,874	3,642	0	130,439
	Appn 10, PE 0101126F, B-1B, Aircraft Procurement BP12, Common Support Equipment	0	1,900	20,598	1,818	1,914	1,916	1,955	1,997	0	32,098
	Appn 10, PE 0101126F,	0	0	6,400	0	0	0	0	0	0	6,400
Pi	roject 4596				Page 3 of	f 9 Pages				Exhibit R-2 (F	PE 0604226F)

	RDT&E BUDG	GET IT	EM JUS	STIFICA	TION SH	IEET (R	-2 Exhib	oit)	D	ATE June 2	2001
	GET ACTIVITY Engineering and Manufa	cturing	g Develop	ment		NUMBER AND 04226F					PROJECT 4596
(U)	B-1B, Aircraft Procurement BP13, Post Production	mary (\$ i Y 2000 Actual	n Thousand FY 2001 Estimate	S) FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	<u>Total Cost</u>
(U)	Charges Appn 10, PE 0207442F, B-1B, EW Production (TDS/IDECM) BP11, Mods (CMUP-related only) Related RDT&E: (U) Program Element 0205164F, COMERCY (U) Program Element 0207325F, JOHN (U) Program Element 0604618F/NOME (U) Program Element 0604727F/NOME (U) Program Element 0604754F, JOHN (U) Program Element 0604600F, NOME (U) Program Element 0208006F, AOM (U) Program Element 0604270F, EU) Program Element 0604270F, EU	Joint Air t N, Joint Di N, Joint St Joint Tact Wind Cor Air Force	o Surface State of State of Attack I and-Off Weated Informate rected Munit Mission Sup	andoff Missi Munition (JD apon (JSOW) ion Distribut ions Dispens port System	oAM) tion System (ser (WCMD) (AFMSS)		0	0	0	0	0
(U)	E. Acquisition Strategy (U) Key elements of the overall CN Installed Performance Responsibili upgrades with software sustainmen	ty (TSIPF	R) to the integ	grating contr	actor; use of	cost plus awa	ard fee (CPA	F) developm	ent contracts;	and combining de	
(U)	F. Schedule Profile				·	FY 2000		<u>FY 2</u>	<u>001</u>	<u>FY</u>	<u>2002</u>
Р	roject 4596				Page 4 of	9 Pages				Exhibit R-2 (P	PE 0604226F)

	RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) PE NUMBER AND TITLE DATE JUNE JUNE											001	
	GET ACTIVITY - Engineering and Manufacturing Development			MBER AN 226F								PRO. 459	
(U)	F. Schedule Profile Continued		EX	2000			F37	2001			F37	2002	
		1	<u>FY</u> 2	2000 3	4	1	<u>FY</u> 2	2001 3	4	1	2.	2002 3	4
000000000000000000000000000000000000000	Defensive System Upgrade Program T&E Milestones - Complete subsystem qual test - Flight Test Start Mission Planning System (MPS) T&E Milestones - S/W Release 1.2 (GPS/COM/JDAM OT&E Fixes) TRR/FQT - S/W Release 2.0 Test Readiness Review/FQT Contract Milestones - S/W Release 1.2 Delivery - S/W Release 2.01 Delivery Training Systems Acquisition Milestones			*				*	X X	X			
	- Start Computer/WST Rehost/WCMD EMD - Complete JDAM/GPS EMD Weapons Engineering Milestones - JSOW/JASSM CDR T&E Milestones - Start Computer/WCMD Flight Test		*				*		X			X	
F	Project 4596	Pag	ge 5 of 9 I	Pages						Exhibit	R-2 (P	E 06042	226F)

	RDT&E PRO	GRAM ELE	MENT/P	ROJECT C	OST B	REAKDO	WN (R-3))	DATE	June 200)1
	GET ACTIVITY Engineering and Ma	nufacturing	Developm	nent		ER AND TITLE 26F B-1B					PROJECT 4596
(U)	A. Project Cost Breakdow	n (\$ in Thousan	<u>ds</u>)								
								<u> 2000</u>	FY 20		FY 2002
(U)	CMUP contractual efforts						121,		107,21		150,671
(U)	Government flight test							,906	37,58		33,462
(U)	Government Furnished Equi							678	45		332
(U)	Advisory and Assistance Se							,685	4,94		4,631
(U)	Modeling & Simulation / St	•						,871	2,95		1,200
(U)	Program Management & Ad	ministration (PM	IA)					,032	3,52		4,211
(U)	Total						155,	668	156,67	1	194,507
(U)	B. Budget Acquisition Hist	ory and Plannir	g Informatio	n (\$ in Thousan	ds)						
(U)	Performing Organizations	;									
	Contractor or	Contract									
	Government	Method/Type	Award or	Performing	Project						
	Performing	or Funding	Obligation	<u>Activity</u>	Office Property of the Contract of the Contrac	Total Prior	Budget	Budget	Budget	Budget to	<u>Total</u>
	Activity	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	to FY 2000	FY 2000	FY 2001	FY 2002	Complete	<u>Program</u>
	Product Development Organ	<u>izations</u>									
	(U) DSUP										
	(U) TBC	SS/CPAF	May 93	31,918	31,918	31,918	0	0	0	0	31,918
	(U) TBC	SS/CPAF	June 97	303,729	303,729	144,639	47,132	46,388	42,388	23,182	303,729
	(U) Mission Planning Syste								_		
	(U) Lockheed-Sanders	C/CPAF	Aug 94	833	833	545	288	0	0	0	833
	(U) Logicon	CPAF	Dec 95	51,664	51,664	39,080	8,048	3,883	653	0	51,664
	(U) Training Systems	C/CD A F	T 04	12.204	12.204	12.204	0	0	0	0	12.204
	(U) Lockheed-Martin	C/CPAF	Jun 94	13,284	13,284	13,284	0	0	0	0	13,284
	(U) Intelx	C/CPAF	Jun 99	38,541	38,541	6,559	11,989	9,069	4,024	6,900	38,541
	(U) Weapons(U) TBC - CBUs	SS/CPFF	Mar 93	4,960	4,960	4,960	0	0	0	0	4,960
	(U) TBC - CBUs (U) TBC - CBUs	SS/CPFF SS/CPFF	Mar 93 Jan 94	4,960 16,314	16,314	4,960 16,314	0	0	0	0	16,314
	(U) TBC - CBUS (U) TBC - FWEP	SS/CPFF SS/T&M	Sep 98	3,866	3,866	3,275	591	0	0	0	3,866
	(U) IDC - FWEF	SS/1 XIVI	sep 30	3,800	3,800	3,213	391	U	U	U	3,800
P	roject 4596			Pas	ge 6 of 9 Pag	ges			Exhib	it R-3 (PE (0604226F)

		RDT&E PROG	RAM EL	.EMENT/PR	OJECT (COST BE	REAKDOV	NN (R-3)		DATE	June 2001	
		ctivity gineering and Mar	nufacturin	g Developme	ent		R AND TITLE 6F B-1B					PROJECT 1596
(U)	Perfo	orming Organizations (Continued:									
,		act Development Organiz										
	(U)	TBC - EFX	SS/T&M	Feb 98	5,727	5,727	5,727	0	0	0	0	5,727
	(U)	TBC- JDAM/GPS	SS/CPFF	Aug 93	72,223	72,223	72,223	0	0	0	0	72,223
	Pre-E			Ü	,	,	,					,
	(U)	TBD - 500 LB JDAM	TBD	Jan 03	69,521	69,521	0	0	0	0	69,521	69,521
	(U)	TBD - ALQ-161	TBD	Jan 02	27,852	27,852	0	0	0	2,000	25,852	27,852
	R&M	I/DMS										
	(U)	TBD - S/A	TBD	Jan 02	5,356	5,356	0	0	0	2,950	2,406	5,356
	Impro	ovements										
	(U) T	SAS/AVTR	TBD	Jan 02	2,800	2,800	0	0	0	2,800	0	2,800
	Impro	ovements										
	(U)	TBD - VSD	TBD	Jan 02	10,100	10,100	0	0	0	10,100	0	10,100
	Impro	ovements										
	(U)	TBD - CITS/EMUX	TBD	Jan 02	14,700	14,700	0	0	0	14,700	0	14,700
	R&M	I/DMS										
	(U)	TBD - IDARS R&M	TBD	Jan 02	1,000	1,000	0	0	0	1,000	0	1,000
	Impro	ovements										
	(U)	TBC- JDAM/ GPS	SS/CPAF	Mar 95	272,404	272,404	272,404	0	0	0	0	272,404
	EMD)										
	(U)	TBC-ACBM	SS/CPAF	Mar 98	1,900	1,900	1,900	0	0	0	0	1,900
	(U)	TBC-Wing Sweep	SS/T&M	Jul 97	1,089	1,089	1,089	0	0	0	0	1,089
	(U)	TBC- Computer	SS/CPAF	May 96/Jan	222,881	222,881	139,561	33,970	19,828	26,874	2,648	222,881
				97								
	(U)	TBC-WCMD	SS/CPAF	May 96/Jan	66,560	66,560	33,829	11,143	8,163	11,843	1,582	66,560
				97								
	(U)	Lockheed-Martin -	SS/CPAF	Jan 97	2,701	2,701	801	900	1,000	0	0	2,701
	WCM											
	(U)	TBC- JSOW/ JASSM		Mar 99	74,272	74,272	9,619	5,165	15,043	28,968	15,477	74,272
	(U)	Lockheed- Martin -	SS/T&M	Jan 99	13,042	13,042	6,822	1,299	2,677	1,871	373	13,042
_	roject	4506			n.	ge 7 of 9 Page	20			Evhibi	t R-3 (PE 06	:04226E\
	roject	7000			Pa	igo / Oi 9 rago	. 3			EXHIDI	11-0 (FE 00	UHZZUF)

	RDT&E PROC	RAM ELE	MENT/P	ROJECT	COST B	REAKDO	WN (R-3)		DATE	June 2001	
	GET ACTIVITY Engineering and Ma	nufacturing	Developr	nent		ER AND TITLE 26F B-1B					ROJECT . 596
(U)	Performing Organizations Product Development Organi JASSM										
	(U) Raytheon -JSOW(U) TBD - Future CMUPRelated EMD		Jan 99 TBD	4,253 0	4,253 0	1,350 0	970 0	1,160 0	500	273 0	4,253 0
	Support and Management Or (U) A&AS (U) Studies & Analyses / Modeling & Sim	Various Various	Annual Various	38,488 27,889	38,488 27,889	20,162 19,868	4,685 2,871	4,943 2,950	4,631 1,200	4,067 1,000	38,488 27,889
	(U) Program Mgmt & Admi Test and Evaluation Organiza (U) DSUP		Various	44,717	44,717	26,617	3,032	3,526	4,211	7,331	44,717
	(U) AFFTC(U) Weapons	P.O.	Various	65,585	65,585	7,005	7,037	16,751	18,428	16,364	65,585
(U)	(U) AFFTC Government Furnished Pro	P.O. pperty: Contract Method/Type	Various Award or	131,244	131,244	65,327	15,869	20,837	15,034	14,177	131,244
	Item Description Product Development Proper (U) DSUP	or Funding Vehicle	Obligation Date	<u>Delivery</u> <u>Date</u>		Total Prior to FY 2000	Budget FY 2000	Budget FY 2001	Budget FY 2002	Budget to Complete	<u>Total</u> <u>Program</u>
	(U) Various (U) Weapons	Various	Various	Various		3,769	300	300	300	150	4,819
	(U) Various Support and Management Pro Test and Evaluation Property		Various	Various		1,553	378	153	32	0	2,116
P	roject 4596			Pa	ge 8 of 9 Pa	ges			Exhib	it R-3 (PE 06	04226F)

RDT&E PROGRAM ELEMENT/PROJEC	DATE	June 2001				
UDGET ACTIVITY 5 - Engineering and Manufacturing Development	PE NUMBER AND TITLE 0604226F B-1B			•		PROJECT 4596
	Total Prior	<u>Budget</u>	Budget	<u>Budget</u>	Budget to	<u>Total</u>
Subtotals	<u>to FY 2000</u>	FY 2000	FY 2001	FY 2002	<u>Complete</u>	Program
Subtotal Product Development	811,221	122,173	107,664	151,003	148,364	1,340,42
Subtotal Support and Management	66,647	10,588	11,419	10,042	12,398	111,094
Subtotal Test and Evaluation	72,332	22,906	37,588	33,462	30,541	196,829
Total Project	950,200	155,667	156,671	194,507	191,303	1,648,348
Project 4596	Page 9 of 9 Pages			Exhib	it R-3 (PE 0	604226F)