

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2000		
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603800F Joint Strike Fighter				PROJECT 642025		
COST (\$ in Thousands)		FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
642025	Joint Strike Fighter (JSF)	453,600	249,088	129,538	0	0	0	0	0	1,695,723
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
<p>(U) <u>A. Mission Description</u> The Joint Strike Fighter (JSF) Program will develop and field an affordable, highly common family of next generation strike fighter aircraft for the USN, USMC, USAF and allies. Current program emphasis is on facilitating the evolution of fully validated and affordable joint operational requirements, and demonstrating cost leveraging technologies and concepts to lower risk prior to entering Engineering and Manufacturing Demonstration (EMD) in FY 2001. This is a joint program with no executive service. Navy and Air Force each provide approximately equal shares of annual funding for the program. The United Kingdom (UK) is a collaborative partner in this phase of the program and several other countries also participate.</p> <p>'FY 1999 ACTUAL' UNDERSTATED BY \$2.537M. BTR NOT REFLECTED IN ABIDES DATABASE. COST BREAKOUT BELOW REFLECTS CORRECT PROGRAM AMOUNTS.</p> <p>PROGRAM FUNDING BREAKOUT (FY1999, 2000, 2001) REFLECTS NAVY, AIR FORCE, MULTI-LATERAL (NETHERLANDS, NORWAY, & DENMARK), CANADA, AND ITALY(FY99 ONLY).</p>										
<p>(U) <u>FY 1999 (\$ in Thousands)</u></p> <p>(U) \$762,415 Continued Concept Demonstration efforts by Boeing, Lockheed Martin and Pratt & Whitney including company unique technology demonstrations, completed final design and continued build of Concept Demonstrator Aircraft (CDA) and continued concept refinement for a tri-service family of aircraft.</p> <p>(U) \$40,153 Continued the Alternate Engine Program.</p> <p>(U) \$141,580 Continued technology maturation demonstrations and assessments in the areas of airframe, flight systems, manufacturing and producibility, propulsion and mission systems. Completed approximately half of the demonstrations. Continued systems engineering support for the Concept Demonstration Phase (CDP) in the areas of system test, air vehicle analysis and integration, advanced cost estimating, survivability, integrated flight and propulsion control and carrier suitability.</p> <p>(U) \$9,341 Continued technology maturation demonstrations and assessments in the area of Prognostics and Health Management, supportability and training.</p> <p>(U) \$13,307 Continued modeling and simulation activities to support strike warfare mission area analysis and requirements analysis efforts including COPT</p>										
Project 642025				Page 1 of 12 Pages				Exhibit R-2 (PE 0603800F)		

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE
BUDGET ACTIVITY		PROJECT
04 - Demonstration and Validation	0603800F Joint Strike Fighter	February 2000 642025
(U) <u>A. Mission Description Continued</u>		
(U) <u>FY 1999 (\$ in Thousands) Continued</u>		
	to facilitate the Services' joint requirements definition. Continued requirements analysis in support of final requirements document. Continued modeling and simulation support testing, training, and refinement of concept of operations for the weapons system (simulation based acquisition).	
(U) \$15,227	Continued mission support, including program office functions.	
(U) \$982,023	Total	
(U) <u>FY 2000 (\$ in Thousands)</u>		
(U) \$394,892	Continue Concept Demonstration efforts by Boeing, Lockheed Martin and Pratt & Whitney including ground and flight demonstrations, areas of technology maturation, and concept refinement for a tri-service family of aircraft. Request proposals from contractors for their designs and EMD programs.	
(U) \$26,190	Continue the Alternate Engine Program.	
(U) \$68,554	Continue technology maturation demonstrations and assessments in the areas of airframe, flight systems, manufacturing and producibility, propulsion and mission systems. Continue systems engineering support for the Concept Demonstration Phase in the areas of system test, air vehicle analysis and integration, advanced cost estimating, survivability, integrated flight and propulsion control, and carrier suitability.	
(U) \$8,853	Continue technology maturation demonstrations and assessments in the area autonomous logistics (formerly supportability and training). Complete Prognostics and Health Management technology maturation demonstrations and assessments.	
(U) \$9,030	Continue modeling and simulation activities to support strike warfare mission area analysis and requirements analysis efforts including COPT to facilitate the Services' joint requirements definition. Support analysis as required for final Operational Requirements Document (ORD) coordination and signature. Continue modeling and simulation support testing, training, and refinement of concept of operations for the weapons system (simulation based acquisition).	
(U) \$15,377	Continued mission support, including program office functions.	
(U) \$522,896	Total	
(U) <u>FY 2001 (\$ in Thousands)</u>		
(U) \$110,552	Complete Concept Demonstration efforts by Boeing, Lockheed Martin and Pratt & Whitney including ground and flight demonstrations, areas of technology maturation and concept refinement for a tri-service family of aircraft.	
(U) \$94,000	Complete the Alternate Engine Phase IIIA effort (Common Core Design Trade Studies) in this Program Element. (Alternate Engine Development Program will continue in JSF EMD, Program Elements 0604800N and 0604800F.)	
(U) \$38,137	Complete technology maturation demonstrations and assessments in the areas of airframe, flight systems, manufacturing and producibility,	
Project 642025	Page 2 of 12 Pages	Exhibit R-2 (PE 0603800F)

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2000		
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT		
04 - Demonstration and Validation	0603800F Joint Strike Fighter	642025		
(U) <u>A. Mission Description Continued</u>				
(U) <u>FY 2001 (\$ in Thousands) Continued</u>				
	mission systems, propulsion and autonomic logistics. Complete systems engineering support for the Concept Demonstration Phase in the areas of system test, air vehicle analysis and integration, advanced cost estimating, survivability, integrated flight and propulsion control and carrier suitability. Complete analyses required for Milestone II. Commence and complete source selection evaluation to down-select for final design.			
(U) \$5,000	Complete modeling and simulation activities to support Milestone II analyses. Complete modeling and simulation support testing, training, and refinement of concept of operations for the weapons system (simulation based acquisition).			
(U) \$15,715	Complete mission support, including program office functions.			
(U) \$263,404	Total			
(U) <u>B. Budget Activity Justification</u>				
This program is funded under Program Definition and Risk Reduction (PDRR), formerly Demonstration and Validation (DEM/VAL), because it integrates hardware for test related to specific ship or aircraft applications.				
(U) <u>C. Program Change Summary (\$ in Thousands)</u>				
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
(U) Previous President's Budget (FY 2000 PBR)	454,789	235,374	22,558	1,573,681
(U) Appropriated Value	456,137	250,374		
(U) Adjustments to Appropriated Value				
a. Congressional/General Reductions				
b. Small Business Innovative Research				
c. Omnibus or Other Above Threshold Reprogram				
d. Below Threshold Reprogram	3,825			
e. Rescissions	-3,825	-1,286		
f. Other				
(U) Adjustments to Budget Years Since FY 2000 PBR			106,980	122,042
(U) Current Budget Submit/FY 2001 PBR	456,137	249,088	129,538	1,695,723

UNCLASSIFIED

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

DATE
February 2000

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

04 - Demonstration and Validation

0603800F Joint Strike Fighter

642025

(U) **C. Program Change Summary (\$ in Thousands) Continued**

(U) **Significant Program Changes:**

(U) Significant Program Changes: FY99 increase of \$3,825 reflects Below Threshold Reprogramming to mitigate impacts caused by the Economic Assumption Congressional Rescission (\$1,288) and the 'Inflation Savings' Congressional Recission (\$2,537). FY00 decrease of \$1,286 reflects the across the board Congressional Recission. FY00 Appropriated Value increase of \$15M reflects Congressional increase for the alternate engine program. FY01 increase reflects a Zero Base Transfer from PE0604800F of \$107 million to cover alternate engine program and CDP requirements and a program adjustment decrease of \$20.

(U) **D. Other Program Funding Summary (\$ in Thousands)**

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) RDT&E 0603800N	471,290	239,907	131,566	0	0	0	0	0	1,742,506
(U) RDT&E 0603800E	0	0	0	0	0	0	0	0	118,006
(U) United Kingdom	34,096	26,101	0	0	0	0	0	0	200,291
(U) Multi-Lateral (see Note1)	7,500	5,100	1,700	0	0	0	0	0	32,100
(U) Canada	3,000	2,700	600	0	0	0	0	0	10,600
(U) Italy	10,000								10,000
(U) RDT&E 0604800F	0	0	299,540	1,321,726	1,927,241	1,853,319	1,631,937	Continuing	TBD
(U) RDT&E 0604800N	0	0	295,962	1,324,048	1,932,487	1,859,938	1,639,111	Continuing	TBD
(U) Related Procurement Funding:									
(U) Procurement 0207142F - JSF Squadrons	0	0	0	0	0	18,000	587,308	Continuing	TBD
(U) Procurement 0204800N - JSF Squadrons	0	0	0	0	0	0	57,735	Continuing	TBD

Note 1: Multi-Lateral countries include Netherlands, Norway, and Denmark.

Note 2: This is a joint program with no executive service. The UK is a collaborative partner in this phase of the program. Several other countries participate.

Note 3: Milestone II for EMD of the JSF is planned in FY 2001.

Note 4: RDT&E 0604800 depicted funding excludes anticipated foreign funding which is TBD.

Note 5: December 1998 Selected Acquisition Report (SAR) reflected total EMD cost estimate of \$19.8B (\$TY) funded by the USN, USAF, and anticipated (but not finalized) foreign sources.

Note 6: Advanced procurement for JSF is planned in FY 2004.

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)		DATE February 2000
BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
04 - Demonstration and Validation	0603800F Joint Strike Fighter	642025
<p>(U) <u>E. Acquisition Strategy</u></p> <p>Program activities center around three distinct objectives that provide a sound foundation for the start of Engineering and Manufacturing Development (EMD) in 2001:</p> <ol style="list-style-type: none"> (1) facilitating the Services' development of fully validated, affordable operational requirements; (2) lowering risk by investing in and demonstrating key leveraging technologies that lower the cost of development, production and ownership; and (3) demonstrating operational concepts. <p>Early warfighter and technologist interaction is an essential aspect of the requirements definition process, and key to achieving JSF affordability goals. To an unprecedented degree, the JSF program is using cost-performance trades early, as an integral part of the weapon system development process. The Services are defining requirements through an iterative process, balancing weapon system capability against life cycle cost at every stage. Each iteration of the requirements is provided to industry. They evolve their designs and provide cost data back to the warfighters. The warfighters evaluate trades and make decisions for the next iteration. This process produced the Services' first Joint Initial Requirements Document (JIRD I) in 1995 and the second and third iterations in 1997 and 1998, respectively. The Services continue to refine their requirements through this process which will culminate in the Operational Requirements Document (ORD) in FY 2000 to support the Milestone II decision.</p> <p>A sizable technology maturation effort is underway to reduce risk and life cycle cost (LCC) through technology maturation and demonstration. The primary emphasis is on technologies which have been identified as high payoff contributors to affordability, supportability, survivability and lethality. Numerous demonstrations have been accomplished and others are in process to validate performance and life cycle cost impact to component, subsystem and the total system.</p> <p>A multi-year \$2.2 billion JSF Concept Demonstration effort commenced in November 1996 with competitive contract awards to Boeing and Lockheed Martin for Concept Demonstration Programs. These competing contractors will build and fly concept demonstrator aircraft, conduct concept unique ground demonstrations, and continue refinement of their ultimate delivered weapon system concepts. Specifically, Boeing and Lockheed Martin will demonstrate commonality and modularity, Short Take Off/ Vertical Land (STOVL) hover and transition, and low speed handling qualities of their respective weapon system concepts. Pratt and Whitney is providing propulsion hardware and engineering support for both Boeing's and Lockheed Martin's on-going JSF Concept Demonstration efforts. The JSF Concept Demonstration approach has several benefits:</p> <ol style="list-style-type: none"> (1) Maintains the competitive environment prior to EMD and provides for two different STOVL approaches and two different aerodynamic configurations. (2) Demonstrates the viability of a multi-service family of variants with high commonality and modularity between CTOL, CV and STOVL variants. (3) Provides affordable and low risk technology transition to the JSF EMD phase. <p>The JSF Alternate Engine Program, with General Electric, continues development of an alternate engine for production.</p> <p>Downselect to a single prime weapon system contractor for EMD and Milestone II are planned in FY 2001. JSF production is planned to begin in FY 2005.</p>		
Project 642025	Page 5 of 12 Pages	Exhibit R-2 (PE 0603800F)

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE February 2000
--	------------------------------

BUDGET ACTIVITY 04 - Demonstration and Validation	PE NUMBER AND TITLE 0603800F Joint Strike Fighter	PROJECT 642025
---	---	--------------------------

(U) <u>F. Schedule Profile</u>	<u>FY 1999</u>			<u>FY 2000</u>			<u>FY 2001</u>					
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Commenced Concept Development Phase: Dec 94												
(U) Released RFP for Concept Demonstration Efforts: Mar 96												
(U) Designated a joint, DoD, Acq Category ID Program by USD(A&T): May 96												
(U) Competitively awarded CDP Contracts to Boeing and Lockheed Martin: Nov 96												
(U) Complete Operational Requirements Document (ORD) Approval: Mar 00												X
(U) Milestone II for JSF EMD: Mar 01												X

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000				
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT			
04 - Demonstration and Validation				0603800F Joint Strike Fighter				642025			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>			
(U) PROJECT COST CATEGORIES:											
(U) WEAPON SYSTEMS CONCEPT DEMONSTRATIONS (including flying demonstrators and supporting propulsion efforts)						762,415	394,892	110,552			
(U) ALTERNATE ENGINE PROGRAM						40,153	26,190	94,000			
(U) TECHNOLOGY MATURATION AREAS:											
(U) Airframe						1,231	1,420	1,500			
(U) Flight Systems						32,589	6,668	3,320			
(U) Manufacturing and Producibility						3,675	1,233	1,530			
(U) Propulsion						24,282	7,245	3,000			
(U) Mission Systems						41,675	9,522	9,955			
(U) Systems Engineering Support						37,208	41,546	10,468			
(U) Prognostics and Health Management/Autonomic Logistics						9,311	8,853	7,444			
(U) Modeling, Simulation, Analysis, Threat, COPT and Core Support						12,907	8,630	4,600			
(U) Mission Support						5,709	5,972	6,210			
(U) SUPPORT (CS)						10,868	10,725	10,825			
(U) TEST AND EVALUATION: (included above)											
(U) MANAGEMENT: N/A											
(U) Total						982,023	522,896	263,404			
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
<u>Contractor or</u>	<u>Contract</u>										
<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>							
<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>	
<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>	

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE	
								February 2000	
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT	
04 - Demonstration and Validation				0603800F Joint Strike Fighter				642025	
(U) <u>Performing Organizations Continued:</u>									
<u>Product Development Organizations</u>									
Strike Warfare Concept									
Studies:									
Miscellaneous	Various		11,467	11,467	11,467			11,467	
Technology Maturation									
Concept Exploration Phase:									
Filed Activities	Various		3,432	3,432	3,432			3,432	
Strike Warfare Systems									
Design Development:									
Boeing, Seattle WA	C/CPFF		32,770	32,770	32,770			32,770	
McAir, St Louis MO	C/CPFF		23,708	23,708	23,708			23,708	
Northrop, Pico Rivera CA	C/CPFF		21,358	21,358	21,358			21,358	
Lockheed Martin, Fort Worth TX	C/CPFF		28,311	28,311	28,311			28,311	
Miscellaneous	Various		1,121	1,121	1,121			1,121	
Field Activities	Various		8,322	8,322	8,322			8,322	
ASTOVL:									
Lockheed Martin	SS/CPFF		16,416	16,416	16,416			16,416	
Boeing	SS/CPFF		11,200	11,200	11,200			11,200	
Miscellaneous	Various		15,539	15,539	15,539			15,539	
Core Team Support									
Field Activities	Various		2,522	2,522	2,522			2,522	
Weapon System Concept									
Demonstrations(Note 1):									
Boeing	C/CPFF	Oct 98/99/00	734,013	734,013	291,356	269,627	156,761	16,269	734,013
Lockheed Martin	C/CPFF	Oct 98/99/00	797,559	797,559	349,423	280,122	153,931	14,083	797,559
Pratt & Whitney, WP Beach, FL	SS/CPFF	Nov98/99/00	914,471	914,471	537,405	212,666	84,200	80,200	914,471

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE
								February 2000
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT
04 - Demonstration and Validation				0603800F Joint Strike Fighter				642025
(U) <u>Performing Organizations Continued:</u>								
<u>Product Development Organizations</u>								
Alternate Engine Program								
(Note 2):								
General Electric,	SS/CPFF		7,000	7,000	7,000			7,000
Cincinnati OH								
General Electric,	SS/CPFF	Nov98/Oct9	222,137	222,137	61,794	40,153	26,190	94,000
Cincinnati OH								
9/Oct00								
TECHNOLOGY								
MATURATION AREAS:								
AIRFRAME:								
McAir	SS/CPFF		19,240	19,240	19,240			19,240
Miscellaneous								
	Various	Various	2,168	2,168	1,985	94	44	45
Field Activities								
	Various	Nov98/99/0	8,204	8,204	4,236	1,137	1,376	1,455
0								
FLIGHT SYSTEMS:								
Lockheed Martin	C/CPFF	Nov98/99	52,700	52,700	41,515	9,807	1,378	52,700
McAir								
	C/CPFF	Nov98/99	65,821	65,821	46,901	17,920	1,000	65,821
Miscellaneous								
	Various	Various	10,605	10,605	9,090	650	60	805
Field Activities								
	Variuos	Nov98/99/0	24,448	24,448	13,491	4,212	4,230	2,515
0								
MANUFATURING AND								
PRODUCIBILITY:								
Hughes, Los Angeles	C/CPFF		5,065	5,065	5,065			5,065
CA								
Lockheed Martin	C/CPFF	Nov98/99	10,200	10,200	7,500	2,100	600	10,200
General Res.								
	C/CPFF		1,945	1,945	1,945			1,945
Corp.,Huntsville AL								
Scaled Composites	C/CPFF		2,000	2,000	2,000			2,000
Lockheed Martin								
	C/CPFF		700	700	700			700
Miscellaneous								
	Various	Various	1,679	1,679	1,343	201	75	60
1,679								

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2000	
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT	
04 - Demonstration and Validation				0603800F Joint Strike Fighter				642025	
(U) <u>Performing Organizations Continued:</u>									
<u>Product Development Organizations</u>									
Field Activities	Various	Nov98/99/0	6,688	6,688	3,286	1,374	558	1,470	6,688
		0							
PROPULSION:									
Pratt & Whitney	C/CPFF		5,448	5,448	5,448				5,448
General Electric	SS/CPFF		5,681	5,681	5,681				5,681
Pratt & Whitney	SS/CPFF		30,000	30,000	30,000				30,000
General Electric	SS/CPFF		3,000	3,000	3,000				3,000
Pratt & Whitney	SS/CPFF	Jan99	26,777	26,777	22,988	3,789			26,777
Pratt & Whitney	SS/CPFF		3,640	3,640	3,640				3,640
Pratt & Whitney	SS/TBD	Dec98	8,200	8,200	7,000	1,200			8,200
NASA Contracts	Various	Jul99	2,800	2,800	700	2,100			2,800
Miscellaneous	Various	Various	14,979	14,979	12,895	1,804	48	50	14,979
Field Activities	Various	Nov98/99/0	50,020	50,020	24,484	15,389	7,197	2,950	50,020
		0							
MISSION SYSTEMS:									
TI, Plano TX	C/CPFF		2,464	2,464	2,464				2,464
Lockheed	SS/CPFF		6,856	6,856	6,856				6,856
McAir	SS/CPFF		6,524	6,524	6,524				6,524
Raytheon	C/CPFF	Nov98/99	45,173	45,173	27,274	17,899	0		45,173
Northrop Grumman	C/CPFF	Nov98/99	41,903	41,903	25,946	15,957	0		41,903
Boeing	C/CPFF		1,575	1,575	1,575				1,575
Lockheed Martin	C/CPFF		1,517	1,517	1,517				1,517
Hughes	C/CPFF		3,681	3,681	3,681				3,681
Classified	Classified	Nov98	3,000	3,000	2,000	1,000			3,000
Miscellaneous	Various	Various	26,092	26,092	20,097	1,467	2,139	2,389	26,092
Field Activities	Various	Nov98/99/0	42,584	42,584	22,283	5,352	7,383	7,566	42,584
		0							
SYSTEMS									
ENGINEERING SUPPORT:									

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2000	
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT	
04 - Demonstration and Validation				0603800F Joint Strike Fighter				642025	
(U) <u>Performing Organizations Continued:</u>									
<u>Product Development Organizations</u>									
Miscellaneous	Various	Various	33,706	33,706	11,993	8,573	10,011	3,129	33,706
Field Activities	Various	Nov98/99/0	132,478	132,478	64,969	28,635	31,535	7,339	132,478
		0							
PROGNOSTICS AND HEALTH MANAGEMENT /AUTONOMIC LOGISTICS:									
Pratt & Whitney	C/CPFF		10,100	10,100	10,100				10,100
General Electric	C/CPFF	Jan99	1,500	1,500		1,500			1,500
Classified	C/CPFF								
Project 3	C/CPFF		8,576	8,576	7,826	750			8,576
Project 4	C/CPFF		5,549	5,549	4,799	750			5,549
Miscellaneous	Various	Various	11,330	11,330	2,271	2,281	5,661	1,117	11,330
Field Activity	Various	Nov98/99/0	21,226	21,226	7,677	4,030	3,192	6,327	21,226
		0							
MODELING, SIMULATION, ANALYSIS, THREAT, COPT, AND CORE SUPPORT:									
Miscellaneous	Various	Various	46,719	46,719	37,719	5,033	3,277	690	46,719
Field Activities	Various	Nov98/99/0	36,145	36,145	19,008	7,874	5,353	3,910	36,145
		0							
MISSION SUPPORT:									
Institute for Defense Analysis	Grant		2,500	2,500	2,500				2,500
Field Activities	Various	Various	38,524	38,524	20,633	5,709	5,972	6,210	38,524

UNCLASSIFIED

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)								DATE February 2000		
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603800F Joint Strike Fighter				PROJECT 642025		
(U) Performing Organizations Continued:										
Note 1:										
- Includes government managed equipment.										
- Consistent with recent Boeing and Lockheed Martin replans, annual funding increments reflect budgeted basic Concept Demonstration Program (CDP) efforts as well as areas of technology maturation.										
- Pratt and Whitney Total Program reflects award fees totaling \$35.1M, FY 1998 and prior and basic CDP efforts.										
Note 2: The Target Value includes Propulsion Technology Maturation efforts.										
<u>Support and Management Organizations</u>										
ANSER, Arlington VA	SS/CPFF	Jan99/00/01	33,701	33,701	19,541	4,720	4,720	4,720	33,701	
Miscellaneous	Various	Various	32,631	32,631	14,373	6,148	6,005	6,105	32,631	
<u>Test and Evaluation Organizations</u>										
Included Above										
					<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
					<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>	<u>Program</u>
<u>Subtotals</u>										
Subtotal Product Development					2,006,989	971,155	512,171	252,579		3,742,894
Subtotal Support and Management					33,914	10,868	10,725	10,825		66,332
Subtotal Test and Evaluation										
Total Project					2,040,903	982,023	522,896	263,404		3,809,226