Exhibit R-2, **RDT&E Budget Item Justification:** PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	602.142	651.786	737.149	-	737.149	693.484	574.746	448.498	340.123	Continuing	Continuing
2262: Joint Strike Fighter EMD STOVL	602.142	651.786	737.149	-	737.149	693.484	574.746	448.498	340.123	Continuing	Continuing

Note

Effective in FY 11 budget year, the F-35B United States Marine Corps (USMC) Short Take-off Vertical Landing (STOVL) and F-35C United States Navy (USN) Carrier Variant (CV) budgets are reported against separate budget line items and PEs. Starting in FY 11, F-35B budget is reported against PE 0604800M. The F-35C USN budget continues to report under PE 0604800N.

A. Mission Description and Budget Item Justification

The F-35 Lightning II Joint Strike Fighter (JSF) program will develop and field a family of aircraft that meets needs of USN, United States Air Force (USAF), USMC, and allies, with maximum commonality among variants, consistent with National Disclosure Policy, to minimize life cycle costs. This is a joint program with no executive service. Navy and Air Force each provide approximately equal shares of annual funding to the program. The United Kingdom, other International countries, and Foreign Military Sales cases are also participants in JSF program. The program shown here reflects USN, USMC, USAF, and International Partner funding. The top line PE cost (R-2) reflects USN F-35C CV budgetary information only. However, funding at accomplishment/planned program level (R-2A) is reported in total (all services and partners) as activities support all aircraft variants.

The System Development and Demonstration (SDD) budget funds a total quantity of 20 RDT&E test articles, to include 6 ground test articles and 14 flight test articles for Navy and Air Force use. The following reflects the scheduled first flight of each flight test asset or production line roll out of each ground test asset:

FY07: 1 Conventional Take Off and Landing (CTOL) flight test article

FY08: 1 Short Take Off Vertical Landing (STOVL) flight test article, 1 STOVL ground test article

FY09: 1 STOVL flight test article, 2 CTOL ground test articles

FY10: 6 flight test articles (3 CTOL, 2 STOVL, 1 CV), 3 ground test articles (1 STOVL, 2 CV)

FY11: 4 flight test articles (1 CTOL, 1 STOVL, 2 CV)

FY12: 1 flight test article (CV)

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD

rogram Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	667.916	670.723	741.600	<u>-</u>	741.600
Current President's Budget	602.142	651.786	737.149	-	737.149
Total Adjustments	-65.774	-18.937	-4.451	-	-4.451
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-18.937			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-8.600	-			
Program Adjustments	-	-	-0.721	-	-0.721
 Rate/Misc Adjustments 	-	-	-3.730	-	-3.730
 Congressional General Reductions 	-3.122	-	-	-	-
Adjustments					
 Congressional Directed Reductions 	-54.052	-	-	-	-

Change Summary Explanation

Adjustments

Schedule: Initial estimated dates associated with PB12 schedule milestones, to include Initial Operational Capability and Intial Operational Testing and Evaluation timeframes have been adjusted pending program rebaseline. The FY12 Defense Program Review is now scheduled for 2nd Quarter FY12 and a Milestone B decision is expected at that time. Navy Follow-on Development will begin in FY13 due to Congressional decision to not fund in FY12. The FY11 Testing and Evaluation schedule changes include extending the completion of Block 3C to 3rd Quarter FY16.

United States Reprogramming Laboratory (USRL) schedule updated to reflect Verification and Validation efforts. The schedule also incorporates a one-year extension to USRL as result of rephasing of program.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604800M: (U)Joint Strike Fighter (JSF) -	2262: Joint	Strike Fighter EMD STOVL
BA 5: Development & Demonstration (SDD)	EMD		

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2262: Joint Strike Fighter EMD STOVL	602.142	651.786	737.149	-	737.149	693.484	574.746	448.498	340.123	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

Navy

Development efforts for Joint Strike Fighter are funded by Navy, Air Force, and International Partners through agreements and memorandums of understanding. Cost details in R-2A Section B and R-3 reflect total effort.

A. Mission Description and Budget Item Justification

The F-35 Lightning II Joint Strike Fighter (JSF) program will develop and field a family of aircraft that meets needs of USN, United States Air Force (USAF), USMC, and allies, with maximum commonality among variants, consistent with National Disclosure Policy, to minimize life cycle costs. This is a joint program with no executive service. Navy and Air Force each provide approximately equal shares of annual funding to the program. The United Kingdom, other International countries, and Foreign Military Sales cases are participants in JSF Program. The program combines USN, USMC, USAF, and International Partner funding. The top line PE cost (R-2) reflects USN F-35C CV budgetary information only. However, funding at accomplishment/planned program level (R-2A) is reported in total (all services and partners) as activities support all aircraft variants. Within Navy, funding is roughly equal contribution of annual funding between USN and USMC.

The System Developement and Demonstration (SDD) budget funds a total quantity of 20 RDT&E test articles, to include 6 ground test articles and 14 flight test articles for Navy and Air Force use. The following fiscal year phasing of test articles reflects the scheduled first flight of each flight test asset or production line roll out of each ground test asset:

- FY07: 1 Conventional Take Off and Landing (CTOL) flight test article
- FY08: 1 Short Take Off Vertical Landing (STOVL) flight test article, 1 STOVL ground test
- FY09: 1 STOVL flight test article, 2 CTOL ground test articles
- FY10: 6 flight test articles (3 CTOL, 2 STOVL, 1 CV), 3 ground test articles (1 STOVL, 2 CV)
- FY11: 4 flight test articles (1 CTOL, 1 STOVL, 2 CV)
- FY12: 1 flight test article (CV)

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: SDD	1,480.978	1,754.840	1,792.649
Articles:	0	0	0
FY 2011 Accomplishments:			

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC.			
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD	2262: Joii	oint Strike Fighter EMD STOVL		
B. Accomplishments/Planned Programs (\$ in Millions, Art	•		FY 2011	FY 2012	FY 2013
Continued System Development and Demonstration (SDD) ex International Commonality Effort which included airframe, veh engineering, and integrated test efforts.		ıs			
FY 2012 Plans: Continue SDD execution of the Air System, with Lockheed Ma airframe, vehicle systems, mission systems, autonomic logistic	·	des			
FY 2013 Plans: Continue SDD execution of Air System (Lockheed Martin), incovehicle systems, mission systems, autonomic logistics, system		frame,			
Title: F135 Propulsion System		Articles:	375.628 0	360.000 0	359.618 0
FY 2011 Accomplishments: Continued SDD execution of the F135 Propulsion System with integration and performing technology maturation efforts.	n Pratt & Whitney that included engine testing, autonomic lo	ogistics,			
FY 2012 Plans: Continue SDD execution of the F135 Propulsion System with integration and performing technology maturation efforts.	Pratt & Whitney that includes engine testing, autonomic log	gistics,			
FY 2013 Plans: Continue SDD execution of F135 Propulsion System (Pratt & and performing technology maturation efforts.	Whitney), including engine testing, autonomic logistics, inte	egration			
Title: F136 Propulsion System		Articles:	69.288 0	-	-
FY 2011 Accomplishments: Continued F136 Propulsion System development effort by the	General Electric/Rolls Royce Fighter Engine team.				
Title: System Engineering		Articles:	39.345 0	45.457 0	20.063 0

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

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			DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD	PROJEC 2262: Join	T nt Strike Figh	ter EMD STC	DVL
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2011	FY 2012	FY 2013
Continued System Development and Demonstration (SDD) Syste analysis, program integration, requirements integration, and interest and program integration in the continued System Development and Demonstration (SDD) System Development (SDD)		rements			
FY 2012 Plans: Continue SDD Systems Engineering including systems operations integration, and interoperability support.	s requirements analysis, program integration, requireme	ents			
FY 2013 Plans: Continue SDD Systems Engineering, including systems operation integration, and interoperability support.	ns requirements analysis, program integration, requirem	ents			
Title: Development Test and Evaluation		Articles:	183.951 0	323.150 0	374.258 (
FY 2011 Accomplishments: Continued government Development Test and Evaluation (DT&E) Low Rate Initial Production aircraft deliveries, and initial service tr Take Off and Landing (CTOL), Short Take Off and Vertical Landir air vehicle envelope to support mission systems testing. Commercommenced Block 2 flight test. Elements of DT&E included prepared component capabilities testing.	raining. Continued flight sciences testing of Conventioning (STOVL), and Carrier Variant (CV) variants to expanded and completed Block 1 Mission Systems flight test	al d the t, and			
FY 2012 Plans: Continue government DT&E/Operational Testing in support of tes CV variants to expand the air vehicle envelope to support mission include preparation for flight testing, weapons integration testing,	n systems testing to include initial Block 2B. Elements of				
FY 2013 Plans: Continue government DT&E/Operational Testing in support of tes and CV variants to expand air vehicle envelope and support miss include preparation for flight testing, weapons integration testing,	ion systems testing (include initial Block 2B). Elements				
modes proparation ingrit tooming, modepoint intogration tooming,			109.293	237.128	146.887
Title: Development Support		Articles:	0	0	140.007

PE 0604800M: *(U)Joint Strike Fighter (JSF) - EMD* Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: Fel	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604800M: (U) Joint Strike Fighter (JSF) - EMD	PROJEC 2262: Join	T nt Strike Figh	ter EMD STC)VL
B. Accomplishments/Planned Programs (\$ in Millions, Articl	e Quantities in Each)		FY 2011	FY 2012	FY 2013
Continued System Development and Demonstration (SDD) Supweapons integration, mission support, and autonomic logistics d		tems,			
FY 2012 Plans: Continue SDD Support efforts for airframe, air vehicle systems, autonomic logistics development activities.	mission systems, weapons integration, mission support,	and			
FY 2013 Plans: Continue SDD support efforts for airframe, air vehicle systems, r autonomic logistics development activities	mission systems, weapons integration, mission support, a	and			
Title: Program Management Support		Articles:	76.876 0	103.447 0	113.875 0
FY 2011 Accomplishments: Continued management support services, travel, engineering te of program objectives.	echnical services, and studies analyses and evaluations i	n support			
FY 2012 Plans: Continue management support services, travel, engineering tecof program objectives.	hnical services, and studies analyses and evaluations in	support			
FY 2013 Plans: Continue management support services, travel, engineering tech program objectives.	nnical services, and studies analyses and evaluations in	support of			
Title: Follow-On Development (FoD)		Articles:	-	-	8.717 0
FY 2013 Plans: Initiate disciplined systems engineering, requirements decompose Block 4 candidates, and technical development of suitability can capabilities to appropriate Technical Readiness Levels to reduce	didates. Continue technical maturation of validated Bloc				
	Accomplishments/Planned Programs	Subtotals	2,335.359	2,824.022	2,816.067
		0604800F	931.599	1,387.926	1,210.306
	Int	ernational	185.912	152.474	144.220
		0604800N	615.706	631.836	724.392

PE 0604800M: *(U)Joint Strike Fighter (JSF) - EMD* Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

DATE: February 2012

PROJECT

2262: Joint Strike Fighter EMD STOVL

B. Accomplishments/Planned Pro	<u>ograms (\$ in</u>	Millions, Ar	<u>ticle Quantit</u>	<u>ies in Each</u>	<u>1)</u>				FY 2011	FY 2012	FY 2013
							Navy S	ubtotals	602.142	651.786	737.149
C. Other Program Funding Summ	nary (\$ in Mill	lions)									
		•	FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	<u>Total</u>	FY 2014	FY 2015	FY 2010	6 FY 2017	Complete	Total Cost
RDT&E/0604800F: Joint Strike	931.599	1,387.926	1,210.306	0.000	1,210.306	1,019.035	635.732	387.694	4 155.59 ²	0.000	22,224.453
Fighter											
International: International	185.912	152.474	144.220	0.000	144.220	2.800	0.000	0.000	0.000	0.000	5,123.601
Partner (SDD/FOD)											
• APAF/0207142F: <i>F-35 Joint</i>	4,297.566	3,518.592	3,417.702	0.000	3,417.702	3,357.676	4,547.095	6,026.187	7 5,949.39	144,091.949	179,224.735
Strike Strike Fighter											
• DDT&E/0604800N: IT Strike	65/ 108	658 540	7/3 026	0.000	7/3 026	702 100	584 341	458 301	3/0 860	0 000	1 151 285

654.198	658.549	743.926	0.000	743.926	702.100	584.341	458.302	349.869	0.000	4,151.285	
838.204	1,259.162	1,510.936	0.000	1,510.936	1,521.174	1,562.016	1,953.170	2,576.560	31,607.019 4	12,828.241	
150.251	23.430	99.006	0.000	99.006	97.805	107.292	186.345	175.615	2,381.670	3,221.414	
1,852.890	1,557.162	1,072.812	0.000	1,072.812	1,273.910	1,432.190	1,724.077	2,429.677	26,609.510 4	15,442.497	
88.923	29.902	41.466	0.000	41.466	114.749	116.392	106.869	144.044	1,792.760	2,865.797	
5.381	5.665	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.875	
726.936	1,223.348	3,054.443	0.000	3,054.443	5,362.214	7,449.007	8,361.881	8,094.783	0.000 3	35,000.074	
121.292	24.250	13.530	0.000	13.530	72.000	69.050	65.000	66.170	0.000	498.821	
4.610	0.000	147.995	0.000	147.995	157.777	245.462	223.683	252.141	0.000	1,031.668	
	838.204 150.251 1,852.890 88.923 5.381 726.936 121.292	838.204 1,259.162 150.251 23.430 1,852.890 1,557.162 88.923 29.902 5.381 5.665 726.936 1,223.348 121.292 24.250	838.204 1,259.162 1,510.936 150.251 23.430 99.006 1,852.890 1,557.162 1,072.812 88.923 29.902 41.466 5.381 5.665 0.000 726.936 1,223.348 3,054.443 121.292 24.250 13.530	838.204 1,259.162 1,510.936 0.000 150.251 23.430 99.006 0.000 1,852.890 1,557.162 1,072.812 0.000 88.923 29.902 41.466 0.000 5.381 5.665 0.000 0.000 726.936 1,223.348 3,054.443 0.000 121.292 24.250 13.530 0.000	838.204 1,259.162 1,510.936 0.000 1,510.936 150.251 23.430 99.006 0.000 99.006 1,852.890 1,557.162 1,072.812 0.000 1,072.812 88.923 29.902 41.466 0.000 41.466 5.381 5.665 0.000 0.000 0.000 726.936 1,223.348 3,054.443 0.000 3,054.443 121.292 24.250 13.530 0.000 13.530	838.204 1,259.162 1,510.936 0.000 1,510.936 1,521.174 150.251 23.430 99.006 0.000 99.006 97.805 1,852.890 1,557.162 1,072.812 0.000 1,072.812 1,273.910 88.923 29.902 41.466 0.000 41.466 114.749 5.381 5.665 0.000 0.000 0.000 0.000 726.936 1,223.348 3,054.443 0.000 3,054.443 5,362.214 121.292 24.250 13.530 0.000 13.530 72.000	838.204 1,259.162 1,510.936 0.000 1,510.936 1,521.174 1,562.016 150.251 23.430 99.006 0.000 99.006 97.805 107.292 1,852.890 1,557.162 1,072.812 0.000 1,072.812 1,273.910 1,432.190 88.923 29.902 41.466 0.000 41.466 114.749 116.392 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 726.936 1,223.348 3,054.443 0.000 3,054.443 5,362.214 7,449.007 121.292 24.250 13.530 0.000 13.530 72.000 69.050	838.204 1,259.162 1,510.936 0.000 1,510.936 1,521.174 1,562.016 1,953.170 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 1,852.890 1,557.162 1,072.812 0.000 1,072.812 1,273.910 1,432.190 1,724.077 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 8,361.881 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000	838.204 1,259.162 1,510.936 0.000 1,510.936 1,521.174 1,562.016 1,953.170 2,576.560 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 175.615 1,852.890 1,557.162 1,072.812 0.000 1,072.812 1,273.910 1,432.190 1,724.077 2,429.677 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 8,361.881 8,094.783 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170	838.204 1,259.162 1,510.936	838.204 1,259.162 1,510.936

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

• FOD/0207142F: USAF Follow-on

• 0207142F/USAF: USAF Spares

• OPN/4267: Autonomic Logistics

Information System (ALIS)

Development

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0.000

0.000

0.000

8.117

3.826

181.833

50.084

197.737

4.869

R-1 Line #133

104.866

265.692

5.592

132.174

274.415

5.647

229.912

5.744

0.000

264.251 12,779.030 14,564.830

43.524

535.120

69.202

9.967

0.000

149.556

8.117

3.826

181.833

0.000

0.000

261.924

DATE: February 2012 Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 1319: Research, Development, Test & Evaluation, Navy PE 0604800M: (U)Joint Strike Fighter (JSF) -2262: Joint Strike Fighter EMD STOVL BA 5: Development & Demonstration (SDD) **EMD**

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

			FY 2013	FY 2013	FY 2013					Cost To	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
• 27142F: <i>USAF/OPAF</i>	0.000	0.000	0.600	0.000	0.600	2.200	2.943	2.471	2.345	0.000	10.559

D. Acquisition Strategy

The System Development and Demonstration program consists of a cost-reimbursement contract awarded to Lockheed Martin Aeronautics Company to develop F-35 Air System, consisting of three aircraft variants and associated logistics support system, for the U.S. Services and international participants. Similarly, a costreimbursement contract was awarded to Pratt & Whitney to develop the F135 propulsion system. Ground and flight testing is being conducted during development to accomplish validation and verification, with extensive use of modeling and simulation to offset risk of this large, complex, and concurrent life-cycle program. A comprehensive logistics support environment, including an integrated training system for aircrew, maintenance, and support personnel, is also being developed.

The F-35 Program has made international involvement a key element of acquisition strategy. This includes international partnership in development, production, and sustainment phases of life-cycle. Additional international participation includes Foreign Military Sales arrangements.

In Fiscal Year (FY) 2007, separate cost-type contracts were awarded to Lockheed Martin Aeronautics Company and Pratt & Whitney to begin low rate initial production for F-35 air vehicles, propulsion systems, and sustainment for fielded systems. Transition to fixed-price-type contracts occurred with fourth low rate lot. To provide logistics support for delivered aircraft, Performance-Based Logistics cost-type contracts are being awarded Lockheed Martin Aeronautics Company and Pratt & Whitney.

At completion of Low Rate Initial Production, a Defense Acquisition Board review, and Milestone Decision Authority approval, the F-35 Program will enter Full Rate Production. Fixed-price procurement contracts will be awarded for F-35 air vehicles and propulsion systems for U.S. Services and international participants. Multiyear procurement authority for the F-35 Air System will be requested for Full Rate Production. Concurrently, multiple-year, fixed-price-type Performance Based Logistics contracts for sustainment will be executed to support multi-Service and multi-national requirements.

E. Performance Metrics

Performance Metrics reflect Key Program Performance data.

Combat Radius

Conventional Take Off and Landing Does Not Meet Requirement

Carrier Variant (CV) Meets Tripwire Requirement

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD

Short Take off Vertical Landing (STOVL) Meets/Exceeds Tripwire Requirement

CV Recovery

Maximum Approach Speed Meets Requirement In Tripwire Band

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy
BA 5: Development & Demonstration (SDD)

PATE: February 2012

R-1 ITEM NOMENCLATURE
PE 0604800M: (U) Joint Strike Fighter (JSF) EMD

STOVL Performance

Flat Deck (High-High-Profile Fuel) Meets Requirement In Tripwire Band Ski Jump (High-Medium-Medium-High Profile Fuel) Meets Requirement In Tripwire Band Vertical Landing Bring Back Meets Requirement In Tripwire Band

Interoperability

Net Ready Criteria- Meets Requirement In Tripwire Band

Radio Frequency Signature Meets/Exceeds Tripwire Requirement

Force Protection

CB Pilot Protection (New Key Performance Parameters Per CN3) - Meets/Exceeds Tripwire Requirement

Mission Reliability

Conventional Take Off and Landing (CTOL) Meets/Exceeds Tripwire Requirement Carrier Variant (CV) Exceeds ORD Objective Short Take Off Vertical Landing (STOVL) USMC Meets/Exceeds Tripwire Requirement STOVL UK Meets/Exceeds Tripwire Requirement

Sortie Generation Rate

CTOL Meets/Exceeds Tripwire Requirement CV Meets/Exceeds Tripwire Requirement STOVL USMC Meets/Exceeds Tripwire Requirement STOVL UK Meets/Exceeds Tripwire Requirement

Logistics Footprints

Navy

CTOL Meets/Exceeds Tripwire Requirement STOVL USMC Meets/Exceeds Tripwire Requirement

Logistics Footprint- Volume CV Exceeds ORD Objective STOVL USMC Exceeds ORD Objective STOVL UK Meets/Exceeds Tripwire Requirement

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy DATE: Febru										
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT								
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD	2262: Joint Strike Fighter EMD STOVL								
Logistics Footprint-Weight										
Carrier Variant (CV) Exceeds ORD Objective										
STOVL USMC Exceeds ORD Objective										
STOVL UK Meets/Exceeds Tripwire Requirement										

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

DATE: February 2012

PROJECT

2262: Joint Strike Fighter EMD STOVL

Product Development (\$ in Millio	ns)		FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary H/W Development - SDD	C/CPAF	Lockheed Martin:Ft. Worth, TX	28,954.680	1,750.839	Oct 2011	1,781.259	Oct 2012	-		1,781.259	2,918.167	35,404.945	35,398.869
Primary H/W Development - IDIQ (0022)	C/CPAF	Lockheed Martin:Ft. Worth, TX	16.162	4.000	Oct 2011	-		-		-	0.000	20.162	20.162
Primary H/W Development - IDIQ (0009)	C/CPAF	Lockheed Martin:Ft. Worth, TX	16.759	-		-		-		-	0.000	16.759	16.759
Primary H/W Development - BOA(3104)	SS/CR	Lockheed Martin:Ft. Worth, TX	3.511	-		-		-		-	0.000	3.511	3.511
Primary H/W Development - SDD (3003)	SS/CPAF	Pratt & Whitney:Hartford, CT	7,282.249	360.000	Dec 2011	359.618	Dec 2012	-		359.618	772.503	8,774.370	8,774.370
Primary H/W Development (C-0132)	SS/CPAF	Pratt & Whitney:Hartford, CT	1.364	-		-		-		-	0.000	1.364	1.364
Primary H/W Development (C-0050)	SS/CPAF	Pratt & Whitney:Hartford, CT	2.211	-		-		-		-	0.000	2.211	2.211
Primary H/W Development BOA(G-3053)	SS/CPAF	Pratt & Whitney:Hartford, CT	35.983	-		-		-		-	0.000	35.983	35.983
Primary H/W Development IDIQ (D-0077)	SS/CPAF	Pratt & Whitney:Hartford, CT	10.925	-		-		-		-	0.000	10.925	10.925
Primary H/W Development GE (C-0093)	SS/CPAF	Pratt & Whitney:Hartford, CT	2,224.861	-		-		-		-	0.000	2,224.861	2,418.868
Primary H/W Development GE (C-0009)	SS/CPAF	GE:Cinn, Ohio	0.264	-		-		-		-	0.000	0.264	0.264
Primary H/W Development GE (04-D-0074	SS/CPAF	GE:Cinn, Ohio	4.175	-		-		-		-	0.000	4.175	4.175
Primary H/W Dev0elopment GE (04-C-0102	SS/CPAF	GE:Cinn, Ohio	100.400	-		-		-		-	0.000	100.400	100.400
Primary H/W Development GE (02-G-3236	SS/CPAF	GE:Cinn, Ohio	5.548	-		-		-		-	0.000	5.548	5.548
Primary H/W Development GE (96-C-0176	SS/CPAF	GE:Cinn, Ohio	382.753	-		-		-		-	0.000	382.753	382.753
Product Development Systems Engineering	Various	Various:Various	329.301	45.457	Oct 2011	20.063	Oct 2012	-		20.063	89.855	484.676	

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

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PROJECT

2262: Joint Strike Fighter EMD STOVL

DATE: February 2012

Product Development (\$ in Millio	ns)		FY 2	012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
NAWC CHLK FOD	Various	NAWC WD:China Lake, CA	-	-		-		-		-	0.000	0.000	
NAWC PAX FOD	Various	NAWC AD:Patuxent River, MD	-	-		-		-		-	0.000	0.000	
PRIME LM FOD	Various	Lockheed Martin:Ft. Worth, TX	-	-		1.860	Oct 2012	-		1.860	396.902	398.762	
PRIME ENGINE P&W FOD	Various	Pratt & Whitney:Hartford, CT	-	-		-		-		-	0.000	0.000	
Systems Engineering FOD	Various	Various:Various	-	-		0.447	Oct 2012	-		0.447	43.099	43.546	
Prime LM Deployability and Suitability Enhancements	Various	Lockheed Martin:Ft. Worth, TX	-	-		17.800	Oct 2012	-		17.800	97.000	114.800	
		Subtotal	39,371.146	2,160.296		2,181.047		-		2,181.047	4,317.526	48,030.015	

Remarks

Note: Cumulative Award Fee Earned in prior years for Pratt & Whitney is 85.2%.

Support (\$ in Millions)				FY 2	012	FY 2 Ba		FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	Various	Eglin AFB:Eglin, FL	115.621	14.929	Oct 2011	15.340	Oct 2012	-		15.340	37.168	183.058	
Development Support	Various	ASC/AFRL:Dayton, OH	65.367	7.625	Oct 2011	8.255	Oct 2012	-		8.255	13.938	95.185	
Development Support	Various	ASC/CIVPAY:Dayton, Ohio	-	19.554	Oct 2011	-		-		-	0.000	19.554	
Development Support	Various	Bolling AFB:Washington, DC	6.775	-		-		-		-	0.000	6.775	
Development Support	Various	DMEA:McClellan, CA	7.148	25.500	Oct 2011	1.400	Oct 2012	-		1.400	0.800	34.848	
Development Support	MIPR	ESC:Hanscom AFB, MA	7.358	0.377	Oct 2011	0.511	Oct 2012	-		0.511	1.585	9.831	
Development Support	Various	AEDC/Fuel:Arnold, TN	156.105	58.764	Oct 2011	23.266	Oct 2012	-		23.266	39.948	278.083	

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

DATE: February 2012

PROJECT

2262: Joint Strike Fighter EMD STOVL

Support (\$ in Millions)				FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support	WR	NAS Jacksonville:Jacksonville FL	, 9.437	1.985	Oct 2011	1.757	Oct 2012	-		1.757	1.800	14.979	
Development Support	Various	Various:Various	249.093	21.298	Oct 2011	21.332	Oct 2012	-		21.332	30.343	322.066	
Development Support	Various	NAWC WD:China Lake, CA	108.289	30.641	Oct 2011	24.833	Oct 2012	-		24.833	56.204	219.967	
Development Support	Various	NAWC AD:Patuxent, MD	331.122	53.484	Oct 2011	42.672	Oct 2012	-		42.672	122.425	549.703	
Development Support	Various	NAWC TSD:Orlando, FL	11.610	2.362	Oct 2011	0.771	Oct 2012	-		0.771	3.555	18.298	
Development Support	WR	NSWC:Indian Head, MD	4.266	0.572	Oct 2011	0.308	Oct 2012	-		0.308	0.640	5.786	
Development Support	Various	SPAWAR:San Diego, CA	10.322	0.038	Oct 2011	0.032	Oct 2012	-		0.032	0.138	10.530	
Prior Years costs no longer funded in the FYDP	Various	SIBR Cong ADD:Various	24.187	-		-		-		-	0.000	24.187	
Misc/Other FOD	Various	Various:Various	-	-		6.410	Oct 2012	-		6.410	86.994	93.404	
		Subtotal	1,106.700	237.129		146.887		-		146.887	395.538	1,886.254	

Test and Evaluation (\$	in Millions)		FY 2	2012	FY 2 Ba			2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	Various	NAWC AD:Patuxent River, MD	381.021	130.731	Oct 2011	115.186	Oct 2012	-		115.186	304.105	931.043	
Developmental Test & Evaluation	Various	NAWC WD:China Lake, CA	37.805	11.637	Oct 2011	5.829	Oct 2012	-		5.829	11.972	67.243	
Developmental Test & Evaluation	Various	Edwards AFB:Edwards AFB, CA	399.018	94.841	Oct 2011	82.500	Oct 2012	-		82.500	228.811	805.170	
Developmental Test & Evaluation	Various	Various:Various	36.486	26.441	Oct 2011	56.449	Oct 2012	-		56.449	170.510	289.886	

PE 0604800M: *(U)Joint Strike Fighter (JSF) - EMD* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

DATE: February 2012

PROJECT

2262: Joint Strike Fighter EMD STOVL

Test and Evaluation (\$	in Millions	s)		FY 2	012	FY 2 Ba	2013 se	FY 2	2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	MIPR	WEPS:Eglin AFB, FL	35.173	2.600	Oct 2011	-		-		-	0.000	37.773	
Developmental Test & Evaluation	MIPR	OT-AFOTEC/ AFFTC:Kirkland AFB, NM/Eglin AFB, FL	108.726	52.200	Oct 2011	108.518	Oct 2012	-		108.518	401.683	671.127	
Developmental Test & Evaluation	Various	OT-JITC/ OPTEC:Various	8.581	4.700	Oct 2011	5.776	Oct 2012	-		5.776	5.926	24.983	
Developmental Test & Evaluation	Various	JITC:Various	-	-		-		-		-	0.000	0.000	
		Subtotal	1,006.810	323.150		374.258		-		374.258	1,123.007	2,827.225	

Management Services ((\$ in Millio	ns)		FY 2	2012	FY 2 Ba	2013 se	FY 2		FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management	SS/CPFF	ACT I:Arlington, VA	8.419	3.418	Oct 2011	3.049	Oct 2012	-		3.049	13.798	28.684	28.684
Program Management - Mantech	C/FP	Mantech:Arlington, VA	59.469	8.366	Oct 2011	11.046	Oct 2012	-		11.046	49.993	128.874	128.874
Program Management - DRC	C/CPFF	DRC:Arlington, VA	5.916	-		-		-		-	0.000	5.916	5.916
Program Management	C/CPFF	First Principles:Arlington, VA	4.634	1.936	Oct 2011	1.836	Oct 2012	-		1.836	8.308	16.714	16.714
Program Management	Various	ASC CIVPAY:VARIOUS	-	3.500	Oct 2011	35.724	Oct 2012	-		35.724	150.762	189.986	
Program Management	C/CPFF	Wyle:Arlington, VA	102.871	27.418	Oct 2011	23.305	Oct 2012	-		23.305	109.904	263.498	263.498
Program Management	C/CPAF	Saftas:Arlington, VA	123.593	26.600	Oct 2011	12.867	Oct 2012	-		12.867	71.197	234.257	234.257
Program Management	C/CPAF	Stanley:Arlington, VA	186.584	27.940	Oct 2012	22.051	Oct 2012	-		22.051	101.523	338.098	338.098
Program Management	C/CPFF	GE F136-COG Studies:Cinn., OH	0.800	-		-		-		-	0.000	0.800	0.800
Travel and Miscellaneous	Various	Various:Various	17.124	4.269	Oct 2011	3.997	Oct 2012	-		3.997	17.225	42.615	
		Subtotal	509.410	103.447		113.875		-		113.875	522.710	1,249.442	

PE 0604800M: *(U)Joint Strike Fighter (JSF) - EMD* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

PROJECT

2262: Joint Strike Fighter EMD STOVL

DATE: February 2012

Management Services (\$ in Millio	ns)		FY	2012		2013 ise		2013 CO	FY 2013 Total			
	Contract		Total Prior										Target
	Method	Performing	Years		Award		Award		Award		Cost To		Value of
Cost Category Item	& Type	Activity & Location	Cost	Cost	Date	Cost	Date	Cost	Date	Cost	Complete	Total Cost	Contract

Remarks

Cumulative Award Fee earned in prior years for Stanley is 99%.

	Total Prior Years Cost	FY	2012	FY 2 Ba	FY 2	2013 CO	FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Subtotals	41,994.066	2,824.022		2,816.067	-		2,816.067	6,358.781	53,992.936	
0604800F		1,387.926		1,210.306	-		1,210.306			
International		152.474		144.220	-		144.220			
0604800N		631.836		724.392	-		724.392			
Project Cost Totals	41,994.066	651.786		737.149	-		737.149	6,358.781	53,992.936	

Remarks

Subtotals and totals may not add due to rounding.

Name PU 2011 2012 2013

0604800F 3831 \$931.599 \$1,387.926 \$1,210.306 0604800M 2262 \$602.142 \$651.786 \$737.149 0604800N 2261 \$615.706 \$631.836 \$724.392 International R&D \$185.912 \$152.474 \$144.220

Total 2261&2262 (R2-A/R-3) FY11 \$2,335.359 FY12 \$2,824.022 FY13 \$2,816.067

Navy 3194 \$38.492 \$26.713 \$19.534

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R-1 Line #133

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: Research, Development, Test & Evaluation, Navy	PE 0604800M: (U)Joint Strike Fighter (JSF) -	2262: Joint Strike Fighter EMD STOVL
BA 5: Development & Demonstration (SDD)	EMD	

PE 0604800M: (U)Joint Strike Fighter (JSF) - EMD Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

EMD

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604800M: (U)Joint Strike Fighter (JSF) - 2262: Joint Strike Fighter EMD STOVL

BA 5: Development & Demonstration (SDD)

Schedule Details

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
JSF Variants - CV, STOVL & CTOL				
Systems Development: Acqusition Milestone: Services Initial Operational Capability TBD	1	2014	4	2017
Systems Development: Follow-on Development	1	2012	4	2017
Test & Evaluation: Conventional Take Off and Landing (CTOL) (DT/OT)	1	2011	4	2017
Test & Evaluation: Short Take Off and Landing (STOVL) (DT/OT)	1	2011	4	2017
Test & Evaluation: Carrier Variant (CV) (DT/OT)	1	2011	4	2017
Defense Acquisition Reviews: Defense Acquisition Board Program Reviews (IPRs) FY11	1	2011	1	2011
Defense Acquisition Reviews: Interim Program Reviews (IPR) FY12	1	2012	1	2012
Defense Acquisition Reviews: IPR FY13	2	2013	2	2013
Defense Acquisition Reviews: IPR FY14	2	2014	2	2014
Defense Acquisition Reviews: IPR FY15	2	2015	2	2015
Defense Acquisition Reviews: IPR FY16	2	2016	2	2016
Defense Acquisition Reviews: IPR FY17	2	2017	2	2017
Production & Sustainment: BLK 1B TR1 LRIP 3	1	2012	4	2012
Production & Sustainment: BLK 2A TR1 LRIP 4&5	3	2012	1	2014
Production & Sustainment: BLK 3I TR2 LRIP 6, 7, &8	2	2011	1	2017
Production & Sustainment: BLK 3F TR2 LRIP 9+	1	2017	4	2017
Contract Awards: Low Rate Inital Production (LRIP) IV Full Funding	1	2011	1	2011
Contract Awards: LRIP V Long Lead	1	2011	1	2011
Contract Awards: LRIP V Full Funding	4	2011	4	2011
Contract Awards: LRIP VI Long Lead	4	2011	4	2011

PE 0604800M: *(U)Joint Strike Fighter (JSF) - EMD* Navy

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Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604800M: (U)Joint Strike Fighter (JSF) -

EMD

DATE: February 2012

PROJECT

2262: Joint Strike Fighter EMD STOVL

	Sta	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Contract Awards: LRIP VI Full Funding	1	2012	1	2012
Contract Awards: LRIP VII Long Lead	2	2012	2	2012
Contract Awards: LRIP VII Full Funding	1	2013	1	2013
Contract Awards: LRIP VIII Long Lead	2	2013	2	2013
Contract Awards: LRIP VIII Full Funding	1	2014	1	2014
Contract Awards: LRIP IX Long Lead	2	2014	2	2014
Contract Awards: LRIP IX Full Funding	1	2015	1	2015
Contract Awards: LRIP X Long Lead	2	2015	2	2015
Contract Awards: LRIP X Full Funding	1	2016	1	2016
Contract Awards: LRIP XI Long Lead	3	2016	3	2016
Contract Awards: LRIP XI Full Funding	1	2017	1	2017
Production Deliveries: LRIP I Delivery (APAF)	3	2011	3	2011
Production Deliveries: LRIP II (APAF & APN)	4	2011	4	2011
Production Deliveries: LRIP III (APAF & APN) INTL	1	2012	1	2012
Production Deliveries: LRIP IV (APAF & APN) INTL	1	2013	1	2013
Production Deliveries: LRIP V (APAF & APN) INTL	3	2013	3	2013
Production Deliveries: LRIP VI (APAF & APN) INTL	2	2014	2	2014
Production Deliveries: LRIP VII (APAF & APN) INTL	2	2012	2	2012
Production Deliveries: LRIP VIII (APAF & APN) INTL	1	2016	1	2016
Production Deliveries: LRIP IX (APAF & APN) INTL	1	2017	1	2017
Production Deliveries: Production Approach Single Lot /MYP - TBD	1	2015	2	2017