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

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE

PE 0604800N: JT Strike Fighter (JSF) - EMD

BA 5: Development & Demonstration (SDD)

1319: Research, Development, Test & Evaluation, Navy

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	654.198	658.549	743.926	-	743.926	702.100	584.341	458.302	349.869	Continuing	Continuing
2261: Joint Strike Fighter EMD	615.706	631.836	724.392	-	724.392	702.100	584.341	458.302	349.869	Continuing	Continuing
3194: Joint Reprogramming Center	38.492	26.713	19.534	-	19.534	-	-	-	-	0.000	84.739

#### Note

Navy

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 0604800N: JT Strike Fighter (JSF) - EMD

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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 0604800N: JT Strike Fighter (JSF) - EMD

BA 5: Development & Demonstration (SDD)

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	707.791	677.486	744.516	-	744.516
Current President's Budget	654.198	658.549	743.926	-	743.926
Total Adjustments	-53.593	-18.937	-0.590	-	-0.590
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-18.937			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-19.166	-			
Program Adjustments	-	-	-1.187	-	-1.187
<ul> <li>Rate/Misc Adjustments</li> </ul>	-	-	0.597	-	0.597
<ul> <li>Congressional General Reductions</li> </ul>	-3.442	-	-	-	-
Adjustments					
Congressional Directed Reductions	-30.985	-	-	-	-
Adjustments					

# **Change Summary Explanation**

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.

PE 0604800N: JT Strike Fighter (JSF) - EMD

Navy

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Exhibit IX-2A, IXD I GE I Toject ous	tilloation.	D ZO IO INAVy							DAIL: 1 CD	rudiy 2012	
APPROPRIATION/BUDGET ACTIV	/ITY			R-1 ITEM N	OMENCLA	TURE		PROJECT			
1319: Research, Development, Tes BA 5: Development & Demonstration		n, Navy		PE 060480	0N: <i>JT Strike</i>	e Fighter (JS	SF) - EMD	2261: Joint	Strike Fight	er EMD	
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To	Total Cost

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
2261: Joint Strike Fighter EMD	615.706	631.836	724.392	-	724.392	702.100	584.341	458.302	349.869	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

Fyhibit R-24 RDT&F Project Justification: PR 2013 Navv

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 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 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 0604800N: JT Strike Fighter (JSF) - EMD

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R-1 Line #134

DATE: February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PROJEC 2261: Join	ECT  Joint Strike Fighter EMD			
B. Accomplishments/Planned Programs (\$ in Millions, Article	Quantities in Each)		FY 2011	FY 2012	FY 2013
Continued System Development and Demonstration (SDD) executive International Commonality Effort which included airframe, vehicle engineering, and integrated test efforts.	, ,	ıs			
FY 2012 Plans: Continue SDD execution of the Air System, with Lockheed Martin airframe, vehicle systems, mission systems, autonomic logistics,		les			
FY 2013 Plans: Continue SDD execution of Air System (Lockheed Martin), includ vehicle systems, mission systems, autonomic logistics, systems	•	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 Printegration and performing technology maturation efforts.	ratt & Whitney that included engine testing, autonomic lo	ogistics,			
FY 2012 Plans: Continue SDD execution of the F135 Propulsion System with Praintegration and performing technology maturation efforts.	tt & Whitney that includes engine testing, autonomic log	jistics,			
FY 2013 Plans: Continue SDD execution of F135 Propulsion System (Pratt & Wh and performing technology maturation efforts.	itney), including engine testing, autonomic logistics, inte	gration			
Title: F136 Propulsion System		Articles:	69.288 0	-	-
FY 2011 Accomplishments: Continued F136 Propulsion System development effort by the Ge	eneral Electric/Rolls Royce Fighter Engine team.				
Title: Systems Engineering		Articles:	39.345 0	45.457 0	20.063 0

PE 0604800N: *JT Strike Fighter (JSF) - EMD* Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: Fel	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	T		
319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604800N: JT Strike Fighter (JSF) - EMD	2261: <i>Joi</i>	nt Strike Figh	ter EMD	
B. Accomplishments/Planned Programs (\$ in Millions, Articl	•		FY 2011	FY 2012	FY 2013
Continued System Development and Demonstration (SDD) Systanalysis, program integration, requirements integration, and inte		irements			
FY 2012 Plans: Continue SDD Systems Engineering including systems operation ntegration, and interoperability support.	ns requirements analysis, program integration, requirement	ents			
FY 2013 Plans: Continue SDD Systems Engineering, including systems operationtegration, and interoperability support.	ons requirements analysis, program integration, requirem	nents			
Title: Development Test and Evaluation		Articles:	183.951 0	323.150 0	374.258 (
EY 2011 Accomplishments: Continued government Development Test and Evaluation (DT&E Low Rate Initial Production aircraft deliveries, and initial service that Off and Landing (CTOL), Short Take Off and Vertical Landair vehicle envelope to support mission systems testing. Commercial Commercial Block 2 flight test. Elements of DT&E included preparameters of DT&E included preparameters.	training. Continued flight sciences testing of Convention ing (STOVL), and Carrier Variant (CV) variants to expanenced and completed Block 1 Mission Systems flight tes	nal nd the nt, and			
FY 2012 Plans: Continue government DT&E/Operational Testing in support of te CV variants to expand the air vehicle envelope to support mission nclude preparation for flight testing, weapons integration testing	on systems testing to include initial Block 2B. Elements o				
FY 2013 Plans: Continue government DT&E/Operational Testing in support of teand CV variants to expand air vehicle envelope and support mis include preparation for flight testing, weapons integration testing	sion systems testing (include initial Block 2B). Elements				
			109.293	237.128	146.887
Title: Development Support		Articles:	0	0	140.007

PE 0604800N: *JT Strike Fighter (JSF) - EMD* Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: Feb	oruary 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604800N: JT Strike Fighter (JSF) - EMD	PROJEC 2261: Joi	T int Strike Fight	ter EMD	
B. Accomplishments/Planned Programs (\$ in Millions, Article	e Quantities in Each)		FY 2011	FY 2012	FY 2013
Continued System Development and Demonstration (SDD) Supplements integration, mission support, and autonomic logistics de		tems,			
FY 2012 Plans: Continue SDD Support efforts for airframe, air vehicle systems, rautonomic logistics development activities.	mission systems, weapons integration, mission support,	and			
FY 2013 Plans: Continue SDD support efforts for airframe, air vehicle systems, nautonomic logistics development activities	nission systems, weapons integration, mission support,	and			
Title: Program Management Support		Articles:	76.876 0	103.447 0	113.875 0
FY 2011 Accomplishments: Continued management support services, travel, engineering ted of program objectives.	chnical services, and studies analyses and evaluations in	n support			
<b>FY 2012 Plans:</b> Continue management support services, travel, engineering tech program objectives.	nnical services, and studies analyses and evaluations in	support of			
<b>FY 2013 Plans:</b> 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
		0604800M	602.142	651.786	737.149
	In	ternational	185.912	152.474	144.220

PE 0604800N: *JT Strike Fighter (JSF) - EMD* Navy

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

R-1 ITEM NOMENCLATURE

IFOT

**DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

PE 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Navy Subtotals	615.706	631.836	724.392

Fighter: International: International 185.912 152.474 144.220 0.000 144.220 2.800 0.000 0.000 0.000 0.000 0.000 Partner (SDD/FOD)  APAF/0207142F: F-35 Joint 4,297.566 3,518.592 3,417.702 0.000 3,417.702 3,357.676 4,547.095 6,026.187 5,949.391144,091.945   Strike Strike Fighter Fighter (JSF) - EMD  APN/0605B: F-35 Joint Strike 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 175.615 2,381.676   Fighter STOVL Spares  APN/0605C: F-35 Joint Strike 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 26,609.516   Fighter CV Spares  OPN/4265: Other Aviation 5.381 5.665 0.000											
Name	gram Funding Summary (	in Millions)									
**RDT&E/0604800F: Joint Strike											
Fighter:   International: International   185.912   152.474   144.220   0.000   144.220   2.800   0.00											
International: International   185.912   152.474   144.220   0.000   144.220   2.800   0.000	94800F: Joint Strike	1.599 1,387.9	7.926 1,210.306	0.000	1,210.306	1,019.035	635.732	387.694	155.591	0.000	22,224.453
Partner (SDD/FOD)  APAF/0207142F: F-35 Joint											
• APAFIO207142F: F-35 Joint Strike Fighter   • APAFIO207142F: F-35 Joint Strike Fighter   • APN/0152: F-35 Joint Strike   • APN/0147: F-35 Joint Strike   • AP		5.912 152.4	2.474 144.220	0.000	144.220	2.800	0.000	0.000	0.000	0.000	5,123.601
Strike Strike Fighter  RDTRE/l0604800M: JT Strike 602.142 651.786 737.149  0.000 737.149 693.484 574.746 448.498 340.123 0.00  Fighter (JSF) - EMD  APN/l0152: F-35 Joint Strike 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 175.615 2,381.67  Fighter STOVL  APN/l047: F-35 Joint Strike 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 26,609.51  Fighter CV  APN/l0605C: F-35 Joint Strike 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.76  Fighter CV Spares  OPN/l4265: Other Aviation 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000  Procurement  International 2: International 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 0.00  Procurement  MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 147.995 157.777 245.462 223.683 252.141 0.00  Modification Funding  FOD/l0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.00  Development	,										
**RDT&E/0604800M: JT Strike	•	7.566 3,518.5	3.592 3,417.702	0.000	3,417.702	3,357.676	4,547.095	6,026.187	5,949.391	144,091.9491	79,224.735
Fighter (JSF) - EMD  • APN/0152: F-35 Joint Strike  • 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  • Fighter STOVL  • APN/0605B: F-35 Joint Strike  • 150.251  • 23.430  • 99.006  • 0.000  • 99.006  • 97.805  • 107.292  • 186.345  • 175.615  • 2,381.676  • Fighter STOVL Spares  • APN/04147: F-35 Joint Strike  • APN/0605C: F-35 Joint Strike  • 88.923  • 29.902  • 41.466  • 0.000  • 0.00	•										
• APN/0152: F-35 Joint Strike 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 31,607.015 Fighter STOVL • APN/0605B: F-35 Joint Strike 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 175.615 2,381.675 Fighter STOVL Spares • APN/0147: F-35 Joint Strike 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 26,609.515 Fighter CV • APN/0605C: F-35 Joint Strike 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.765 Fighter CV Spares • OPN/4265: Other Aviation 5.381 5.665 0.000 0		2.142 651.7	.786 737.149	0.000	737.149	693.484	574.746	448.498	340.123	0.000	4,047.928
Fighter STOVL  • APN/0605B: F-35 Joint Strike 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 175.615 2,381.676  Fighter STOVL Spares  • APN/0147: F-35 Joint Strike 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 26,609.516  Fighter CV  • APN/0605C: F-35 Joint Strike 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.766  Fighter CV Spares  • OPN/4265: Other Aviation 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000  Support Equipment  • International 2: International 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  Procurement  • MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170 0.000  Modification Funding  • FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000  Development											
• APN/0605B: F-35 Joint Strike 150.251 23.430 99.006 0.000 99.006 97.805 107.292 186.345 175.615 2,381.676 Fighter STOVL Spares  • APN/0147: F-35 Joint Strike 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 26,609.516 Fighter CV  • APN/0605C: F-35 Joint Strike 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.766 Fighter CV Spares  • OPN/4265: Other Aviation 5.381 5.665 0.000		8.204 1,259.1	9.162 1,510.936	0.000	1,510.936	1,521.174	1,562.016	1,953.170	2,576.560	31,607.019	42,828.241
Fighter STOVL Spares  • APN/0147: F-35 Joint Strike  • 1,852.890  • 1,557.162  • 1,072.812  • 0.000  • 1,072.812  • 1,072.812  • 0.000  • 0.000  • 0.						07.005	407.000	100015	.== 0.1=	0.004.070	
• APN/0147: F-35 Joint Strike 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 26,609.517 Fighter CV  • APN/0605C: F-35 Joint Strike 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.767 Fighter CV Spares  • OPN/4265: Other Aviation 5.381 5.665 0.000 0.		0.251 23.4	3.430 99.006	0.000	99.006	97.805	107.292	186.345	1/5.615	2,381.670	3,221.414
Fighter CV  APN/0605C: F-35 Joint Strike  B8.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.76  Fighter CV Spares  OPN/4265: Other Aviation 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000  Support Equipment  International 2: International 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  Procurement  MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170 0.000  APAF/0204142F: USAF 4.610 0.000 147.995 0.000 147.995 157.777 245.462 223.683 252.141 0.000  Modification Funding  FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000  Development	•	0.000 4.557.4	7 400 4 070 040	0.000	4 070 040	4 070 040	4 400 400	4 704 077	0 400 077	00 000 540	45 440 407
• APN/0605C: F-35 Joint Strike 88.923 29.902 41.466 0.000 41.466 114.749 116.392 106.869 144.044 1,792.766   Fighter CV Spares • OPN/4265: Other Aviation 5.381 5.665 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000   Support Equipment • International 2: International 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   Procurement • MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170 0.000   • APAF/0204142F: USAF 4.610 0.000 147.995 0.000 147.995 157.777 245.462 223.683 252.141 0.000   Modification Funding • FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000   Development	F-35 Joint Strike 1,8	2.890 1,557.10	1,072.812	0.000	1,072.812	1,273.910	1,432.190	1,724.077	2,429.677	26,609.510	45,442.497
Fighter CV Spares  OPN/4265: Other Aviation 5.381 5.665 0.000 0.00	E OF Initial Obsilia	0.000		0.000	44 400	444.740	440.000	400.000	444044	4 700 700	0.005.707
• OPN/4265: Other Aviation 5.381 5.665 0.000 0.0		8.923 29.9	9.902 41.466	0.000	41.466	114.749	116.392	106.869	144.044	1,792.760	2,865.797
Support Equipment         • International 2: International       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         Procurement       • MC/0207142F: USAF MILCON       121.292       24.250       13.530       0.000       13.530       72.000       69.050       65.000       66.170       0.000         • APAF/0204142F: USAF       4.610       0.000       147.995       0.000       147.995       157.777       245.462       223.683       252.141       0.000         Modification Funding       • FOD/0207142F: USAF Follow-on       0.000       9.967       8.117       0.000       8.117       50.084       104.866       132.174       229.912       0.000         Development		E 204 E 66	. 665 0 000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	47.075
<ul> <li>International 2: International Procurement</li> <li>MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170 0.000 147.995 157.777 245.462 223.683 252.141 0.000 Modification Funding</li> <li>FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000 Development</li> </ul>		5.381 5.00	0.000 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.875
Procurement  • MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170 0.000  • APAF/0204142F: USAF 4.610 0.000 147.995 0.000 147.995 157.777 245.462 223.683 252.141 0.000  Modification Funding  • FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000  Development	•	6 026 4 222 2	240 2054442	0.000	2.054.442	E 262 244	7 440 007	0 264 004	0 004 702	0.000	25 000 074
• MC/0207142F: USAF MILCON 121.292 24.250 13.530 0.000 13.530 72.000 69.050 65.000 66.170 0.000   • APAF/0204142F: USAF 4.610 0.000 147.995 0.000 147.995 157.777 245.462 223.683 252.141 0.000   Modification Funding   • FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000   Development		.0.930 1,223.34	5.546 5,054.445	0.000	3,054.443	5,362.214	7,449.007	0,301.001	0,094.703	0.000	35,000.074
<ul> <li>APAF/0204142F: USAF 4.610 0.000 147.995 0.000 147.995 157.777 245.462 223.683 252.141 0.000 Modification Funding</li> <li>FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000 Development</li> </ul>		1 202 24 2	1250 12520	0.000	12 520	72 000	60.050	65,000	66 170	0.000	498.821
Modification Funding • FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000 Development		-									1,031.668
• FOD/0207142F: USAF Follow-on 0.000 9.967 8.117 0.000 8.117 50.084 104.866 132.174 229.912 0.000 Development		4.010 0.00	7.000 147.993	0.000	147.995	137.777	243.402	223.003	232.141	0.000	1,001.000
Development	•	0 000 9 9	9 9 8 1 1 7	0.000	8 117	50 084	104 866	132 174	220 012	0.000	535.120
		0.000 3.5	7.501 0.117	0.000	0.117	30.004	104.000	102.174	223.512	0.000	300.120
02011421700711.00711 0paros 201.024 140.000 101.000 101.000 101.701 200.002 214.410 204.201 12,110.00		1 924 149 5	181 833	0.000	181 833	197 737	265 692	274 415	264 251	12 779 030	14 564 830
	•							_		43.524	69.202
System (ALIS)	•	0.00	0.020	0.000	0.020	1.000	0.002	0.047	0.1 44	10.02	00.202
	~/										

PE 0604800N: JT Strike Fighter (JSF) - EMD

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R-1 Line #134

Navy

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 0604800N: JT Strike Fighter (JSF) - EMD 2261: Joint Strike Fighter EMD

BA 5: Development & Demonstration (SDD)

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

		-	FY 2013	FY 2013	FY 2013					<b>Cost To</b>	
<u>Line Item</u>	FY 2011	FY 2012	Base	000	<b>Total</b>	FY 2014	FY 2015	FY 2016	FY 2017	Complete	<b>Total Cost</b>
• 27142F: USAF/OPAF	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 cost-reimbursement 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

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

CV Recovery

Navy

Maximum Approach Speed Meets Requirement In Tripwire Band

PE 0604800N: JT Strike Fighter (JSF) - EMD

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**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 BA 5: Development & Demonstration (SDD)

PE 0604800N: JT Strike Fighter (JSF) - EMD

2261: Joint Strike Fighter 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 0604800N: JT Strike Fighter (JSF) - EMD

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604800N: JT Strike Fighter (JSF) - EMD	PROJECT 2261: Joint Strike Fighter EMD
Logistics Footprint-Weight Carrier Variant (CV) Exceeds ORD Objective STOVL USMC Exceeds ORD Objective STOVL UK Meets/Exceeds Tripwire Requirement		

PE 0604800N: JT Strike Fighter (JSF) - EMD

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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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

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)	C/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	GE:Cinn, Ohio	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 Development 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	

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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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

Product Development (	\$ in Millio	ns)		FY 2	2012		2013 ise		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			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 AFB, FL	115.621	14.929	Oct 2011	15.340	Oct 2012	-		15.340	37.168	183.058	
Development Support	Various	ASC/AFRL:Dayton, Ohio	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 0604800N: *JT 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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

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 River, 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 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 0604800N: JT 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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

Test and Evaluation (\$	in Millions	5)		FY 2	2012		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
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:Various	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	ons)		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
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	SS/CPAF	Stanley:Arlington, VA	186.584	27.940	Oct 2011	22.051	Oct 2012	-		22.051	101.523	338.098	338.098
Program Management	SS/CPFF	GE F136-COG Studies:Cinn., OH	0.800	-		-		-		-	0.000	0.800	0.800
Program Management	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	

#### Remarks

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

PE 0604800N: *JT 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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

	Total Prior Years Cost	FY	2012	FY 2 Bas	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			
0604800M		651.786		737.149	-		737.149			
International		152.474		144.220	-		144.220			
Project Cost Totals	41,994.066	631.836		724.392	-		724.392	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

PE 0604800N: *JT Strike Fighter (JSF) - EMD* Navy

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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 0604800N: JT Strike Fighter (JSF) - EMD	2261: Joint Strike Fighter EMD
BA 5: Development & Demonstration (SDD)		

PE 0604800N: *JT 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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

# Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
JSF Variants - CV, STOVL & CTOL				
Systems Development: Acquisition 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 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 Initial 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

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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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

2261: Joint Strike Fighter EMD

**DATE:** February 2012

	Sta	art	Er	d
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 (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

PE 0604800N: JT Strike Fighter (JSF) - EMD Navy

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APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 5: Development & Demonstration	& Evaluation	n, Navy			OMENCLAT ON: <i>JT Strike</i>	_		PROJECT 3194: Joint	Reprogramn	ming Center	
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
3194: Joint Reprogramming Center	38.492	26.713	19.534	-	19.534	-	-	-	-	0.000	84.739
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

### A. Mission Description and Budget Item Justification

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

The United States Reprogramming Laboratory (USRL)/Capability Concept project, previously referred to as Joint Strike Fighter Joint Reprogramming Center/Capability Concept is required to adequately develop and maintain Operational Sensor Engineering F-35(V) Mission Data to support United States Navy, United States Marine Corps, and United States Air Force multi-mission objectives. USRL will allow rapid operational response to threat changes. Funding is provided for:

- Aircraft sensor function and combat identification
- Conducting Offensive Identification/Jamming of potential threats
- Providing self defense against surface threats, air, and missile threats
- Detecting and identifying targets, to include moving land, air, and missile targets
- Providing mission planning to ensure aircraft survivability
- Conducting offensive operations against surface threats
- Conducting sensor management and information processing
- Software development for this requirement is funded through the F-35 Joint Strike Fighter System Development and Demonstration (SDD) baseline

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: USRL Build Up	31.990	14.213	6.734
Articles:	0	0	0
FY 2011 Accomplishments: Provided funds to Lockheed Martin Aero in support of reprogramming techniques, development and verification capacity required to adjust to emergent threats, and validate system effectiveness to increase survivability of the weapon system.			
FY 2012 Plans: Provide funds to Lockheed Martin Aero in support of reprogramming techniques, development and verification capacity required to adjust to emergent threats, and validate system effectiveness to increase survivability of the weapon system. Perform USRL Stand-up testing and acceptance tasks.			
FY 2013 Plans:			

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**DATE:** February 2012

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 BA 5: Development & Demonstration (SDD)	PE 0604800N: JT Strike Fighter (JSF) - EMD	3194: <i>Joint</i>	Reprogramming Center

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Provide funds to Lockheed Martin Aero in support of reprogramming techniques, development and verification capacity required to adjust to emergent threats, and validate system effectiveness to increase survivability of the weapon system. Perform United States Reprogramming Laboratory (USRL) Stand-up testing and acceptance tasks.			
Title: Development Support  Articles:	6.502 0	12.500 0	12.800 0
FY 2011 Accomplishments: Continued System Development and Demonstration (SDD) Systems Engineeering (SE) that included systems operations requirements analysis, program integration, requirements integration, and interoperability support of the USRL.			
FY 2012 Plans: Continue SDD SE including systems operations requirements analysis, program integration, requirements integration, and interoperability support of the USRL.			
FY 2013 Plans: Continue SDD SE including systems operations requirements analysis, program integration, requirements integration, and interoperability support of the USRL.			
Accomplishments/Planned Programs Subtotals	38.492	26.713	19.534

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

N/A

# D. Acquisition Strategy

The Joint Reprogramming Capability (JRC) is a subset of Joint Strike Fighter (JSF) Program and falls within JSF acquisition strategy. JRC is needed to support scheduled Initial Operational Capability dates (and supporting test activity) for three JSF variants. To that end, a concept of operations is being developed for JRC to address Mission Data development, verification/validation/testing, and to merge service unique requirements into Joint processes/procedures. Previously envisioned as a single facility, JRC is now comprised of two distinct facilities under JRC concept. The USRL will support U.S. Joint Service reprogramming requirements; the Partner Reprogramming Laboratory will focus on International Partner areas of interest.

Inter-Service collaboration will eliminate duplication of effort, maximize technology to improve configuration control, employ advance networks, and ensure implementation of an enterprise (single shared database) solution. By capitalizing on legacy platform synergy, operational mission data intellect, proven processes, and existing reprogramming center resources, this approach will improve efficiencies. A Joint Command reprogramming authority will determine/manage reprogramming priorities and implementation authority.

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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 0604800N: JT Strike Fighter (JSF) - EMD	3194: Joint	Reprogramming Center
BA 5: Development & Demonstration (SDD)			

The USRL Mission data development strategy is based upon an assessment of legacy systems, F-22 data, corporate expertise at Eglin Air Force Base/Naval Air Warfare Center Weapons Division, personnel, adjusted cost and schedule projections keyed to complexity of multi-variant and multi-mission aircraft; JSF-specific utilization of multiple sources of non-sustained disparate, raw, intelligence data, development of threat assessment - metrics; and build-up of real-world scenarios for systems verification and validation. These efforts support Joint Strike Fighter (JSF) operational requirements, interoperability, and fratricide mitigation.

Although the JSF Program has contracted with Lockheed Martin and Pratt & Whitney for System Development and Demonstration (SDD) of JSF, contractors do not have laboratory space available or expertise to perform operational evaluation of lab and flight test data and support field recommendations to level needed. The complexity and magnitude of JSF mission data loads drives decision to utilize government and contractor resources to design and develop a Joint-Service reprogramming facility at Eglin Air Force Base.

#### **E. Performance Metrics**

Jnited States	Reprogramming	Laboratory	/ Stand-up	- 3rd Qua	arter FY 1	12

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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 0604800N: JT Strike Fighter (JSF) - EMD

PROJECT

3194: Joint Reprogramming Center

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Product Development (	\$ in Millio	ns)		FY 2013 FY 2012 Base			FY 2013 OCO						
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	C/CPAF	Lockheed Martin:Ft. Worth, Texas	76.602	8.206	Oct 2011	-	Oct 2012	-		-	0.000	84.808	84.808
Primary H/W Development Award Fee	C/CPAF	Lockheed Martin:Ft. Worth, Texas	1.252	2.507	Oct 2011	-	Oct 2012	-		-	0.000	3.759	7.509
Lockheed Martin Various	Various	Lockheed Martin:Ft. Worth, Texas	11.828	3.500	Oct 2011	6.734	Oct 2012	-		6.734	0.000	22.062	
		Subtotal	89.682	14.213		6.734		-		6.734	0.000	110.629	

Support (\$ in Millions)				FY 2	012	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
Development Support	WR	NAWCWD:China Lake California	14.002	12.500	Oct 2011	12.800	Oct 2012	-		12.800	0.000	39.302	
		Subtotal	14.002	12.500		12.800		-		12.800	0.000	39.302	

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_											
	Total Prior										Target
	Years			FY 2	2013	FY 2	2013	FY 2013	Cost To		Value of
	Cost	FY 2	2012	Ва	se	00	co	Total	Complete	<b>Total Cost</b>	Contract
Project Cost Totals	103.684	26.713		19.534		-		19.534	0.000	149.931	

Remarks

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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 0604800N: JT Strike Fighter (JSF) - EMD	3194: Joint Reprogramming Center
BA 5: Development & Demonstration (SDD)		

PE 0604800N: JT Strike Fighter (JSF) - EMD Navy

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

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0604800N: JT Strike Fighter (JSF) - EMD 3194: Joint Reprogramming Center

BA 5: Development & Demonstration (SDD)

# Schedule Details

	Sta	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
ISF United States Researh Laboratoty (USRL)					
USRL Implementation: USRL Standup: USRL Standup	3	2012	3	2012	
Verification and Validation Facility (VVF): Development	1	2011	1	2013	
Verification and Validation Facility (VVF): Integration	1	2011	1	2013	
Verification and Validation Facility (VVF): Acceptance Test Program (ATP)	2	2013	2	2013	
Verification and Validation Facility (VVF): Initial Operational Capability	2	2013	2	2013	
Electronic Warfare Verification Station (EWVS) and Reprogramming Facility (RF): Development	1	2011	3	2012	
Electronic Warfare Verification Station (EWVS) and Reprogramming Facility (RF): Integration	1	2011	3	2012	
Electronic Warfare Verification Station (EWVS) and Reprogramming Facility (RF): Acceptance Test Program (ATP)	2	2012	4	2012	