Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy

Date: February 2018

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

1319: Research, Development, Test & Evaluation, Navy I BA 5: System

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

Development & Demonstration (SDD)

,	,											
COST (\$ in Millions)	Prior			FY 2019	FY 2019	FY 2019					Cost To	Total
COST (\$ III WIIIIONS)	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Cost
Total Program Element	49,382.978	519.393	152.934	66.566	-	66.566	1.713	0.542	0.558	0.569	0.000	50,125.253
2262: Joint Strike Fighter EMD STOVL	49,044.533	495.958	141.534	66.566	-	66.566	1.713	0.542	0.558	0.569	0.000	49,751.973
3350: F-35B Sustainment/ Capability Enhancements	338.445	23.435	11.400	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	373.280

Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): 198

### A. Mission Description and Budget Item Justification

The F-35 Joint Strike Fighter (JSF) Program will develop and field an affordable, highly common family of next generation strike aircraft for the USN, USAF, USMC and allies. The three variants are the F-35A conventional takeoff and landing; F-35B short takeoff and vertical landing; and the F-35C Aircraft Carrier suitable variant. The F-35A will be a stealthy multi-role aircraft, primary air-to-ground for the Air Force to replace the F-16 and A-10 and complement the F-22. The F-35B variant will be a multi-role strike fighter aircraft to replace the AV-8B and F/A-18 for the Marine Corps, replace the Sea Harrier and GR 7 for the United Kingdom, and replace the AV-8 currently employed by the Italian Navy. The F-35C will provide the Department of the Navy a multi-role, stealthy strike fighter aircraft to complement the F/A-18E/F.

The United Kingdom, Italy, Netherlands, Turkey, Canada, Australia, Denmark, Norway, and Foreign Military Sales customers are also participants in the JSF program. The program shown here reflects USN, USMC, USAF, and International Partner funding.

Funding at the accomplishment/planned program level is reported as the total of all services and partners as these 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 USN, USMC, and USAF use.

FY07: 1 F-35A flight test article

FY08: 1 F-35B flight test article; 1 F-35B ground test article FY09: 1 F-35B flight test article; 2 F-35A ground test articles

FY10: 6 flight test articles: 3 F-35A, 2 F-35B, 1 F-35C; 3 ground test articles: 1 F-35B, 2 F-35C

FY11: 4 flight test articles: 1 F-35A, 1 F-35B, 2 F-35C

FY13: 1 F-35C flight test article

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under SDD because it includes those projects that have passed Milestone B approval and are conducting engineering and manufacturing development tasks aimed at meeting validated requirement prior to full-rate production decision.

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

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Navy

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Navy

Appropriation/Budget Activity

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

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

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	531.426	152.934	55.952	-	55.952
Current President's Budget	519.393	152.934	66.566	-	66.566
Total Adjustments	-12.033	0.000	10.614	-	10.614
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
<ul> <li>SBIR/STTR Transfer</li> </ul>	-12.033	0.000			
<ul> <li>Program Adjustments</li> </ul>	0.000	0.000	11.000	-	11.000
<ul> <li>Rate/Misc Adjustments</li> </ul>	0.000	0.000	-0.386	-	-0.386

Exhibit R-2A, RDT&E Project J	ustification:	PB 2019 N	lavy							Date: Feb	ruary 2018	
Appropriation/Budget Activity 1319 / 5	·					R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) - EMD				Number/Name) nt Strike Fighter EMD STOVL		
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
2262: Joint Strike Fighter EMD STOVL	49,044.533	495.958	141.534	66.566	-	66.566	1.713	0.542	0.558	0.569	0.000	49,751.973
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 198

#### Note

Total cost including United States Navy (USN), United States Marine Corps (USMC), International partner contributions and United States Air Force (USAF) funding are: FY17 \$1,394.043M, FY18 \$ 527.873M and FY19 \$196.622M R-2 data reflects variant unique funding only.

R-2A(section B)/R-3 displays total combined program (i.e. not Service specific), including International partners.

F-35 EMD Includes:

USAF PE 0604800F BPAC 653831

USN PE 0604800N Project Unit 2261

USMC PE 0604800M Project Unit 2262

D&S Includes:

Navy

USAF PE 0604800F BPAC 653832

USN PE 0604800N Project Unit 3352

USMC PE 0604800M Project Unit 3350

### A. Mission Description and Budget Item Justification

The F-35 Joint Strike Fighter (JSF) Program will develop and field an affordable, highly common family of next generation strike aircraft for the USN, USAF, USMC and allies. The three variants are the F-35A Conventional Takeoff and Landing; F-35B Short Takeoff and Vertical Landing; and the F-35C Aircraft Carrier suitable variant. The F-35A will be a stealthy multi-role aircraft, primary air-to-ground for the Air Force to replace the F-16 and A-10 and complement the F-22. The F-35B variant will be a multi-role strike fighter aircraft to replace the AV-8B and F/A-18 for the Marine Corps, replace the Sea Harrier and GR 7 for the United Kingdom, and replace the AV-8 currently employed by the Italian Navy. The F-35C will provide the Department of the Navy a multi-role, stealthy strike fighter aircraft to complement the F/A-18E/F.

The United Kingdom, other International Partner nations, and Foreign Military Sales customers are also participants in the Joint Strike Fighter program. The program shown here reflects United States Navy (USN), United States Marine Corps, United States Air Force (USAF), and International Partner funding.

The top-line Program Element reflects the unique variant for each Service. Funding at the accomplishment/planned program level is reported as the total of all services and partners as these activities support all aircraft variants.

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

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0604800M I (U)Joint Strike Fighter (JSF)	2262 I Join	nt Strike Fighter EMD STOVL
	- EMD		

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 USN, USMC and USAF use.

FY07: 1 F-35A flight test article

FY08: 1 F-35B flight test article; 1 F-35B ground test article FY09: 1 F-35B flight test article; 2 F-35A ground test articles

FY10: 6 flight test articles: 3 F-35A, 2 F-35B, 1 F-35C; 3 ground test articles: 1 F-35B, 2 F-35C

FY11: 4 flight test articles: 1 F-35A, 1 F-35B, 2 F-35C

FY13: 1 F-35C flight test article

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2019	FY 2019	FY 2019
	FY 2017	FY 2018	Base	OCO	Total
Title: System Development and Demonstration (SDD)	883.024	331.782	164.165	0.000	164.165
Articles:	_	-	-	-	-
<b>Description:</b> SDD execution of the Air System (Lockheed Martin) including International Commonality Efforts; includes airframe, vehicle and mission systems, autonomic logistics, systems engineering & test efforts.					
FY 2018 Plans: Continue SDD execution of Air System Lockheed Martin, including International Commonality Effort which includes, airframe, vehicle systems, mission systems, autonomic logistics, systems engineering, and integrated test efforts. Activity aligned to IMS in accordance with variant IOC.					
FY 2019 Base Plans: Continue SDD execution of Air System Lockheed Martin, including International Commonality Effort which includes, airframe, vehicle systems, mission systems, autonomic logistics, systems engineering, and integrated test efforts. Activity aligned to IMS in accordance with variant IOC.					
FY 2019 OCO Plans: N/A					
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 funding decrease is due to reduction in domestic and International controls as SDD phase draws to closure.					
Title: F135 Propulsion System	120.000	0.000	0.000	0.000	0.000
Articles:	-	-	_	_	-

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: Febr	uary 2018	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/ PE 0604800M / (U)Joint Strike Fig - EMD			umber/Nan t Strike Figi		TOVL
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities	in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<b>Description:</b> SDD execution of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing, autonomic logistics, integration & performance of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing, autonomic logistics, integration & performance of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing, autonomic logistics, integration & performance of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing, autonomic logistics, integration & performance of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing, autonomic logistics, integration & performance of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing, autonomic logistics, integration & performance of the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing) and the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing) and the F135 Propulsion System (Pratt & Whitney Commonality Effort; includes testing) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the F135 Propulsion System (Pratt & Whitney Commonality Effort) and the P135 Propulsion System (Pratt & Whitney Commonality Effort) and the P135 Propulsion System (Pratt & Whitney Commonality Effort) and the P135 Propuls System (Pratt & Whitney Commonality Effort) and the P135 Propul						
<b>FY 2018 Plans:</b> N/A						
FY 2019 Base Plans: N/A						
FY 2019 OCO Plans: N/A						
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 funding decrease is due to reduction in domestic and International cont closure.	rols as SDD phase draws to					
Title: Systems Engineering (SE)	Articles:	28.181 -	0.912	0.000	0.000	0.000
<b>Description:</b> SDD SE including systems operations requirements analysis, p integration, and interoperability support.	rogram integration, requirements					
<b>FY 2018 Plans:</b> Complete SDD SE, including systems operations requirements analysis, progintegration, and interoperability support.	gram integration, requirements					
FY 2019 Base Plans: N/A						
FY 2019 OCO Plans: N/A						
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 funding decrease is due to reduction in domestic and International cont closure.	rols as SDD phase draws to					
Title: Test and Evaluation (T&E)	Articles:	281.672 -	143.809	4.293 -	0.000	4.293 -

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

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: Febr	uary 2018	
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/ PE 0604800M / (U)Joint Strike Fig - EMD			umber/Nan at Strike Figi		TOVL
B. Accomplishments/Planned Programs (\$ in Millions, Artic	le Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
<b>Description:</b> Government DT&E/Operational Testing (OT) in su DT&E include preparation for flight testing and weapons integra						
FY 2018 Plans: Continue government DT&E/OT in support of test aircraft. Contant CV variants to expand air vehicle envelope and support misflight testing, weapons integration testing, and component capa	ssion systems testing. Elements of DT&E include					
FY 2019 Base Plans: Continue government DT&E/OT in support of test aircraft. Contant CV variants to expand air vehicle envelope and support misflight testing, weapons integration testing, and component capa	ssion systems testing. Elements of DT&E include					
<b>FY 2019 OCO Plans:</b> N/A						
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 funding decrease is due to reduction in domestic and Inte closure.	rnational controls as SDD phase draws to					
Title: Development Support	Articles:	80.945 -	10.676 -	0.764	0.000	0.76
<b>Description:</b> SDD Support efforts for airframe, air vehicle systemission support, and autonomic logistics development activities						
FY 2018 Plans: Continue SDD support efforts for airframe, air vehicle systems, support, and autonomic logistics development activities.	mission systems, weapons integration, mission					
FY 2019 Base Plans: Continue SDD support efforts for airframe, air vehicle systems, support, and autonomic logistics development activities.	mission systems, weapons integration, mission					
FY 2019 OCO Plans:						

PE 0604800M: *(U)Joint Strike Fighter (JSF) - EMD* Navy UNCLASSIFIED Page 6 of 30

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: Febr	uary 2018		
1319 / 5	<b>1 Program Element (Number/</b> E 0604800M <i>I (U)Joint Strike FigEMD</i>			Project (Number/Name) 2262 I Joint Strike Fighter EMD STOVL			
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in E	ach)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
N/A							
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 funding decrease is due to reduction in domestic and International controls a closure.	as SDD phase draws to						
Title: Autonomic Logistics Information System (ALIS)	Articles:	0.221 -	40.694 -	27.400 -	0.000	27.400 -	
<b>Description:</b> SDD execution of Autonomic Logistics Information System (ALIS) de infrastructure used to transmit health and maintenance action information for the ausers.							
FY 2018 Plans: Continue SDD execution of ALIS to develop the information infrastructure used to maintenance action information for the aircraft to the appropriate users.	transmit health and						
FY 2019 Base Plans: Continue SDD execution of ALIS to develop the information infrastructure used to maintenance action information for the aircraft to the appropriate users.	transmit health and						
<b>FY 2019 OCO Plans:</b> N/A							
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 funding decrease is due to reduction in domestic and International controls a closure.	as SDD phase draws to						
Accomplishments/	Planned Programs Subtotals	1,394.043	527.873	196.622	0.000	196.622	
	Joint Strike Fighter 0604800F	386.941	255.745	69.519	-	69.519	
	Joint Strike Fighter 0604800N	489.144		60.537	-	60.537	
	International Partner	22.000		-	-	-	
	Navy Subtotals	495.958	141.534	66.566	0.000	66.566	

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

Exhibit R-2A, RDT&E Project Just	ification: PB	3 2019 Navy						_	Date: Feb	ruary 2018	
Appropriation/Budget Activity 1319 / 5					04800M <i>I (</i> U	ment (Numb J)Joint Strike	oer/Name) e Fighter (JSF)		Number/Na int Strike Fig		STOVL
C. Other Program Funding Summa	ary (\$ in Mill	ions)									
			FY 2019	FY 2019	FY 2019					Cost To	
<u>Line Item</u>	FY 2017	FY 2018	<u>Base</u>	<u>000</u>	<u>Total</u>	FY 2020	FY 2021	FY 2022			<b>Total Cost</b>
<ul><li>RDT&amp;E/0604800F:</li></ul>	388.660	255.745	69.655	-	69.655	7.796	5.598	0.000	0.000	0.000	22,247.823
F-35A Joint Strike Fighter											
<ul><li>International:</li></ul>	22.000	27.450	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5,013.463
International Partner (SDD)											
<ul> <li>APAF/0207142F BP10:</li> </ul>	4,667.894	4,544.684	4,253.696	-	4,253.696	4,209.813	4,862.684	,796.042	0.000	148,685.767	202,884.710
F-35A USAF CTOL											
• RDT&E/0604800N/2261: <i>F-35C</i>	489.144	103.144	60.537	-	60.537	1.499	0.328	0.323	0.345	0.000	49,699.853
Joint Strike Fighter (JSF) - EMD											
<ul> <li>APN/0605B: F-35B Joint</li> </ul>	123.252	105.671	92.198	-	92.198	160.150	140.989	143.809	0.000	Continuing	Continuing
Strike Fighter STOVL Spares											
<ul> <li>APN/0605C: F-35C Joint</li> </ul>	26.076	84.591	44.971	-	44.971	52.858	303.608	309.680	0.000	Continuing	Continuing
Strike Fighter CV Spares											
<ul><li>MILCON 0207142F:</li></ul>	305.700	181.250	175.150	-	175.150	154.400	0.000	0.000	0.000	0.000	1,602.550
USAF MILCON Operations											
<ul> <li>APAF/0207142F BP11:</li> </ul>	115.811	68.270	230.448	-	230.448	279.814	259.978	301.899	0.000	0.000	1,665.794
USAF Modification Funding											
• FOD/0207142F: <i>USAF</i>	50.970	299.408	396.821	-	396.821	504.971	418.988	343.147	283.292	Continuing	Continuing
Follow-on Development (FoD)											
• 0207142F/USAF BP16: <i>USAF</i>	362.792	320.831	319.151	-	319.151	416.722	399.361	394.654	0.000	4,175.007	7,849.413
Joint Strike Fighter Initial Spares											
<ul><li>USAF/OPAF</li></ul>	2.333	3.326	3.310	-	3.310	2.993	2.463	2.507	0.000	Continuing	Continuing
0207142F: <i>USAF OPAF</i>											
• APN/0592: F-35B STOVL Series	24.350	34.963	36.618	-	36.618	38.582	47.609	50.163	53.742	Continuing	Continuing
<ul> <li>APN/0593: F-35C CV Series</li> </ul>	21.733	31.689	21.236	-	21.236	13.136	12.435	12.683	12.938	Continuing	Continuing
<ul><li>RDT&amp;E/0604800N/3352:</li></ul>	23.518	5.787	4.957	-	4.957	0.000	0.000	0.000	0.000	0.000	372.707
F-35C Sustainment/											
Capability Enhancements											
• USAF SDD BP 653832:	46.962	37.202	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	241.159
JSF Deployability and											
Suitability Enhancements											
• PAF/0207142F BP10: <i>F-35A</i>	404.500	780.300	405.200	-	405.200	1,003.600	965.300	414.700	0.000	20,154.954	26,885.296
JSF CTOL Advance Procurement											

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

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Exhibit R-2A, RD I & Project Justi	fication: PE	3 2019 Navy							Date: Fe	oruary 2018	
Appropriation/Budget Activity 1319 / 5				I	604800M <i>I (l</i>	ment (Numl U)Joint Strike	,		( <b>Number/Na</b> oint Strike Fi	<b>nme)</b> ghter EMD S	STOVL
C. Other Program Funding Summa	ary (\$ in Mill	lions)									
	• .	•	FY 2019	FY 2019	FY 2019					<b>Cost To</b>	
Line Item	FY 2017	FY 2018	Base	oco	<u>Total</u>	FY 2020	FY 2021	FY 2022	FY 2023	Complete	<b>Total Cost</b>
<ul><li>DCA/0207142F 676011:</li></ul>	25.743	35.122	78.016	-	78.016	92.026	95.040	37.599	11.725	Continuing	Continuing
Dual Capable Aircraft (DCA)											_
• APN/0147: <i>F-35C</i>	1,360.880	663.232	1,341.369	-	1,341.369	1,938.799	2,793.290	2,963.544	2,973.130	26,243.243	54,674.071
Joint Strike Fighter CV											
<ul> <li>APN/0152C: F-35B Joint</li> </ul>	233.648	413.450	228.492	-	228.492	215.704	209.222	225.245	229.749	1,651.860	4,696.946
Strike Fighter STOVL AP											
<ul> <li>APN/0152: F-35B Joint</li> </ul>	2,504.927	2,631.787	2,635.111	-	2,635.111	2,700.264	2,658.313	2,666.245	2,851.920	20,419.570	47,203.890
Strike Fighter STOVL											
• DoN MILCON: DoN JSF MILCON	230.900	64.660	121.990	-	121.990	119.800	0.000	0.000	0.000	642.400	1,406.074
<ul> <li>International 2: Intl Production/</li> </ul>	185.641	124.114	151.776	-	151.776	150.588	149.848	87.119	0.000	Continuing	Continuing
Reprogramming Lab											
<ul> <li>OPN/4268: Logistics</li> </ul>	29.528	63.277	39.374	-	39.374	51.457	54.934	70.046	71.314	Continuing	Continuing
Information System (ALIS)											
<ul> <li>MC/0207597F: USAF</li> </ul>	20.000	70.350	11.000	-	11.000	0.000	0.000	0.000	0.000	0.000	166.750
MILCON Training											
<ul><li>International 3:</li></ul>	84.602	158.273	159.649	-	159.649	162.023	167.383	160.111	0.000	Continuing	Continuing
International R&D FoM/D&S											
<ul> <li>OPN 902010 S8JC: Aviation</li> </ul>	0.881	2.297	2.321	-	2.321	0.139	1.977	0.000	0.000	Continuing	Continuing
Support Equipment (ALIS)											
<ul> <li>USAF O&amp;M: USAF O&amp;M</li> </ul>	425.978	516.569	731.134	-	731.134	909.930	985.790	1,089.394	0.000	Continuing	Continuing
<ul> <li>USAF MILCON 0502635F:</li> </ul>	15.100	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	15.100
USAF MILCON Air National Guard											
<ul> <li>USN 2936: F-35C Follow-</li> </ul>	63.387	139.942	224.712	-	224.712	228.707	188.678	120.192	0.000	Continuing	Continuing
on Development (CV)											
<ul> <li>International Unique:</li> </ul>	32.374	15.566	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	481.617
Intl Unique (SDD/PSFD)											
Damanda											

#### Remarks

## **D. Acquisition Strategy**

The SDD program consists of a cost-reimbursement contract awarded to Lockheed Martin Aeronautics Company to develop the F-35 Air System, consisting of three aircraft variants and its 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 will be conducted during development to accomplish validation and verification, with

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

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Date: February 2018

Fyhihit R-24 RDT&F Project Justification: PR 2019 Navy

Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0604800M I (U)Joint Strike Fighter (JSF)	2262 I Join	nt Strike Fighter EMD STOVL
	- EMD		

the extensive use of modeling and simulation to offset the risk of this large, complex, and concurrent lifecycle program. A comprehensive logistics support environment, including an integrated training system for aircrew, maintenance, and support personnel, is also being developed.

On 25 April 2011, the Department of Defense terminated the development of the General Electric Rolls-Royce Fighter Engine Team F136 propulsion system.

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

In Fiscal Year 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 the fielded systems. Transition to fixed-price-type procurement contracts occurred with the fourth low rate lot. To provide logistics support for delivered aircraft, Performance-Based Logistics cost-type contracts will be awarded to Lockheed Martin Aeronautics Company and Pratt & Whitney.

At the 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 the U.S. Services and international participants. Multiyear procurement authority for the F-35 Air System will be requested for Full Rate Production. Concurrently, a fixed-price-type Performance Based Logistics contracts for sustainment will be requested to support multi-Service and multi-national requirements.

#### E. Performance Metrics

The following are the key performance parameters from the F-35 Selected Acquisition Report:

Performance Metrics reflect Key Program Performance data.

Combat Radius

F-35A Meets/Exceeds Tripwire Requirement

F-35B Meets/Exceeds Tripwire Requirement

F-35C Meets/Exceeds Tripwire Requirement

CV Recovery Performance

Maximum Approach Speed at required carrier landing weight

Mission Reliability

Navy

F-35A Meets/Exceeds Tripwire Requirement

F-35B Meets/Exceeds Tripwire Requirement

F-35C Meets/Exceeds Tripwire Requirement

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

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity I319 / 5	R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) - EMD	Project (Number/Name) 2262 I Joint Strike Fighter EMD STOVL
Sortie Generation Rate		
F-35A Meets Tripwire Requirement		
F-35B Meets Tripwire Requirement		
F-35C Meets Tripwire Requirement		
Logistics Footprint		
F-35A Less than or equal to 8 C-17 equivalents		
F-35B Less than or equal to 8 C-17 equivalents		
F-35C Less than or equal to 38,800 cu ft., 217 ST		

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

Date: February 2018 Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy

Appropriation/Budget Activity

1319 / 5

R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) 2262 I Joint Strike Fighter EMD STOVL - EMD

Project (Number/Name)

Product Developmen	ıt (\$ in Mi	llions)		FY 2	2017	FY 2	2018	FY 2 Ba	2019 ise		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Primary Hardware Development - SDD	C/CPIF	Lockheed Martin : Ft. Worth, TX	31,298.696	731.806	Dec 2016	274.720	Dec 2017	161.665	Dec 2018	-		161.665	16.771	32,483.658	32,483.65
Primary Hardware Development - Award Fee	C/CPIF	Lockheed Martin : Ft. Worth, TX	1,727.259	11.430	Dec 2016	35.000	Dec 2017	2.500	Dec 2018	-		2.500	0.000	1,776.189	1,776.189
Primary Hardware Development - ALIS	C/CPIF	Lockheed Martin : Ft. Worth, TX	462.317	0.221	Dec 2016	40.694	Dec 2017	27.400	Dec 2018	-		27.400	0.000	530.632	530.632
Primary Hardware Development - 0031	C/CPFF	Lockheed Martin : Ft. Worth, TX	0.337	0.506	Dec 2016	0.169	Dec 2017	0.000		-		0.000	0.000	1.012	1.012
Primary Hardware Development - 0020	C/CPFF	Lockheed Martin : Ft. Worth, TX	81.838	139.281	Dec 2016	21.893	Dec 2017	0.000		-		0.000	0.000	243.012	243.012
Primary Hardware Development - SDD	C/CPIF	Pratt and Whitney : Hartford, CT	7,296.328	105.448	Dec 2016	0.000		0.000		-		0.000	0.000	7,401.776	7,401.776
Primary Hardware Development - Award Fee	C/CPIF	Pratt and Whitney : Hartford, CT	677.646	14.552	Dec 2016	0.000		0.000		-		0.000	0.000	692.198	692.198
Systems Engineering	Various	Various : Various	435.371	23.577	Nov 2016	0.911	Dec 2017	0.000		-		0.000	0.000	459.859	459.859
Prior Year No Longer Funded in FYDP	Various	Various : Various	2,909.122	0.000		0.000		0.000		-		0.000	0.000	2,909.122	2,909.122
	Subtotal 44,888					373.387		191.565		-		191.565	16.771	46,497.458	N/A

#### Remarks

Contract type prior to 2013 was CPAF.

Cumulative Award Fee earned in prior years for Lockheed Martin is 97%.

Cumulative Award Fee earned in prior years for Pratt and Whitney is 98%.

Support (\$ in Millions	s)			FY 2	2017	FY 2	2018	FY 2 Ba	2019 ise	FY 2		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Support - AFFTC/Eglin	Various	Eglin AFB : Eglin, FL	138.926	1.834	Nov 2016	0.830	Nov 2017	0.000		-		0.000	0.000	141.590	-
Development Support - AFLCMC/AFRL	Various	AFLCMC/AFRL : Various	75.829	3.133	Nov 2016	0.000		0.000		-		0.000	0.000	78.962	-

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

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy Date: February 2018

Appropriation/Budget Activity

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R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) 2262 I Joint Strike Fighter EMD STOVL - EMD

Project (Number/Name)

Support (\$ in Million	,			FY 2	2017	FY 2	2018		2019 ise	FY 2	2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Engine Test and Evaluation Support - AEDC/Fuel	Various	Various : Various	199.947	3.771	Nov 2016	0.000		0.000		-		0.000	0.000	203.718	-
Development Support - Miscellaneous	Various	Various : Various	123.516	12.356	Nov 2016	2.927	Nov 2017	0.764	Nov 2018	-		0.764	0.000	139.563	-
Software Development Support	Various	NAWC WD : China Lake, CA	163.175	4.312	Nov 2016	0.000		0.000		-		0.000	0.000	167.487	-
Development Support	Various	NAWC AD : Patuxent, MD	505.484	41.726	Nov 2016	6.913	Nov 2017	0.000		-		0.000	0.000	554.123	-
Prior Year No Longer Funded in FYDP	Various	Various : Various	77.641	0.000		0.000		0.000		-		0.000	0.000	77.641	-
		Subtotal	1,284.518	67.132		10.670		0.764		-		0.764	0.000	1,363.084	N/A

st and Evaluation (\$ in Millions)			FY 2	2017	FY 2	2018					FY 2019 Total			
Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Various	NAWC WD : China Lake, CA	40.545	2.712	Nov 2016	0.000		0.000		-		0.000	0.000	43.257	-
Various	NAWC AD : Patuxent River, MD	752.168	54.944	Nov 2016	4.400	Nov 2017	0.000		-		0.000	0.000	811.512	-
Various	Edwards AFB : Edwards AFB, CA	683.943	54.976	Nov 2016	4.400	Nov 2017	0.000		-		0.000	0.000	743.319	-
Various	Other (incl Classified PIDs) : Various	241.272	30.602	Nov 2016	2.400	Nov 2017	0.000		-		0.000	0.000	274.274	-
Various	OT-AFOTEC/ AFFTC : Kirkland AFB, NM/Eglin AFB, FL	204.545	35.436	Nov 2016	41.976	Nov 2017	2.150	Nov 2018	-		2.150	0.000	284.107	-
Various	OT-JITC/OPTEC : Various	61.243	42.956	Nov 2016	71.886	Nov 2017	2.143	Nov 2018	-		2.143	0.000	178.228	-
	Contract Method & Type Various Various Various Various Various	Contract Method & Type Activity & Location  Various NAWC WD : China Lake, CA  Various NAWC AD : Patuxent River, MD  Various Edwards AFB : Edwards AFB, CA  Various Other (incl Classified PIDs) : Various  OT-AFOTEC/AFFTC : Kirkland AFB, NM/Eglin AFB, FL  Various OT-JITC/OPTEC :	Contract Method & Type Activity & Location Years  Various NAWC WD : China Lake, CA 40.545  Various NAWC AD : Patuxent River, MD 752.168  Various Edwards AFB : Edwards AFB, CA 683.943  Various Other (incl Classified PIDs) : Various 241.272  Various OT-AFOTEC/ AFFTC : Kirkland AFB, NM/Eglin AFB, FL  Various OT-JITC/OPTEC : 61.243	Contract Method & Type         Performing Activity & Location         Prior Years         Cost           Various         NAWC WD : China Lake, CA         40.545         2.712           Various         NAWC AD : Patuxent River, MD         752.168         54.944           Various         Edwards AFB : Edwards AFB, CA         683.943         54.976           Various         Other (incl Classified PIDs) : Various         241.272         30.602           Various         OT-AFOTEC/AFTC : Kirkland AFB, NM/Eglin AFB, FL         204.545         35.436           Various         OT-JITC/OPTEC : 61.243         42.956	Contract Method & Type         Performing Activity & Location         Prior Years         Award Date           Various         NAWC WD : China Lake, CA         40.545         2.712         Nov 2016           Various         NAWC AD : Patuxent River, MD         752.168         54.944         Nov 2016           Various         Edwards AFB : Edwards AFB, CA         683.943         54.976         Nov 2016           Various         Other (incl Classified PIDs) : Various         241.272         30.602         Nov 2016           Various         OT-AFOTEC/AFFTC : Kirkland AFB, NM/Eglin AFB, FL         204.545         35.436         Nov 2016           Various         OT-JITC/OPTEC : 61.243         42.956         Nov 2016	Contract Method & Type         Performing Activity & Location         Prior Years         Award Date         Cost           Various         NAWC WD : China Lake, CA         40.545         2.712         Nov 2016         0.000           Various         NAWC AD : Patuxent River, MD         752.168         54.944         Nov 2016         4.400           Various         Edwards AFB : Edwards AFB, CA         683.943         54.976         Nov 2016         4.400           Various         Other (incl Classified PIDs) : Various         241.272         30.602         Nov 2016         2.400           Various         OT-AFOTEC/AFTC : Kirkland AFB, NM/Eglin AFB, FL         204.545         35.436         Nov 2016         41.976           Various         OT-JITC/OPTEC :         61.243         42.956         Nov 2016         71.886	Contract Method & Type         Performing Activity & Location         Prior Years         Award Date         Award Date         Award Date           Various         NAWC WD : China Lake, CA         40.545         2.712         Nov 2016         0.000           Various         NAWC AD : Patuxent River, MD         752.168         54.944         Nov 2016         4.400         Nov 2017           Various         Edwards AFB : Edwards AFB, CA         683.943         54.976         Nov 2016         4.400         Nov 2017           Various         Other (incl Classified PIDs) : Various         241.272         30.602         Nov 2016         2.400         Nov 2017           Various         OT-AFOTEC/AFFTC : Kirkland AFB, NM/Eglin AFB, FL         204.545         35.436         Nov 2016         41.976         Nov 2017           Various         OT-JITC/OPTEC :         61.243         42.956         Nov 2016         71.886         Nov 2017	Contract   Method   Performing   Activity & Location   Prior   Years   Cost   Date   Cost   Date   Cost   Date   Cost	Contract   Method   Performing   Activity & Location   Vears   Cost   Date   Date   Cost   Date   Date   Cost   Date   Date	Contract Method & Type Activity & Location	Contract Method & Type Activity & Location Performing Activity & Location Performing Lake, CA	Contract Method & Type Activity & Location Years Cost Date Cost Da	Contract Method & Performing Activity & Location Years Cost Date Date Cost D	Contract Method & Type Activity & Location

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

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy Date: February 2018

Appropriation/Budget Activity

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R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) 2262 I Joint Strike Fighter EMD STOVL - EMD

Project (Number/Name)

Test and Evaluation	Test and Evaluation (\$ in Millions)			FY 2	2017	FY 2	2018	FY 2 Ba		FY 2	2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Operational Test and Evaluation Support	Various	OT-CHLK : China Lake, CA	3.999	9.912	Nov 2016	15.392	Nov 2017	0.000		-		0.000	0.000	29.303	-
Operational Test and Evaluation Support	Various	OT-Various : Various	7.823	2.775	Nov 2016	3.274	Nov 2017	0.000		-		0.000	0.000	13.872	-
Prior Year No Longer Funded in FYDP	Various	Various : Various	27.829	0.000		0.000		0.000		-		0.000	0.000	27.829	-
	<b>Subtotal</b> 2,023.36			234.313		143.728		4.293		-		4.293	0.000	2,405.701	N/A

Management Service	nagement Services (\$ in Millions)			FY 2	2017	FY 2	2018	FY 2 Ba			2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Security System High BOS	C/FP	Mantech : Arlington, VA	7.845	8.037	Dec 2016	0.000		0.000		-		0.000	0.000	15.882	15.882
AFLCMC Civilian Pay	Various	AFLCMC CIVPAY : Wright Patterson, AFB, OH	120.311	10.270	Oct 2016	0.000		0.000		-		0.000	0.000	130.581	-
Program Management Support	C/CPFF	Allutiiq : Arlington, VA	2.213	0.192	Dec 2016	0.000		0.000		-		0.000	0.000	2.405	2.40
Facilities BOSS	WR	Various : Various	32.772	9.013	Dec 2016	0.000		0.000		-		0.000	0.000	41.785	-
CIO ODCs	Various	Various : Various	13.021	7.256	Dec 2016	0.000		0.000		-		0.000	0.000	20.277	-
Travel	Various	Various : Various	24.830	2.343	Oct 2016	0.088	Dec 2017	0.000		-		0.000	0.000	27.261	-
Program Management Support	Various	Jacobs BOSS : Arlington, VA	50.440	24.686	Dec 2016	0.000		0.000		-		0.000	0.000	75.126	-
OPS - Cost/FM/EV ACT-I	Various	OPS - Cost/FM/EV : Arlington, VA	2.000	3.845	Dec 2016	0.000		0.000		-		0.000	0.000	5.845	-
Program Management Support	Various	Andrews AFB : Camp Springs, MD	0.358	0.135	Dec 2016	0.000		0.000		-		0.000	0.000	0.493	-
Prior Year No Longer Funded in FYDP	Various	Various : Various	593.944	0.000		0.000		0.000		-		0.000	0.000	593.944	-
	Subtotal 847.7					0.088		0.000		-		0.000	0.000	913.599	N/A

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

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 5	PE 0604800M I (U)Joint Strike Fighter (JSF)	2262 I Joint Strike Fighter EMD STOVL
	- EMD	

	Prior Years	FY 2	2017	FY 2	018	FY 2 Ba	2019 ise	FY 2	 FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Subtotals	49,044.533	1,394.043		527.873		196.622		-	196.622	16.771	51,179.842	N/A
Joint Strike Fighter 0604800F	-	386.941		255.745		69.519		-	69.519			-
Joint Strike Fighter 0604800N	-	489.144		103.144		60.537		-	60.537			-
International Partner	-	22.000		27.450		-		-	-			-
Project Cost Totals	49,044.533	495.958		141.534		66.566		-	66.566	16.771	51,179.842	-

#### Remarks

Subtotals and totals may not add due to rounding.

NOTE 1: Prior Years reflect \$21,601.831M USAF/\$19,311.879M USN/\$3,166.810M USMC /\$4,964.013 International/Total \$49,044.533M FY 2017 reflects \$386.941M USAF/\$489.144M USN/\$495.958M USMC/\$22.000M International/Total \$1,394.043M FY 2018 reflects \$255.745M USAF/\$103.144M USN/\$141.534M USMC/\$27.450M International/Total \$ 527.873M FY 2019 reflects \$ 69.519M USAF/\$ 60.537M USN/\$ 66.566M USMC/\$ 0.000M International/Total \$ 196.622M

JSF EMD Includes:

USAF PE 0604800F BPAC 653831 USN PE 0604800N Project Unit 2261 USMC PE 0604800M Project Unit 2262

D&S Includes:

USAF PE 0604800F BPAC 653832 USN PE 0604800N Project Unit 3352 USMC PE 0604800M Project Unit 3350

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

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Exhibit R-4, RDT&E Schedule Pro	file:	PB :	2019	) Nav	/y																				: Feb		y 20	18
Appropriation/Budget Activity 1319 / 5										P															r/Na e Fig		r EM	D STC
JSF Variants - CV, STOVL & CTO			2017	7   4Q		FY 2Q	201	8 4Q			2019	4Q			2020	) 4Q			2021 3Q			FY 2	2022			FY 2	2023	
Acquisition Milestones	10	20	30	40	10	20	3Q	F-35C IOC	10	202	3Q	40	10	2Q	3Q	40	lu	2Q	30	40	10	20	30	40	10	20	30	40
Test & Evaluation		Block	k 3F	DT&I	E/Ce	rt	Ini	tial Ope Evalua																				
Defense Acquisition Reviews				IPR				IPR				IPR				IPR				IPR		   		   				
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft)												10 (A 2, US	мс	9) RIP SN 14	4, US	AF 53 SMC : 12 (A	24) AF 46	20)   LR		(AF			RIP		AF 48		SN 10	6,
																										(AF	RIP 54, I USI 21)	JSN MC
2019PB - 0604800M - 2262																												

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) - EMD	- , (	umber/Name) nt Strike Fighter EMD STOVL

# Schedule Details

	Sta	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
JSF Variants - CV, STOVL & CTOL				
Acquisition Milestones: F-35C Initial Operational Capability	4	2018	4	2018
Test & Evaluation: Test and Evaluation: Block 3F DT&E/Cert	1	2017	2	2018
Test & Evaluation: Test and Evaluation: Initial Operational Test and Evaluation (IOT&E)	2	2018	1	2020
Defense Acquisition Reviews: System Development Reviews: Interim Program Review (IPR) FY-17	4	2017	4	2017
Defense Acquisition Reviews: System Development Reviews: Interim Program Review (IPR) FY-18	4	2018	4	2018
Defense Acquisition Reviews: System Development Reviews: Interim Program Review (IPR) FY-19	4	2019	4	2019
Defense Acquisition Reviews: System Development Reviews: Interim Program Review (IPR) FY-20	4	2020	4	2020
Defense Acquisition Reviews: System Development Reviews: Interim Program Review (IPR) FY-21	4	2021	4	2021
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft): LRIP 10 Full Funding / Production / Delivery	2	2019	2	2020
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft): LRIP 11 Full Funding / Production / Delivery	1	2020	1	2021
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft): LRIP 12 Full Funding / Production / Delivery	2	2020	2	2021
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft): LRIP 13 Full Funding / Production / Delivery	2	2021	1	2022
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft): LRIP 14 Full Funding / Production / Delivery	2	2022	4	2023

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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) - EMD	• `	lumber/Name) nt Strike Fighter EMD STOVL

	St	art	En	ıd
Events by Sub Project	Quarter	Year	Quarter	Year
Production Lots (Full Funding / Production / Delivery: U.S. Aircraft): LRIP 15 Full Funding / Production / Delivery	2	2023	4	2023

Exhibit R-2A, RDT&E Project J	ustification:	PB 2019 N	lavy							Date: Febr	uary 2018	
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604800M / (U)Joint Strike Fighter (JSF) - EMD Project (Number/Name) 3350 / F-35						er/Name) ustainment/Capability				
COST (\$ in Millions)	COST (\$ in Millions)							FY 2022	FY 2023	Cost To Complete	Total Cost	
3350: F-35B Sustainment/ Capability Enhancements	338.445	23.435	11.400	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	373.280
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

Project MDAP/MAIS Code: 198

#### Note

Total cost including United States Navy (USN), United States Marine Corps (USMC), United States Air Force (USAF) and International Partner contributions funding is: FY17 \$125.862M, FY18 \$61.270M and FY19 \$ 4.957M.

R-2A table shown above reflect service funding only.

R-2A (section B)/R-3 displays total combined program (i.e. not Service-specific), including International partners.

D&S Includes:

USAF PE 64800F BPAC 653832 USN PE 0604800N Project Unit 3352 USMC PE 0604800M Project Unit 3350

### A. Mission Description and Budget Item Justification

Funds enhancements to the deployability and suitability of the air system such as low observable (LO) maintenance enhancements, security architecture updates, redesign of obsolete items, and integrated training simulators. These enhancements will provide vital on-demand support to the war-fighter within a deployed environment and are not funded via the existing System Development and Demonstration (SDD) program or tied to Block 4 Operational Flight Program development. Funding will result in achieving targeted suitability, maintainability, and affordability returns employing the F-35 in deployed or austere locations.

-Funding at the accomplishment/planned program level is reported as the total of all services as these activities support all aircraft variants. By agreement, USN and USMC funding shares are approximately equal and when combined are equal to the USAF share.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Sustainment and Capability Enhancements		75.280	26.030	4.957	0.000	4.957
A	Articles:	-	-	-	-	-
Description: Apply disciplined systems engineering, refinement of requirements, develop and acquire						

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

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Navy

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: Febr	uary 2018		
Appropriation/Budget Activity 1319 / 5	Budget Activity  R-1 Program Element (Number/Name) PE 0604800M / (U)Joint Strike Fighter (JSF) - EMD						
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in	n Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
suitability and maintainability of the air system such as decentralized maintenar enhancements, security architecture updates, redesign of obsolete items and ir	•						
FY 2018 Plans: Continue to conduct systems engineering, technical maturation, integration and deployability enhancements. Continue to perform sustaining engineering, developed necessary to gain capacity, compatibility, and expansion in wiring, power, wing electronic warfare. This includes funding for suitability enhancements such as S and Band 2/5 efforts.	opment and test activities conduits, etc. in support of						
FY 2019 Base Plans: Continue to conduct systems engineering, technical maturation, integration and deployability enhancements. Continue to perform sustaining engineering, developed necessary to gain capacity, compatibility, and expansion in wiring, power, wing electronic warfare. This includes funding for suitability enhancements related to (DMT).	opment and test activities conduits, etc. in support of						
FY 2019 OCO Plans: N/A							
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 Sustainment/Capability Enhancements funding decrease is due to reduct controls in cojunction with SDD phase drawing to closure.	ion in domestic and International						
Title: Development Support	Articles:	3.556 -	1.000	0.000	0.000	0.00	
<b>Description:</b> SDD support efforts for airframe, air vehicle systems, mission sysmission support, and autonomic logistics development activities.	stems, weapons integration,						
FY 2018 Plans: Complete SDD support efforts for airframe, air vehicle systems, mission system support, and autonomic logistics development activities. Development Support board reduction between both services.							
FY 2019 Base Plans:							

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy				Date: Febr	uary 2018		
Appropriation/Budget Activity 1319 / 5		R-1 Program Element (Number/Name) PE 0604800M / (U)Joint Strike Fighter (JSF) - EMD Project (N 3350 / F-3 Enhancem					
B. Accomplishments/Planned Programs (\$ in Millions, Article	e Quantities in Each)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
N/A							
FY 2019 OCO Plans: N/A							
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 Sustainment/Capability Enhancements funding decrease is controls in cojunction with SDD phase drawing to closure.	s due to reduction in domestic and International						
Title: Development Test and Evaluation	Articles:	1.440 -	0.500	0.000	0.000	0.000	
Description: Verification and testing for deployability and suitability	lity enhancements.						
FY 2018 Plans: Complete to initiate government test and evaluation of capability Logistics Information system, and LO maintenance enhancemen	• •						
<b>FY 2019 Base Plans:</b> N/A							
FY 2019 OCO Plans: N/A							
FY 2018 to FY 2019 Increase/Decrease Statement: FY19 Sustainment/Capability Enhancements funding decrease is controls in cojunction with SDD phase drawing to closure.	s due to reduction in domestic and International						
Title: Autonomic Logistics Information System	Articles:	45.586 -	33.740	0.000	0.000	0.000	
<b>Description:</b> SDD execution of Autonomic Logistics Information infrastructure used to transmit health and maintenance action infusers.							

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Exhibit R-2A, RDT&E Project Just	ification: PB	2019 Navy				<u> </u>			Date: Febr	uary 2018		
Appropriation/Budget Activity 1319 / 5					604800M <i>I (</i> U	ment (Numb J)Joint Strike	3350 <i>I F</i> -3	Project (Number/Name) 3350 / F-35B Sustainment/Capability Enhancements				
B. Accomplishments/Planned Pro	grams (\$ in	Millions, Ar	ticle Quantit	ies in Each	1)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	
Complete SDD execution of Autono infrastructure used to transmit health users.							11.2011	11.2010			7000	
<b>FY 2019 Base Plans:</b> N/A												
<b>FY 2019 OCO Plans:</b> N/A												
FY 2018 to FY 2019 Increase/Decr FY19 Sustainment/Capability Enhar controls in cojunction with SDD phase	ncements fun	ding decreas	se is due to r	eduction in	domestic an	d Internation	al					
			Accomplisi	nments/Pla	nned Progr	ams Subtot	als 125.862	61.270	4.957	0.000	4.95	
				Joint Str	ike Fighter (	0604800N 33	352 23.518	5.787	4.957	-	4.95	
					Interr	national Parti	ner 31.947	6.881	-	_	_	
				Jo	int Strike Fig	ghter 060480	0F 46.962	37.202	_	_	_	
						Navy Subtot			0.000	0.000	0.00	
C. Other Program Funding Summ	arv (\$ in Mill	ions)					'	*				
5. Othor Frogram Funding Cumm	<u>u. y (v</u>	<u>10110</u>	FY 2019	FY 2019	FY 2019					Cost To		
Line Item	<b>FY 2017</b>	FY 2018	Base	000	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	<b>Total Cos</b>	
<ul><li>RDT&amp;E/0604800F:</li></ul>	388.660	255.745	69.655	-	69.655	7.796	5.598	0.000	0.000	0.000	22,247.82	
F-35A Joint Strike Fighter												
• International:	22.000	27.450	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5,013.46	
International Partner (SDD) • APAF/0207142F BP10:	4 667 904	4,544.684	4 253 606		4 252 606	4 200 912	4,862.684	1 706 042	0 000 1	48,685.7672	202 204 7	
F-35A USAF CTOL	4,007.094	4,344.004	4,233.090	-	4,233.090	4,209.013	4,002.004	1,7 30.042	0.000 1	40,003.7072	202,004.7	
• RDT&E/0604800N/2261: <i>F-35C</i>	489.144	103.144	60.537	-	60.537	1.499	0.328	0.323	0.345	0.000	49,699.85	
Joint Strike Fighter (JSF) - EMD											,	
• APN/0605B: <i>F-35B Joint</i>	123.252	105.671	92.198	_	92.198	160.150	140.989	143.809	0.000	Continuing	Continuing	

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

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Exhibit R-2A, RDT&E Project Justi	ification: PB	3 2019 Navy						1		oruary 2018			
<b>Appropriation/Budget Activity</b> 1319 / 5					604800M <i>I (l</i>	ment (Numl J)Joint Strike	oer/Name) e Fighter (JSF)	, , ,					
C. Other Program Funding Summa	ary (\$ in Mill	ions)		•				-					
			FY 2019	FY 2019	FY 2019					<b>Cost To</b>			
<u>Line Item</u>	FY 2017	FY 2018	<b>Base</b>	OCO	<u>Total</u>	FY 2020	FY 2021	FY 2022	FY 2023	Complete	<b>Total Cos</b>		
<ul> <li>APN/0605C: F-35C Joint</li> </ul>	26.076	84.591	44.971	_	44.971	52.858	303.608	309.680	0.000	Continuing	Continuir		
Strike Fighter CV Spares													
<ul> <li>MILCON 0207142F:</li> </ul>	305.700	181.250	175.150	-	175.150	154.400	0.000	0.000	0.000	0.000	1,602.55		
USAF MILCON Operations													
<ul> <li>APAF/0207142F BP11:</li> </ul>	115.811	68.270	230.448	-	230.448	279.814	259.978	301.899	0.000	0.000	1,665.79		
USAF Modification Funding													
• FOD/0207142F: <i>USAF</i>	50.970	299.408	396.821	_	396.821	504.971	418.988	343.147	283.292	Continuing	Continuir		
Follow-on Development (FoD)										•			
• 0207142F/USAF BP16: <i>USAF</i>	362.792	320.831	319.151	_	319.151	416.722	399.361	394.654	0.000	4,175.007	7,849.41		
Joint Strike Fighter Initial Spares										·	,		
• USAF/OPAF	2.333	3.326	3.310	_	3.310	2.993	2.463	2.507	0.000	Continuing	Continuir		
0207142F: USAF OPAF										<b>.</b>			
APN/0592: F-35B STOVL Series	24.350	34.963	36.618	_	36.618	38.582	47.609	50.163	53.742	Continuing	Continuir		
• APN/0593: <i>F-35C CV Series</i>	21.733	31.689	21.236	_	21.236	13.136	12.435	12.683		Continuing			
• RDT&E/0604800N/3352:	23.518	5.787	4.957	_	4.957	0.000	0.000	0.000	0.000	0.000	372.70		
F-35C Sustainment/											• • • • • • • • • • • • • • • • • • • •		
Capability Enhancements													
• USAF SDD BP 653832:	45.243	37.202	0.000	_	0.000	0.000	0.000	0.000	0.000	0.000	236.88		
Deployability and	10.210	01.202	0.000		0.000	0.000	0.000	0.000	0.000	0.000	200.00		
Suitability Enhancements													
• PAF/0207142F BP10: <i>F-35A</i>	404.500	780.300	405.200	_	405.200	1,003.600	965.300	414.700	0.000	20,154.954	26 885 29		
JSF CTOL Advance Procurement	101.000	700.000	100.200		100.200	1,000.000	000.000	111.700	0.000	20,101.001	20,000.20		
• DCA/0207142F 676011:	25.743	35.122	78.016	_	78.016	92.026	95.040	37.599	11 725	Continuing	Continuir		
Dual Capable Aircraft (DCA)	20.140	00.122	70.010		70.010	02.020	00.040	07.000	11.720	Continuing	Continui		
• APN/0147: <i>F-35C</i>	1,360.880	663 232	1,341.369	_	1,341.369	1,938.799	2,793.290 2	963 544	2 973 130	26 243 243	54 674 07		
Joint Strike Fighter CV	1,500.000	000.202	1,041.000		1,041.000	1,550.755	2,733.230 2	-,000.044	2,575.150	20,240.240	04,014.01		
• APN/0152C: <i>F-35B Joint</i>	233.648	413.450	228.492	_	228.492	215.704	209.222	225.245	220 740	1,651.860	4 696 94		
Strike Fighter STOVL AP	200.040	710.700	220.732	_	220.732	210.704	200.222	220.270	220.140	1,001.000	→,000.0-		
• APN/0152: <i>F-35B Joint</i>	2 504 927	2,631.787	2 635 111	_	2,635.111	2 700 264	2,658.313 2	666 245	2 851 920	20 419 570	47 203 gg		
Strike Fighter STOVL	2,504.521	2,001.707	2,000.111	_	2,000.111	2,700.204	2,000.010 2	.,000.243	2,001.020	20,419.070	→1,∠00.03		
• DoN MILCON: DoN JSF MILCON	230.900	64.660	121.990	_	121.990	119.800	0.000	0.000	0.000	642 400	1,406.07		
- DOIN WILCOIN. DOIN JOI WILCOIN	230.900	04.000	121.330	-	121.990	119.000	0.000	0.000	0.000	042.400	1,400.07		

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

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Exhibit R-2A, RDT&E Project Justi	fication: PB	2019 Navy	·		· ·			·	Date: Fel	bruary 2018		
Appropriation/Budget Activity 1319 / 5					<b>Program Eler</b> 604800M <i>I (U</i> D	Project (Number/Name) 3350 I F-35B Sustainment/Capability Enhancements						
C. Other Program Funding Summa	ary (\$ in Milli	ons)		,				1				
		-	FY 2019	FY 2019	FY 2019					<b>Cost To</b>		
<u>Line Item</u>	FY 2017	<b>FY 2018</b>	Base	000	<u>Total</u>	FY 2020	FY 2021	FY 2022	FY 2023	Complete	<b>Total Cost</b>	
<ul> <li>International 2: International</li> </ul>	185.641	124.114	151.776	-	151.776	150.588	149.848	87.119	0.000	Continuing	Continuing	
Production/Reprogramming Lab												
OPN/4268: Logistics	29.528	63.277	39.374	-	39.374	51.957	55.434	70.046	71.314	Continuing	Continuing	
Information System (ALIS)												
• MC/0207597F: <i>USAF</i>	20.000	70.350	11.000	-	11.000	0.000	0.000	0.000	0.000	0.000	166.750	
MILCON Training												
International 3:	84.602	158.273	159.649	-	159.649	162.023	167.383	160.111	0.000	Continuing	Continuing	
International R&D FoM/D&S												
• OPN 902010 S8JC: Aviation	0.881	2.297	2.321	-	2.321	0.139	1.977	0.000	0.000	Continuing	Continuing	
Support Equipment (ALIS)												
• USAF O&M: <i>USAF O&amp;M</i>	425.978	516.569	731.134	-	731.134	909.930	985.790	1,089.394	0.000	Continuing	Continuing	
• USAF MILCON 0502635F:	15.100	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	15.100	
USAF MILCON Air National Guard												
• USN 2936: <i>F-35C Follow-</i>	63.387	139.942	224.712	-	224.712	228.707	188.678	120.192	0.000	Continuing	Continuing	
on Development (CV)												
<ul> <li>International Unique:</li> </ul>	32.374	15.566	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	481.617	
Imtl Unique (SDD/PSFD)												

#### Remarks

### D. Acquisition Strategy

Implement Joint Strike Fighter Joint Executive Steering Board/Configuration Steering Board approved enhancements to existing capabilities through existing contracts using the engineering change proposal process. When appropriate, new cost type contracts may be established.

## **E. Performance Metrics**

The following are the key performance parameters from the F-35 Selected Acquisition Report:

Performance Metrics reflect Key Program Performance data.

Combat Radius

F-35A Meets/Exceeds Tripwire Requirement

F-35B Meets/Exceeds Tripwire Requirement

F-35C Meets/Exceeds Tripwire Requirement

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

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0604800M I (U)Joint Strike Fighter (JSF)	3350 <i>I F-3</i>	5B Sustainment/Capability
	- EMD	Enhancem	pents

F-35B 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

F-35C Recovery

Maximum Approach Speed 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

F-35A Meets/Exceeds Tripwire Requirement

F-35B United States Marine Corps (USMC) Meets/Exceeds Tripwire Requirement

F-35B United Kingdom (UK) Meets/Exceeds Tripwire Requirement

F-35C Exceeds Operational Requiremets Document Objective

Sortie Generation Rate

F-35A Meets/Exceeds Tripwire Requirement

F-35B USMC Meets/Exceeds Tripwire Requirement

F-35B UK Meets/Exceeds Tripwire Requirement

F-35C Meets/Exceeds Tripwire Requirement

Logistics Footprints

F-35A Meets/Exceeds Tripwire Requirement

F-35B USMC Meets/Exceeds Tripwire Requirement

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Logistics Footprint- Volume

F-35B USMC Exceeds ORD Objective

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Navy		Date: February 2018
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) - EMD	Project (Number/Name) 3350 / F-35B Sustainment/Capability Enhancements
F-35B UK Meets/Exceeds Tripwire Requirement F-35C Exceeds Operational Requirements Document (ORD) Objective		
Logistics Footprint-Weight F-35B USMC Exceeds ORD Objective F-35B UK Meets/Exceeds Tripwire Requirement F-35C Exceeds ORD Objective		
r-33C Exceeds ORD Objective		

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

					UN	ICLA53	סורובט								
Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	2019 Navy	/								Date:	February	2018	
Appropriation/Budge 1319 / 5	et Activity	1	-				ogram Ele 4800M / (						r/Name) stainment/	Capabilit	у
Product Developmen	nt (\$ in M	illions)		FY 2	2017	FY 2	2018	FY 2 Ba	2019 ise	FY 2		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development - 3002 SDD	C/CPFF	Lockheed Martin : Fort Worth, TX	44.233	45.572	Mar 2017	23.655	Mar 2018	4.957	Mar 2019	-		4.957	0.000	118.417	116.732
Primary Hardware Development - 3002 ALIS	C/CPFF	Lockheed Martin : Fort Worth, TX	144.378	40.768	Mar 2017	33.740	Mar 2018	0.000		-		0.000	0.000	218.886	218.886
Primary Hardware Development -14-C-002 Band 2/5	C/CPFF	Lockheed Martin : Fort Worth, TX	98.639	34.526	Mar 2017	2.375	Mar 2018	0.000		-		0.000	0.000	135.540	135.540
		Subtotal	287.250	120.866		59.770		4.957		-		4.957	0.000	472.843	N/A
Support (\$ in Million	s)			FY 2	017	FY 2	2018	FY 2	2019 ise		2019 FY 2019 DCO Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Development Support	Various	AFLCMC : Eglin AFB	33.501	0.000	2 0.00	0.000		0.000		-		0.000	0.000	33.501	-
Development Support	Various	Various : Various	12.368	2.410	Mar 2017	1.000	Mar 2018	0.000		-		0.000	0.000	15.778	-
		Subtotal	45.869	2.410		1.000		0.000		-		0.000	0.000	49.279	N/A
Test and Evaluation	(\$ in Milli	ions)		FY 2	2017	FY 2	2018	FY 2 Ba	2019 ise	FY 2		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	Various : Various	2.010	0.976	Mar 2017	0.500	Mar 2018	0.000		-		0.000	0.000	3.486	-
		Subtotal	2.010	0.976		0.500		0.000		-		0.000	0.000	3.486	N/A
Management Service	es (\$ in M	lillions)		FY 2	2017	FY 2	2018	FY 2 Ba	2019 ise	FY 2		FY 2019 Total			
	Contract								Award		Award		Cost To	Total	Target Value of
Cost Category Item	Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Date	Cost	Complete	Cost	Contract

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0604800M I (U)Joint Strike Fighter (JSF)	3350 <i>I F-3</i>	5B Sustainment/Capability
	- EMD	Enhancem	ents

Management Services (\$ in Millions)				FY	2017	FY 2	2018	FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	3.316	1.610		0.000		0.000		-		0.000	0.000	4.926	N/A
			Prior Years	FY:	2017	FY 2	2018		2019 ase		2019 CO	FY 2019 Total	Cost To	Total Cost	Target Value of Contract
	Cos	st Category Subtotals	338.445	125.862		61.270		4.957		-		4.957	0.000	530.534	N/A
J	oint Strike F	ighter 0604800N 3352	-	23.518		5.787		4.957		-		4.957			-
		International Partner	-	31.947		6.881		-		-		-			-
	Joint S	trike Fighter 0604800F	-	46.962		37.202		-		-		-			-
		Project Cost Totals	338.445	23.435		11.400		0.000		-		0.000	0.000	530.534	-

#### Remarks

NOTE: Prior Years reflect \$154.435M USAF/\$68.518M USN/\$58.740M USMC/\$56.752M International/Total \$338.445M FY 2017 reflects \$46.962M USAF/\$23.518M USN/\$23.435M USMC/\$31.947M International/Total \$125.862M FY 2018 reflects \$37.202M USAF/\$ 5.787M USN/\$11.400M USMC/\$ 6.881M International/Total \$ 61.270M FY 2019 reflects \$ 0.000M USAF/\$ 4.957M USN/\$ 0.000M USMC/\$ 0.000M International/Total \$ 4.957M

R-2A (section B)/R-3 displays total combined program (i.e. not Service-specific), including International partners.

JSF EMD Includes:

USAF PE 0604800F BPAC 653831 USN PE 0604800N Project Unit 2261 USMC PE 0604800M Project Unit 2262

D&S Includes:

USAF PE 0604800F BPAC 653832 USN PE 0604800N Project Unit 3352 USMC PE 0604800M Project Unit 3350

Exhibit R-4, RDT&E Schedule Prof	file:	PB:	2019	Nav	у																		ı	Date	: Fel	oruai	ry 20	18
Appropriation/Budget Activity 1319 / 5					R-1 Program Element (Number/Name) PE 0604800M I (U)Joint Strike Fighter (JSF) - EMD										) (JSF)	Project (Number/Name)												
Proj 3350	FY 2017 FY 2018									FY	2019	Ð		FY	2020		FY 2021			FY 2022				FY 2023				
	10	20	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
D&S			В	SO and :	Uv2 2/5		 	 																				
	_	Se	ecurity	0	MS DMT			-																				
2019DON - 0604800M - 3350																												

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

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Navy			Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 5	PE 0604800M I (U)Joint Strike Fighter (JSF)	3350 <i>I F-3</i> 8	5B Sustainment/Capability
	- EMD	Enhancem	nents

# Schedule Details

	Sta	art	End			
Events by Sub Project	Quarter	Year	Quarter	Year		
Proj 3350						
D&S: Standard Operating Unit (SOUv2)	1	2017	4	2018		
D&S: Band 2/5	1	2017	3	2018		
D&S: Security Architecture	1	2017	3	2018		
D&S: Offboard Misson Support (OMS) Redesign	1	2017	4	2018		
D&S: Distributed Mission Training/Distributed Mission Operations (DMT/DMO)	1	2017	2	2019		