Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

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

PE 0604810N I (U)Joint Strike Fighter Follow On Mod (FoM) - Navy

Development & Demonstration (SDD)

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	65.045	20.544	63.387	143.855	-	143.855	225.442	229.055	189.104	121.613	Continuing	Continuing
2936: JSF Follow On Modernization - Navy	65.045	20.544	63.387	143.855	-	143.855	225.442	229.055	189.104	121.613	Continuing	Continuing

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 United States Navy, United States Air Force, United States Marine Corps and International Partners countries. There are three variants the F-35A Conventional Takeoff and Landing variant; F-35B Short Take Off and Vertical Landing; and the F-35C Aircraft Carrier suitable variant. Maximum commonality among the variants, consistent with National Disclosure Policy, will minimize total air system life cycle costs. Planning and pre-development systems engineering for the FOM continues as Initial Operational Capability (IOC) is met for each variant during System Development and Demonstration (SDD).

The JSF FoM efforts provide incremental warfighting capability improvements to maintain joint air dominance against evolving threats. FoM capability requirements were initiated through ongoing Service-led operational analysis of warfighting gaps identified in the Fifth Generation Fighter Modernization Initial Capabilities Document (ICD), and through F-35 JSF FoM Mission Decomposition analysis completed in FY2014. These analyses serve as the basis for the F-35 FoM Capabilities Development Document (CDD), staffed through the Air Force Requirements Oversight Council (AFROC) and signed by the USAF Chief of Staff in January 2015. Joint Requirements Oversight Council (JROC) approved the CDD 21 March 2017. Pre-modernization activities in FY2017 and FY2018 include systems engineering, risk reduction, and infrastructure upgrades to support initial fleet availability of FoM upgrades in FY2021.

FoM efforts designated as Block 4 include a robust weapons integration portfolio and provide new opportunities for International Partners to assess, integrate, and field unique capabilities based on global sovereign requirements.

The United Kingdom, Italy, Netherlands, Turkey, Canada, Australia, Denmark and Norway are participants in F-35 modernization. The program shown here reflects United States Marine Corps funding. Total funding for all Service and International Partners is reported at the accomplishment/planned program level since activities support all aircraft variants. Foreign Military Sales are ongoing separately.

Note:

Navy

FY 2017 and prior year PE was titled (U)Joint Strike Fighter Follow On Develop - Navy

PE 0604810N: (U) Joint Strike Fighter Follow On Mod (F...

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Navy

Date: May 2017

Appropriation/Budget Activity

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

R-1 Program Element (Number/Name)

PE 0604810N I (U)Joint Strike Fighter Follow On Mod (FoM) - Navy

B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	21.200	63.387	133.686	<u> </u>	133.686
Current President's Budget	20.544	63.387	143.855	_	143.855
Total Adjustments	-0.656	0.000	10.169	-	10.169
Congressional General Reductions	-	-			
Congressional Directed Reductions	_	-			
Congressional Rescissions	_	-			
Congressional Adds	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
SBIR/STTR Transfer	-0.656	0.000			
 Program Adjustments 	0.000	0.000	10.114	=	10.114
 Rate/Misc Adjustments 	0.000	0.000	0.055	-	0.055

Change Summary Explanation

Adjusted R-4 schedule as follows:

Requirements: Final CCD (JROC) changed from 3rd Quarter FY16 to 3rd Quarter FY17

Systems Engineering: Updated to show Block 4.1 SRR and 4.1 & 4.2 PDR dates Test & Evaluation: 4.1 Test changed from 3QFY19-3QFY20 to 4QFY19-4QFY20 Test & Evaluation: 4.2 Test changed from 1QFY21-4QFY21 to 2QFY21-4QFY22

Fielding: Added Block 4.2 Fleet Availability 4QFY22

Program Changes:

FY2018 Increase: \$10.169M net increase in FY 18 including \$10.300M increase to fund Tech Refresh (TR)-3 and \$4.044 adjustment for underexecution of funds.

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 N	lavy				Date: May 2017						
1319/5						am Elemen ON / (U)Joi Mod (FoM)	nt Strike Fig	•	Project (Number/Name) 2936 I JSF Follow On Modernization - Navy				
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost	
2936: JSF Follow On Modernization - Navy	65.045	20.544	63.387	143.855	-	143.855	225.442	229.055	189.104	121.613	Continuing	Continuing	
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-			

Project MDAP/MAIS Code: 198

Note

Total cost, including International partner contributions, USN, USMC, and USAF funding: FY2016 \$110.517M; FY2017 \$373.463M; FY2018 \$739.755M

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

R-2A (section B)/R-3 displays combined program for JSF Follow-on Modernization (FoM).

JSF FoM Includes:

USAF PE 0207142F BPAC 675346 USN PE 0604810N Project Unit 2936 USMC PE 0604810M Project Unit 2935

USN PE 0604800N Project Unit 9999 (FY14): \$1.500M USMC PE 0604800M Project Unit 9999 (FY14): \$1.500M

International Partner Contributions

A. Mission Description and Budget Item Justification

F-35 FoM provides continuing incremental upgrades of the three F-35 variants and associated ground equipment. Upgrades are essential mission improvements for Air Interdiction and Strategic Attack, Close Air Support, Suppression and Destruction of Enemy Air Defenses, Offensive and Defensive Counter Air and expanded Surface Warfare. The Block 4 acquisition strategy is based upon incremental deliveries of capabilities in 4 sub-blocks. The strategy includes deliveries on a two year cycle with a focus on hardware and tech refresh change every four years. FoM capability planning includes an efficient transition from F-35 SDD to Follow-on Modernization. As SDD development activities ramp down FoM will assume responsibility for improvements and modernization efforts. Block 4 capability planning includes sub-block 4.1 through 4.4 modernization efforts with initial increment of capability available in FY2021 and subsequent releases every two years.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2018	FY 2018	FY 2018
	FY 2016	FY 2017	Base	oco	Total
Title: Product Development - Block 4 Planning and Systems Engineering	85.478	265.280	311.270	0.000	311.270
Articles:	-	-	-	-	-

PE 0604810N: (U)Joint Strike Fighter Follow On Mod (F... Navy

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy		Date: May 2017						
Appropriation/Budget Activity 1319 / 5	R-1 Program Element (Number/ PE 0604810N <i>I (U)Joint Strike Fig</i> <i>Follow On Mod (FoM) - Navy</i>		ne) Modernizat	ration - Navy				
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in	n Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total		
Description: Block 4 Planning and Systems Engineering preliminarily design at of the F-35 Aircraft. This is a continuation of the previous Block 4 Requirements will include activities leading up to a successful System Functional Review (SFF required for Block 4 research, development, test and evaluation. Included in Bloc and continuous improvements to maintain Air System viability against evolving the Warfare Initial Capabilities Document (ICD), the Fifth Generation Fighter Moder Capability Development Document (CDD), reduce life cycle cost, and improve completion of a Block 4.1 Preliminary Design Review (PDR) and a Block 4.2 Sy (SRR) will address additional Block 4 capabilities requirements. Post-PDR risk is subsequent Block 4 Modernization events are included. Capability planning efformal acquisition approval of a Block 4 Modernization contract. FY 2016 Accomplishments: Continued FoM requirements analysis and technical requirements development engineering, and technical planning.	B Decomposition effort which R) and select facility upgrades ock 4 are upgraded capabilities threats indicated in the Electronic inization ICD, and the FoM operational suitability. Expected istem Requirements Review reduction and pre-planning for out and preparations will lead to							
FY 2017 Plans: Continue requirements analysis and technical requirements development and d engineering, and technical planning. Conduct Block 4.1 System Requirements F								
FY 2018 Base Plans: Conduct a Block 4.1 System Functional Review (SFR) followed by initiation of p Block 4 modernization Request for Proposal (RFP) 1QFY2018 with contract aw								
FY 2018 OCO Plans: N/A								
Title: Product Development - Technology Refresh 3 (TR-3)	Articles:	14.214 -	32.515	150.370 -	0.000	150.370		
Description: Technology Refresh 3 (TR-3) Design Competition, Development, the design phase of TR-3 program fully supports Block 3F functionality and allow capabilities documented in the System Requirements Document (SRD). TR-3 h support 4X processing growth factor based on the current processing estimates of TR-3 subsystems (Integrated Core Processor (ICP), Aircraft Memory System	ws incorporation of all Block 4 ardware redesign is required to for all 3F capabilities. Redesign							

PE 0604810N: (U) Joint Strike Fighter Follow On Mod (F... UNCLASSIFIED

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy	-			Date: May	2017				
1319 <i>I</i> 5	R-1 Program Element (Number/ PE 0604810N / (U)Joint Strike Fig Follow On Mod (FoM) - Navy			Project (Number/Name) 2936 <i>I JSF Follow On Modernization - Na</i>					
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in I	Each)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
Display (PCD)) configurations will contain new backplane technology, commercia modified middleware necessary to take the design of the TR-3 System through C									
FY 2016 Accomplishments: TR-3 Program produced 5 government-owned specifications to inform the new F-required to support 4X processing growth factor based on current processing esti The program also started the design of the new Integrated Core Processor (ICP), (PCD), and Aircraft Memory System (AMS).	imates for all 3F capabilities.								
FY 2017 Plans: The TR-3 program continued to design the Integrated Core Processor (ICP), Pan and Aircraft Memory System (AMS). The program will hold System Requirement Design Review for the ICP, PCD, and AMS to ensure on-time Critical Design Revarticle delivery to the production line in FY23.	s Review and Preliminary								
FY 2018 Base Plans: The TR-3 program will continue design toward Critical Design Review of the Integrand Panoramic Cockpit Display (PCD), and Aircraft Memory System (AMS). In additional prototype the middleware software that will enable F-35's new messaging archite and ensure compatibility with current F-35 sensors. Additionally the initial lab statimely first article delivery to the production line in FY23.	on the TR-3 program will cture delivered as part of TR-3								
FY 2018 OCO Plans: N/A									
Title: Infrastructure and Support Costs	Articles:	10.825 -	70.668	114.115 -	0.000	114.11			
Description: Funding will support infrastructure investment planning and other to for Block 4 development, integration, test and evaluation. Funding related to the government, and contractor labor. Other costs in support of ranges, chase plane	Integrated Test Force,								
FY 2016 Accomplishments: Continue development support for defining, managing and acquiring the F-35 cap in approved requirements documents.	pability enhancements identified								
FY 2017 Plans:									

PE 0604810N: (U)Joint Strike Fighter Follow On Mod (F... Navy

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			-	Date: May	2017				
1319 / 5	1 Program Element (Number/l E 0604810N <i>I (U)Joint Strike Fig.</i> Illow On Mod (FoM) - Navy								
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in E	ach)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
Continue development support for defining, managing and acquiring the F-35 capain approved requirements documents.	ability enhancements identified								
FY 2018 Base Plans: Continue development support for defining, managing and acquiring the F-35 capa in approved requirements documents. Transfer of integrated test force requirements closure.									
FY 2018 OCO Plans: N/A									
Title: Test and Evaluation	Articles:	0.000	5.000	164.000 -	0.000	164.00			
Description: Non-recurring engineering required to plan for the service life extension and modification necessary to bring DT aircraft fleet to a common configuration. To support development and evaluation of improvements driven by changes in the identified in the Electronic Warfare ICD, the Fifth Generation Fighter Modernization Development Document (CDD). Execution all DT activities in support of Block 4.	Additional upgrades required threat environment and as								
FY 2016 Accomplishments: N/A									
FY 2017 Plans: Award initial contract in support of the non-recurring engineering effort.									
FY 2018 Base Plans: Funding will support investment planning and prioritization required to maintain fulful This funding supports the non-recurring engineering (NRE) for capability upgrades modifications to include engine, structural and mission systems updates to maintal FoM efforts. This funding also supports laboratory upgrades required to support capabilities in a relevant environment.	and service life extension in the viability of DT fleet for								
FY 2018 OCO Plans: N/A									
	Planned Programs Subtatals	110.517	373.463	739.755	0.000	739.75			
Accomplishments	Planned Programs Subtotals	110.517	313.403	139.135	0.000	139.1			

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PE 0604810N: (U)Joint Strike Fighter Follow On Mod (F... Navy

Exhibit R-2A, RDT&E Project Justification: FY 2018 Navy			Date: May 2017
1319 / 5	3	- , (umber/Name) Follow On Modernization - Navy

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2018	FY 2018	FY 2018
	FY 2016	FY 2017	Base	oco	Total
0207142F JSF Follow on Modernization	47.023	127.302	299.832	-	299.832
International Follow on Modernization	22.793	108.547	151.110	-	151.110
0604810M JSF Follow on Modernization	20.157	74.227	144.958	-	144.958
Navy Subtotals	20.544	63.387	143.855	0.000	143.855

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

			FY 2018	FY 2018	FY 2018					Cost To	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total Cost
RDT&E/0604810M/2935:	20.157	74.227	144.958	-	144.958	226.310	230.383	190.442	123.531	Continuing	Continuing
F-35C Follow-on Modernization											
 International: International 	22.793	108.547	151.110	-	151.110	161.934	165.007	83.372	160.473	Continuing	Continuing
Follow-on Modernization											
 USAF/FOD/0207142F: USAF 	47.023	127.302	299.832	-	299.832	463.321	474.971	396.488	263.548	Continuing	Continuing
Follow-on Modernization											

Remarks

This is a joint program with no executive service. Service Acquisition Executive (SAE) authority alternates between the Department of the Navy and the Department of the Air Force and currently resides with the Navy. Program Element 0604800N/0604800M continues USN development efforts budgeted in 0603800N prior to FY2002. The United Kingdom, Italy, Netherlands, Turkey, Canada, Australia, Denmark, and Norway are participants in the SDD phase of JSF.

D. Acquisition Strategy

The FoM acquisition strategy is to employ both Cost and Fixed Price Incentive contracts for the Block 4 engineering and development efforts. A new modernization contract structure will be established for all post SDD Block 4 efforts. In addition, a separate Basic Ordering Agreement or Indefinite Quantity/Indefinite Delivery contract is planned to provide a long term approach to upgrading and maintaining laboratories and test aircraft and supporting technology maturation for future FoM capabilities.

E. Performance Metrics

Overall FoM Performance Metrics will reflect Key Performance Parameters established in the F-35 FoM Capability Development Document.

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy

R-1 Program Element (Number/Name)

Project (Number/Name)

Appropriation/Budget Activity 1319 / 5

PE 0604810N I (U)Joint Strike Fighter Follow On Mod (FoM) - Navy

2936 I JSF Follow On Modernization - Navy

Date: May 2017

Product Developmen	it (\$ in Mi	illions)		FY 2	2016	FY 2	2017	FY 2 Ba	2018 Ise	FY 2	2018 CO	FY 2018 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
Prime LM 02-C-3002	C/CPFF	Lockheed Martin : FT. Worth, TX	19.485	3.707	Dec 2015	0.000		0.000		-		0.000	23.192	46.384	46.384
Prime LM 16-C-0008	C/CPFF	Lockheed Martin : FT. Worth, TX	38.868	80.299	Dec 2015	39.853	Dec 2016	0.000		-		0.000	86.812	245.832	245.832
Prime LM 14-G-0020(TR3)	C/CPFF	Lockheed Martin : FT Worth, TX	0.000	14.214	Mar 2017	32.515	Mar 2017	150.370	Dec 2017	-		150.370	466.040	663.139	663.139
Prime LM TBD(Phase II)	C/CPFF	Lockheed Martin : FT. Worth, TX	0.000	0.000		171.760	Dec 2017	130.370	Dec 2017	-		130.370	657.019	959.149	959.149
Prime LM BOA 0020 (Nimble Lightning + Pilot Training)	C/CPFF	Lockheed Martin : FT Worth, TX	0.000	1.206	Dec 2015	0.000		0.000		-		0.000	5.470	6.676	6.676
Prime LM TBD (Modernization)	C/CPFF	Lockheed Martin : FT. Worth, TX	0.000	0.000		40.297	Dec 2017	115.900	Dec 2017	-		115.900	1,878.246	2,034.443	2,034.443
Prime LM Flight Test Asset	C/CPFF	Lockheed Martin : FT Worth, TX	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Prime LM IDIQ TBD (ECASE)	C/CPFF	Lockheed Martin : FT. Worth, TX	0.000	0.000		0.000		65.000	Dec 2017	-		65.000	0.000	65.000	65.000
Systems Engineering	C/CPFF	Various : Various	0.000	0.266	Dec 2015	13.370	Dec 2016	0.000		-		0.000	84.010	97.646	97.646
		Subtotal	58.353	99.692		297.795		461.640		-		461.640	3,200.789	4,118.269	-

Support (\$ in Millions)		FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	WR	NAWCAD : Patuxent River, MD	0.400	7.503	Dec 2015	20.970	Dec 2016	15.496	Dec 2017	-		15.496	138.721	183.090	188.090
Development Support	WR	NAWCWD : China Lake, CA	0.000	0.429	Dec 2015	7.383	Dec 2016	4.808	Dec 2017	-		4.808	Continuing	Continuing	Continuing
Development Support	Various	Edwards AFB : Edwards AFB, CA	0.000	0.986	Dec 2015	0.000		2.200	Dec 2017	-		2.200	11.380	14.566	14.566
Development Support	Various	Eglin : Various	0.015	0.000		1.940	Dec 2016	3.220	Dec 2017	-		3.220	18.882	24.057	24.057

PE 0604810N: (U) Joint Strike Fighter Follow On Mod (F... Navy

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Exhibit R-3, RDT&E	Project C	ost Analysis: FY 2	.018 Navy	<i>'</i>								Date:	May 2017	7		
Appropriation/Budge 1319 / 5	et Activity	1				PE 060	ogram Ele 4810N / (l On Mod (l	Project (Number/Name) 2936 / JSF Follow On Modernization - I								
Support (\$ in Million	s)			FY 2	2016	FY 2	2017	FY 2	2018 ise		2018 CO	FY 2018 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	Various	Various : Various	6.277	1.626	Dec 2015	8.714	Dec 2016	8.215	Dec 2017	-		8.215	68.103	92.935	92.93	
Development Support	MIPR	AFLCMC : Wright Patterson AFB	0.000	0.281	Dec 2015	0.232	Dec 2016	0.464	Dec 2017	-		0.464	3.037	4.014	4.014	
Development Support Engine	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-	
		Subtotal	6.692	10.825		39.239		34.403		-		34.403	-	-	-	
Test and Evaluation (\$ in Millions)				FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 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	NAWCAD : Patuxent River, MD	0.000	0.000		0.000		10.478	Dec 2017	-		10.478	174.872	185.350	185.350	
Developmental Test & Evaluation	WR	NAWCWD : China Lake , CA	0.000	0.000		0.000		1.050	Dec 2017	-		1.050	24.396	25.446	25.446	
Developmental Test & Evaluation Edwards/AFB	Various	Edwards AFB : Edwards AFB, CA	0.000	0.000		0.000		12.471	Dec 2017	-		12.471	289.067	301.538	301.538	
Developmental Test & Evaluation	Various	Various : Various	0.000	0.000		0.000		6.001	Dec 2017	-		6.001	57.087	63.088	63.088	
Delveopmental Test Aircraft Viability	C/CPFF	Lockheed Martin : Ft. Worth, TX	0.000	0.000		5.000	Dec 2017	134.000	Dec 2017	-		134.000	0.000	139.000	139.000	
		Subtotal	0.000	0.000		5.000		164.000		-		164.000	545.422	714.422	714.422	
Management Service	es (\$ in M	lillions)		FY 2	2016	FY 2	2017	FY 2	2018 ise		2018 CO	FY 2018 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	
Functional Wyle	C/CPFF	Wyle : Arlington, VA	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-	
AFLCMC Civilian Pay	Various	AFLCMC CIVPAY : Wright Patterson, AFB	0.000	0.000		30.550	Nov 2016	40.000	Nov 2017	-		40.000	231.610	302.160	302.160	

PE 0604810N: (U)Joint Strike Fighter Follow On Mod (F... Navy

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Navy

R-1 Program Element (Number/Name)

Project (Number/Name)

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Appropriation/Budget Activity

PE 0604810N I (U)Joint Strike Fighter Follow On Mod (FoM) - Navy

2936 I JSF Follow On Modernization - Navy

Date: May 2017

Management Service	vices (\$ in Millions)			FY 2016		FY 2	2017	FY 2 Ba	2018 ise		2018 CO	FY 2018 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
Program Management Support	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
Financial Mgmt Database Support IDS	Various	Various : Various	0.000	0.000		0.760	Nov 2016	0.800	Nov 2017	-		0.800	4.301	5.861	5.861
Earned Value/Finance/ Cost ACT-I	Various	Various : Various	0.000	0.000		0.000		3.178	Nov 2017	-		3.178	23.518	26.696	26.696
CIO BOS	Various	Various : Various	0.000	0.000		0.000		20.000	Nov 2017	-		20.000	95.066	115.066	115.066
Systems System High BOS	Various	Various : Various	0.000	0.000		0.000		9.336	Nov 2017	-		9.336	45.342	54.678	54.678
Other CIO Services	Various	Various : Various	0.000	0.000		0.000		4.739	Nov 2017	-		4.739	22.579	27.318	27.318
Travel	Various	Various : Various	0.000	0.000		0.119	Nov 2016	1.659	Nov 2017	-		1.659	8.569	10.347	10.347
Security Mantech	Various	Various : Various	0.000	0.000		0.000		0.000		-		0.000	0.000	0.000	-
	•	Subtotal	0.000	0.000		31.429		79.712		-		79.712	430.985	542.126	-

	Prior Years	FY 2	016 FY 2	2017	FY 2 Ba	 FY 2	 FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Subtotals	65.045	110.517	373.463		739.755	-	739.755	-	-	-
0207142F JSF Follow on Modernization	-	47.023	127.302		299.832	-	299.832			-
International Follow on Modernization	-	22.793	108.547		151.110	-	151.110			-
0604810M JSF Follow on Modernization	-	20.157	74.227		144.958	-	144.958			-
Project Cost Totals	65.045	20.544	63.387		143.855	-	143.855	0.000	0.000	-

Remarks

Subtotals and totals may not add due to rounding.

Prior Year reflects \$26.660M USAF/\$11.802M USN/\$11.586M USMC/\$14.997M International/Total \$65.045M FY 2016 reflects \$47.023M USAF/\$20.544M USN/\$20.157M USMC/\$22.793M International/Total \$110.517M FY 2017 reflects \$127.302M USAF/\$ 63.387M USN/\$74.227M USMC/\$108.547M International/Total \$373.463M FY 2018 reflects \$299.832M USAF/\$143.855M USN/\$144.958M USMC/\$151.110M International/Total \$739.755M

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

PE 0604810N: (U) Joint Strike Fighter Follow On Mod (F... Navy

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Exhibit R-3, RDT&E Project Cost Analysis: FY	2018 Navy	/				С	Date: May	/ 2017		
Appropriation/Budget Activity 1319 / 5			_	l ement (Number /l (U)Joint Strike Fig (FoM) - Navy	•	Project (Nu 2936 / JSF F		,	ernizatio	n - Navy
	Prior Years	FY 2016	FY 2017	FY 2018 Base				st To	Total Cost	Target Value o Contrac

JSF Follow on Modernization (FoM) Includes:
USAF PE 0207142F BPAC 675346
USN PE 0604810N Project Unit 2936
USMC PE 0604810M Project Unit 2935
USN PE 0604800N Project Unit 9999 (FY14): \$1.500
USMC PE 0604800M Project Unit 999 (FY14): \$1.500

Exhibit R-4, RDT&E Schedule Pr	отне): F	Y 2	018	ıvavı	/				1.										1.					: Ma			
Appropriation/Budget Activity 1319 / 5										I	PE C	604	gram El 4810N / (O <i>n Mod</i> ((U)Jc	int .	Strik	ke Fi			:	P roje 2936	ect / J	(Nu SF F	mbo Follo	er/Na ow O	m e) n Mo	der	nization - Na
Proj 2936	Τ	FY	201	6		FY	2017		FY	20	18		FY	201	9			FY	2020)	Τ	FY	202	1	1	FY 2	202	2
Requirements	10	2Q	3Q	4Q	1Q	2Q		4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	20	30	40	1Q	2Q	3Q	4Q
							CDD (JROC)																					
Acquisition	╁	╁	╁	\vdash		-		-		╁	\vdash			-	-						┤─	╁	╁	╁		Н	\dashv	
									EMD RFP Decision	1			EMD Contract Decision															
									IPR ◆				IPR ◆				IPR ♦				IPF				IPR			
Contracting		1	İ	Blo	ck 4 I	Pre-	Modern	izati	ion	İ					j		ВІ	ock	4 Mo	dern	ation	1		İ	j			
Systems Engineering					4.1 SRR				4.1 SFR					4.1 PDR					4.2 PDR									
Test & Evaluation	+	 	 			 				 				 	 			4.1	Test	-	 	 	+	+	4.2	Test	\dashv	
Fielding	<u> </u>	 	† 																	4.1 Flee Ava								4.2 Fleet Avail

2018PB - 0604810N - 2936

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Navy			Date: May 2017
1319 / 5	,	- , ,	umber/Name) Follow On Modernization - Navy

Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 2936				
Requirements: Final CDD (JROC)	3	2017	3	2017
Acquisition: Modernization RFP Decision	1	2018	1	2018
Acquisition: Modernization Contract Decision	1	2019	1	2019
Acquisition: Interim Program Review (IPR) FY18	1	2018	1	2018
Acquisition: Interim Program Review (IPR) FY19	1	2019	1	2019
Acquisition: Interim Program Review (IPR) FY20	1	2020	1	2020
Acquisition: Interim Program Review (IPR) FY21	1	2021	1	2021
Acquisition: Interim Program Review (IPR) FY22	1	2022	1	2022
Contracting: Block 4 Pre-Modernization	1	2016	2	2018
Contracting: Block 4 Modernization	3	2018	4	2022
Systems Engineering: 4.1 Preliminary Design Review (PDR)	2	2019	2	2019
Systems Engineering: 4.2 Preliminary Design Review (PDR)	3	2020	3	2020
Systems Engineering: 4.1 System Requirements Review (SRR)	1	2017	1	2017
Systems Engineering: 4.1 System Functional Review (SFR)	1	2018	1	2018
Test & Evaluation: Test & Evaluation: 4.1 Test	4	2019	4	2020
Test & Evaluation: Test & Evaluation: 4.2 Test	2	2021	4	2022
Fielding: Block 4.1 Fleet Availability	4	2020	4	2020
Fielding: Block 4.2 Fleet Availability	4	2022	4	2022