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Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Navy Date: February 2015

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
1319: Research, Development, Test & Evaluation, Navy I BA 7: Operational Systems Development					PE 0305234N I (U)SMALL (LEVEL 0) TACTICAL UAS (STUASLO)							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	59.476	5.033	4.813	4.647	-	4.647	5.276	5.266	5.258	5.365	Continuing	Continuing
3192: RQ-21 BLACKJACK	59.476	5.033	4.813	4.647	-	4.647	5.276	5.266	5.258	5.365	Continuing	Continuing

## A. Mission Description and Budget Item Justification

The RQ-21A BLACKJACK (formerly known as The Small Tactical Unmanned Aircraft System (STUAS)) is a combined United States Navy (USN) and United States Marine Corps (USMC) program that provides persistent maritime and land-based tactical Intelligence, Surveillance, and Reconnaissance/Target Acquisition support for tactical level maneuver decisions and unit level force defense/force protection for Naval amphibious assault ships (multi-ship classes) and Navy and Marine land forces. This system will support Naval Missions such as building the Recognized Maritime Picture, Maritime Security Operations, Maritime Interdiction Operations, and provide support for Naval Units operating from sea/shore in Overseas Contingency Operations. This submission is the USNs portion of the program and has been coordinated with the USMC budget submission PE 0305239M (RQ-21A).

The RQ-21A BLACKJACK system will continue to evolve and upgrade capabilities to satisfy capabilities shortfalls, new requirements, and reliability, maintainability and safety issues. Upgraded capabilities may include Navy Command and Control integration, Weapons Integration, Heavy Fuel Engine, Laser Designator, Frequency Agile Communications Relay, Digital Common Data Link, and cyclic refresh of the Electro-Optical/Infrared camera. RQ-21A BLACKJACK will also continue to expand its shipboard capability across new ship classes.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it includes development efforts to upgrade systems that have been fielded or have received approval for full-rate production and anticipate funding in the current or subsequent fiscal year.

<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>
Previous President's Budget	5.013	4.813	4.992	-	4.992
Current President's Budget	5.033	4.813	4.647	-	4.647
Total Adjustments	0.020	-	-0.345	-	-0.345
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.020	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	-	-	-
• Rate/Misc Adjustments	-	-	-0.345	-	-0.345

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<u>Change Summary Explanation</u> The FY 2016 funding request was reduced by \$308 thousand to account for the availability of prior year execution balances.  Schedule: Due to ship availability, Initial Operational Test and Evaluation (IOT&E) has been extended through 4QFY14; thereby extending correction of deficiencies and shifting the IOT&E final report into 1QFY15. Decrease in funding from FY15 to FY16 reflect rephasing of development funds to better align with revised program development schedule. Technical: N/A		

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy										Date: February 2015		
Appropriation/Budget Activity 1319 / 7					R-1 Program Element (Number/Name) PE 0305234N / (U)SMALL (LEVEL 0) TACTICAL UAS (STUASL0)				Project (Number/Name) 3192 / RQ-21 BLACKJACK			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
3192: RQ-21 BLACKJACK	59.476	5.033	4.813	4.647	-	4.647	5.276	5.266	5.258	5.365	Continuing	Continuing
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

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The RQ-21A BLACKJACK system will continue to evolve and upgrade capabilities to satisfy capabilities shortfalls, new requirements, and reliability, maintainability and safety issues. Upgraded capabilities may include Navy Command and Control integration, Weapons Integration, Heavy Fuel Engine, Laser Designator, Frequency Agile Communications Relay, Digital Common Data Link, and cyclic refresh of the Electro-Optical/Infrared camera. RQ-21A BLACKJACK will also continue to expand its shipboard capability across new ship classes.

**B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)**

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>
<b>Title:</b> Upgrade Efforts	1.520	1.700	1.673	-	1.673
<b>Articles:</b>	-	-	-	-	-
<b>Description:</b> Provide Upgrade Efforts					
<b>FY 2014 Accomplishments:</b> Corrected deficiencies found during Initial Operational Test and Evaluation (IOT&E) testing. Performed beyond line of sight demonstration. Completed documentation for United States Marine Corps (USMC) Initial Operating Capability. Successfully completed Operational Test Readiness Review. Delivered USMC Low Rate Initial Production 1 System.					
<b>FY 2015 Plans:</b> RQ-21A Blackjack will complete ship based IOT&E and continue correction of deficiencies. The program will continue software engineering and development for block software updates and begin development and					

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
integration of an advanced heavy fuel engine and fuselage upgrades to extend the maximum gross takeoff weight. <b>FY 2016 Base Plans:</b> RQ-21A Blackjack will continue correction of deficiencies based on the final FY15 Initial Operational Test and Evaluation (IOT&E) Report. The program will continue advanced heavy fuel engine integration and testing. Other upgrades include the cyclic refresh of the Electro-Optical/Infrared camera, associated turret system, communications relay package, and automated identification system. <b>FY 2016 OCO Plans:</b> N/A						
<b>Title:</b> Engineering and Technical Services  <b>Articles:</b>  <b>Description:</b> Provides for the Government Engineering Technical Support, Logistics Support, Test and Evaluation, other Government Support, Contractor Support Services, Program Management Support, Program related travel in support of the upgrade/payload efforts.  <b>FY 2014 Accomplishments:</b> Provided for the Government Engineering Technical Support, Logistics Support, Test and Evaluation, Other Government Support, Contractor Support Services, Program Management Support, Program related travel in support of IOT&E and the upgrade/payload efforts.  <b>FY 2015 Plans:</b> Will provide support for Government Engineering Technical Support, Logistics Support, Test and Evaluation, other Government support, Contractor Support Services, Program Management Support, and program related travel in support of upgrades and correction of deficiencies.  <b>FY 2016 Base Plans:</b> FY16 will continue FY15 support for Government Engineering Technical Support, Logistics Support, Test and Evaluation, Other Government Support, Contract Support Services, Program Management Support, and program related travel in support of correction of deficiencies and upgrade efforts.  <b>FY 2016 OCO Plans:</b> N/A		3.513 -	3.113 -	2.974 -	- -	2.974 -
Accomplishments/Planned Programs Subtotals		5.033	4.813	4.647	-	4.647

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

Line Item	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• RDTEN/0305239M: STUAS/RQ-21A	11.122	8.192	6.435	-	6.435	9.608	9.393	8.853	9.035	Continuing	Continuing
• PMC/473700: STUAS/RQ-21A	66.007	69.315	84.916	-	84.916	84.034	78.779	76.675	83.332	Continuing	Continuing
• PMC/7000: STUAS/RQ-21A Spares and Repair Parts	4.950	5.093	4.111	-	4.111	5.869	5.760	5.454	5.567	Continuing	Continuing
• APN/0444: STUAS/RQ-21A.	-	55.000	3.450	55.000	58.450	-	1.950	-	-	Continuing	Continuing

## Remarks

## D. Acquisition Strategy

The program office has utilized a competitive acquisition approach for award of the Engineering and Manufacturing Development effort to field a capability that meets threshold requirements. Low Rate Initial Production test article was utilized to successfully complete Initial Operational Test and Evaluation (IOT&E) and achieve Initial Operational Capability. Future upgrades and development shall be competitively sourced or procured via Government Laboratories with Insitu, the prime contractor, performing integration efforts as required.

## E. Performance Metrics

Attainment of Full Rate Production (FRP), correction of deficiencies from the IOT&E report, and attainment of USMC and USN Full Operational Capability (FOC) in accordance with the approved schedule.

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2016 Navy</b>													<b>Date:</b> February 2015		
<b>Appropriation/Budget Activity</b> 1319 / 7						<b>R-1 Program Element (Number/Name)</b> PE 0305234N / (U)SMALL (LEVEL 0) TACTICAL UAS (STUASL0)						<b>Project (Number/Name)</b> 3192 / RQ-21 BLACKJACK			
<b>Product Development (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Upgrade Efforts/Correction of Deficiencies	C/BOA	Insitu, Inc : Bingen, WA	0.000	1.520	Jan 2014	1.200	Jan 2015	1.093	Jan 2016	-		1.093	Continuing	Continuing	Continuing
Mission Training Device	MIPR	JTC/SIL : Redstone Arsenal, AL	2.136	-		0.500	Mar 2015	0.580	Mar 2016	-		0.580	-	3.216	3.216
Prior year cost no longer funded in the FYDP	Various	Various : Various	26.989	-		-		-		-		-	-	26.989	26.989
<b>Subtotal</b>			29.125	1.520		1.700		1.673		-		1.673	-	-	-
<b>Remarks</b> Product development corresponds to R-2A Upgrade Efforts.															
<b>Support (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Integrated Logistics Support	WR	NAWC-AD : Patuxent River, MD	4.034	0.487	Dec 2013	0.315	Dec 2014	-		-		-	Continuing	Continuing	Continuing
Training Support	WR	NAWC-TSD : Orlando, FL	2.886	0.420	Dec 2013	0.440	Dec 2014	0.440	Dec 2015	-		0.440	Continuing	Continuing	Continuing
Software Engineering Support	WR	NAWC-WD : China Lake, CA	5.970	1.200	Dec 2013	1.200	Dec 2014	1.200	Dec 2015	-		1.200	Continuing	Continuing	Continuing
Government Engineering Support	WR	NAWC-AD : Patuxent River, MD	10.529	0.610	Dec 2013	0.451	Dec 2014	0.392	Dec 2015	-		0.392	Continuing	Continuing	Continuing
<b>Subtotal</b>			23.419	2.717		2.406		2.032		-		2.032	-	-	-
<b>Remarks</b> Support is included within R-2A Engineering and Technical Services.															

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<b>Test and Evaluation (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Developmental Test & Evaluation	C/CPFF	OPTEVFOR : Norfolk, VA	2.353	0.175	Jul 2014	0.296	Jan 2015	0.385	Jan 2016	-		0.385	Continuing	Continuing	Continuing
Operational Test & Evaluation	WR	OPTEVFOR : Norfolk, VA	0.000	0.135	Mar 2014	-		0.135	Dec 2015	-		0.135	Continuing	Continuing	Continuing
<b>Subtotal</b>			2.353	0.310		0.296		0.520		-		0.520	-	-	-

**Remarks**  
Test and Evaluation is included within R-2A Engineering and Technical Services.

<b>Management Services (\$ in Millions)</b>				<b>FY 2014</b>		<b>FY 2015</b>		<b>FY 2016 Base</b>		<b>FY 2016 OCO</b>		<b>FY 2016 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Prior Years</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Contractor Engineering Support	MIPR	DTIC : FT. Belvoir, VA	2.120	0.236	Jan 2014	0.225	Mar 2015	0.225	Mar 2016	-		0.225	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Ausley : Patuxent River, MD	2.299	0.050	Dec 2013	-		-		-		-	Continuing	Continuing	Continuing
Program Management Support	C/CPFF	Bowhead : Patuxent River, MD	0.000	0.150	Feb 2014	0.138	Dec 2014	0.149	Feb 2016	-		0.149	Continuing	Continuing	Continuing
Travel	WR	Various : Various	0.160	0.050	Nov 2013	0.048	Nov 2014	0.048	Nov 2015	-		0.048	Continuing	Continuing	Continuing
<b>Subtotal</b>			4.579	0.486		0.411		0.422		-		0.422	-	-	-

**Remarks**  
Management Services is included within R-2A Engineering and Technical Services.

			<b>Prior Years</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Project Cost Totals</b>			59.476	5.033	4.813	4.647	-	4.647	-	-	-

**Remarks**

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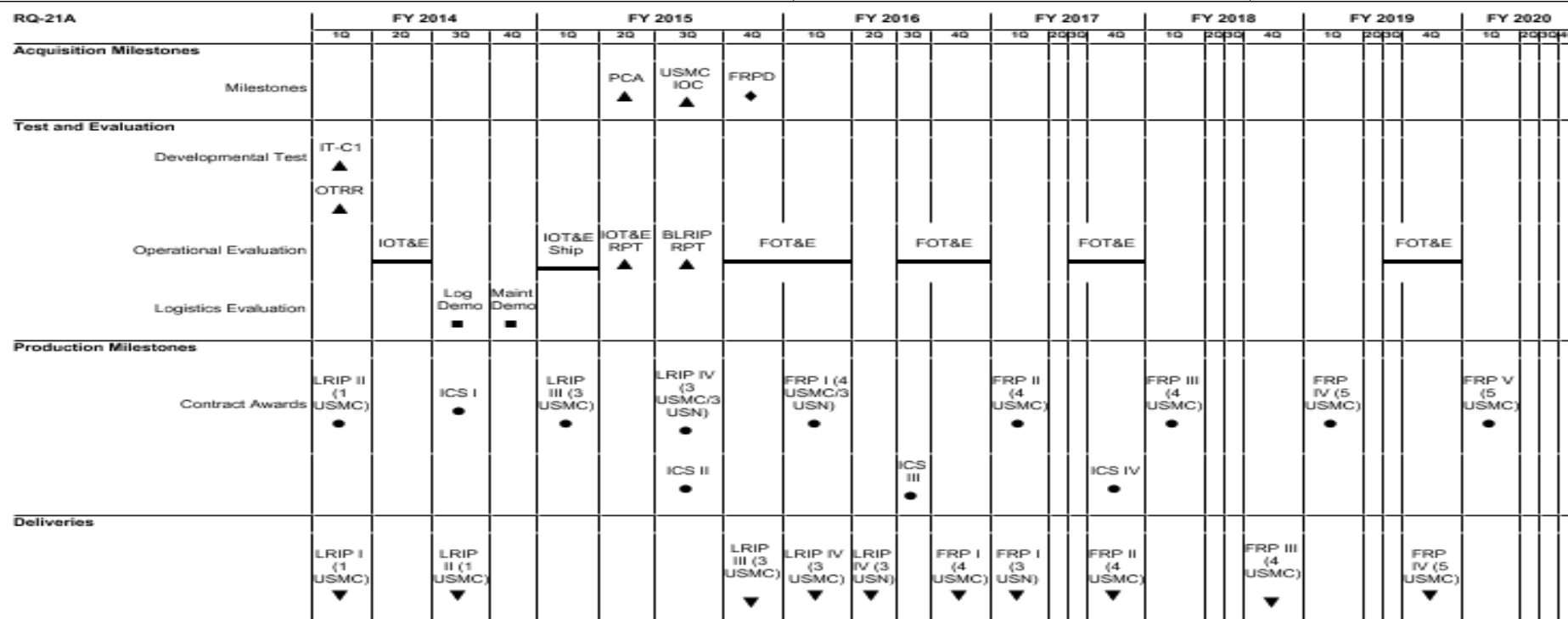
Exhibit R-4, RDT&E Schedule Profile: PB 2016 Navy

Date: February 2015

Appropriation/Budget Activity  
1319 / 7

R-1 Program Element (Number/Name)  
PE 0305234N / (U)SMALL (LEVEL 0)  
TACTICAL UAS (STUASL0)

Project (Number/Name)  
3192 / RQ-21 BLACKJACK



2016PB - 0305234N - 3192



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<b>Exhibit R-4A, RDT&amp;E Schedule Details:</b> PB 2016 Navy			<b>Date:</b> February 2015
<b>Appropriation/Budget Activity</b> 1319 / 7	<b>R-1 Program Element (Number/Name)</b> PE 0305234N / (U)SMALL (LEVEL 0) TACTICAL UAS (STUASL0)	<b>Project (Number/Name)</b> 3192 / RQ-21 BLACKJACK	

## Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<b>RQ-21A</b>				
Acquisition Milestones: Milestones: USMC Initial Operational Capability (IOC)	3	2015	3	2015
Acquisition Milestones: Milestones: Physical Configuration Audit	2	2015	2	2015
Acquisition Milestones: Milestones: Full-Rate Production Decision	4	2015	4	2015
Test and Evaluation: Developmental Test: Initial Testing - C1	1	2014	1	2014
Test and Evaluation: Developmental Test: Operational Test Readiness Review	1	2014	1	2014
Test and Evaluation: Operational Evaluation: Initial Operational Test & Evaluation (IOT&E)	2	2014	2	2014
Test and Evaluation: Operational Evaluation: IOT&E Report	2	2015	2	2015
Test and Evaluation: Operational Evaluation: Initial Operational Test & Evaluation (IOT&E) Ship	1	2015	1	2015
Test and Evaluation: Operational Evaluation: Beyond LRIP Report (BLRIP)	3	2015	3	2015
Test and Evaluation: Operational Evaluation: Follow-on Test and Evaluation 1	4	2015	1	2016
Test and Evaluation: Operational Evaluation: Follow-on Test and Evaluation 2	3	2016	4	2016
Test and Evaluation: Operational Evaluation: Follow-on Test and Evaluation 3	3	2017	4	2017
Test and Evaluation: Operational Evaluation: Follow-on Test and Evaluation 4	3	2019	4	2019
Test and Evaluation: Logistics Evaluation: Logistics Demonstration	3	2014	3	2014
Test and Evaluation: Logistics Evaluation: Maintenance Demonstration	4	2014	4	2014
Production Milestones: Contract Awards: LRIP Lot 2	1	2014	1	2014
Production Milestones: Contract Awards: LRIP Lot 3	1	2015	1	2015
Production Milestones: Contract Awards: LRIP Lot 4	3	2015	3	2015
Production Milestones: Contract Awards: Full-Rate Production Contract Award 1	1	2016	1	2016
Production Milestones: Contract Awards: Full-Rate Production Contract Award 2	1	2017	1	2017

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		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
Production Milestones: Contract Awards: Full-Rate Production Contract Award 3		1	2018	1	2018
Production Milestones: Contract Awards: Full-Rate Production Contract Award 4		1	2019	1	2019
Production Milestones: Contract Awards: Full-Rate Production Contract Award 5		1	2020	1	2020
Production Milestones: Contract Awards: ICS Contract Award 1		3	2014	3	2014
Production Milestones: Contract Awards: ICS Contract Award 2		3	2015	3	2015
Production Milestones: Contract Awards: ICS Option Award 1		3	2016	3	2016
Production Milestones: Contract Awards: ICS Option Award 2		4	2017	4	2017
Deliveries: LRIP Lot 1		1	2014	1	2014
Deliveries: LRIP Lot 2		3	2014	3	2014
Deliveries: LRIP Lot 3		4	2015	4	2015
Deliveries: LRIP Lot 4 USMC		1	2016	1	2016
Deliveries: LRIP Lot 4 USN		2	2016	2	2016
Deliveries: FRP Lot 1 USMC		4	2016	4	2016
Deliveries: FRP Lot 1 USN		1	2017	1	2017
Deliveries: FRP Lot 2		4	2017	4	2017
Deliveries: FRP Lot 3		4	2018	4	2018
Deliveries: FRP Lot 4		4	2019	4	2019