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 4: Advanced

PE 0604272N / Tact Air Dir Infrared CM (TADIRCM)

Component Development & Prototypes (ACD&P)

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	186.141	24.562	5.556	18.969	-	18.969	42.013	38.413	39.236	24.835	274.593	654.318
3302: <i>JATAS</i>	182.130	21.273	-	-	-	-	-	-	-	-	-	203.403
3304: CIRCM	4.011	3.289	5.556	18.969	-	18.969	42.013	38.413	39.236	24.835	274.593	450.915

#### Note

Navy

There is a FY14 \$20 million House Appropriations Committee (HAC), House Report 113-473, rescission and a FY14 \$14 million Senate Appropriations Committee (SAC), Senate Report 113-211, rescission against the Joint and Allied Threat Awareness System (JATAS) Project Unit (PU) 3302. The JATAS project ends in FY14 in accordance with the Acquisition Decision Memorandum (ADM) dated 7 Feb 2014.

## A. Mission Description and Budget Item Justification

NOTE: The cost to complete on exhibit R2 and R2a for project unit 3304 should be \$162.174 million. R-3 exhibit reflects the correct cost to complete and total cost.

This element includes development of electronic warfare systems for the United States Navy and United States Marine Corps assault aircraft. This includes the development and testing of advanced infrared countermeasures systems for emerging threats and emergency contingencies for Aircraft Self-Protection Equipment (ASE) suite integration. Realignment of project units from Tactical Aircraft Directed Infrared Countermeasures (TADIRCM) to JATAS began in FY11. Common infrared countermeasures was a new start for the Navy with efforts that began in FY13.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	33.906	5.657	43.440	<del>-</del>	43.440
Current President's Budget	24.562	5.556	18.969	-	18.969
Total Adjustments	-9.344	-0.101	-24.471	-	-24.471
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-0.101			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	5.374	-			
SBIR/STTR Transfer	-0.718	-			
Rate/Misc Adjustments	-	-	-24.471	-	-24.471
<ul> <li>Congressional Rescission Adjustments</li> </ul>	-14.000	-	-	-	-

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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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 4: Advanced	PE 0604272N I Tact Air Dir Infrared CM (TADIRCM)	
Component Development & Prototypes (ACD&P)		

## **Change Summary Explanation**

Schedule:

PU 3302 JATAS: Engineering Development Model (EDM) changed from 1st Qtr FY14 to 3rd Qtr FY14. The project ends in FY14 in accordance with the Acquisition Decision Memorandum (ADM). Remaining funds in FY15 will be realigned to CIRCM (PU 3304). All tasks after FY14 were removed from the schedule profile.

PU 3304 CIRCM: Changes made for Milestone B (MS-B) from 1st Qtr FY15 to 3rd Qtr FY15; Integrated Baseline Review Engineering Manufacturing Development (IBR EMD) from 2nd Qtr FY15 to 4th Qtr FY15; Critical Design Review (CDR) from 3rd Qtr FY15 to 1st Qtr FY16; Functional Configuration Audit (FCA) from 4th Qtr FY16 to 2nd Qtr FY17; Production Readiness Review (PRR) from 1st Qtr FY17 to 3rd Qtr FY17; Milestone C (MS-C) from 2nd Qtr FY17 to 4th Qtr FY17; Integrated Operational test & Evaluation (IOT&E) from 3rd Qtr FY17 through 4th Qtr FY18 to 4th Qtr FY18 through 4th Qtr FY19; Navy EMD Option from 2nd Qtr FY15 to 2nd Qtr FY16; Navy Development Test & Evaluation EMD (DT&E-EMD) from 2nd Qtr FY15 through 1st Qtr FY17 to 2nd Qtr FY16 through 2nd Qtr FY18; Navy Test Readiness Review (TRR) from 2nd Qtr FY16 to 2nd Qtr FY17; Navy EMD Test Articles from 1st Qtr FY16 to 2nd Qtr FY17. All tasks are on schedule and to be completed by the Army.

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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Exhibit R-2A, RDT&E Project Ju	Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy  Date: February 2015												
Appropriation/Budget Activity 1319 / 4						R-1 Program Element (Number/Name) PE 0604272N / Tact Air Dir Infrared CM (TADIRCM)				Project (Number/Name) 3302 / JATAS			
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	
3302: <i>JATAS</i>	182.130	21.273	-	-	-	-	-	-	-	-	-	203.403	
Quantity of RDT&E Articles		-	-	_	-	-	-	-	-	-			

#### Note

Navy

There is a FY14 \$20 million House Appropriations Committee (HAC), House Report 113-473, rescission and a FY14 \$14 million Senate Appropriations Committee (SAC), Senate Report 113-211, rescission against the Joint and Allied Threat Awareness System (JATAS) Project Unit (PU) 3302. The JATAS project ends in FY14 in accordance with the Acquisition Decision Memorandum (ADM) dated 7 Feb 2014.

## A. Mission Description and Budget Item Justification

The JATAS AN/AAR-59 system is required to provide assault aircraft with a reliable and improved surface-to-air Infrared (IR) missile/Hostile Fire Indication (HFI) threat detection system. This capability must provide accurate and timely warning in all flight regimes, ambient light conditions, clutter backgrounds and weather conditions. It must be capable of providing countermeasure cueing to flares and/or a Directional Infrared Countermeasures (DIRCM). JATAS will enable assault Aircraft Survivability Equipment (ASE) to detect and provide countermeasure cueing for current and emerging threats. Lead department of the Navy platform for this capability is the MV-22. Project was previously funded by the Tactical Aircraft Directed Infrared Countermeasure (TADIRCM) project unit. JATAS has been designated an Aquisition Category (ACAT) IC program.

PU 3302 JATAS began in FY11. Prior year efforts (FY08 - FY10) were funded via PU 3040 TADIRCM.

In FY12, JATAS was assigned a system nomenclature of AN/AAR-59.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title: Joint and Allied Threat Awareness System (JATAS AN/AAR-59) Engineering and Manufacturing Development (EMD)  Articles:	19.779	-	-	-	
<b>Description:</b> Engineering Manufacturing Development (EMD) phase and required program support for EMD phase.					
FY 2014 Accomplishments: Began Initial Test and Evaluation (IT&E).  FY 2015 Plans:					

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 4	PE 0604272N I Tact Air Dir Infrared CM	3302 / JATAS
	(TADIRCM)	

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
N/A					
FY 2016 Base Plans:					
N/A					
FY 2016 OCO Plans:					
N/A					
Title: Joint and Allied Threat Awareness System (JATAS AN/AAR-59) Integration	1.494	-	_	-	-
Articles	-	-	-	-	-
<b>Description:</b> Provide platform integration support and JATAS A-kit development.					
FY 2014 Accomplishments:					
Began Integrated Test and Evaluation (IT&E).					
FY 2015 Plans:					
The project ends in FY14 in accordance with the Acquisition Decision Memorandum (ADM).					
FY 2016 Base Plans:					
N/A					
FY 2016 OCO Plans:					
N/A					
Accomplishments/Planned Programs Subtotals	21.273	-	-	_	_

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

N/A

Navy

Remarks

# D. Acquisition Strategy

A JATAS Capabilities Development Document (CDD) was approved in a Joint Requirements Oversight Council Memorandum dated 18 February 2011. Per the CDD, the JATAS will be an advanced Missile Warning System (MWS) designed to replace the legacy AN/AAR-47(V) MWS and increase the survivability of Marine Corps and Navy tilt-rotor and rotary wing aircraft against infrared threats. Additionally, the system will provide aircrew with warnings of laser-enabled weapon systems such as range finders, illuminators, and beam riders. The JATAS will interface with existing AN/ALE-47 Countermeasures Dispensing System, existing AN/APR-39 Radar Warning Receiver, existing Department of the Navy Large Aircraft Infrared Countermeasure system, and other compatible directed infrared countermeasures systems as part of an integrated electronic countermeasures response to attacking infrared missiles. Additionally, the JATAS will provide Hostile Fire Indication (HFI) of small arms,

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy	Date: February 2015		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 4	PE 0604272N I Tact Air Dir Infrared CM	3302 / JAT	AS
	(TADIRCM)		

rockets and other unguided threats and provide situational awareness in visually degraded environments. Per the CDD, JATAS was developed into two increments. Increment I (Phase I) includes the missile and laser warning capabilities and cueing of countermeasure systems. Increment I (Phase II) adds Hostile Fire Indication (HFI) capability against type I and III threats during the Engineering and Manufacturing Development (EMD) phase of this program. Increment II will develop HFI capability against type II threats. The Joint and Allied Threat Awareness System (JATAS) EMD phase is being executed via a Fixed Price Incentive Firm (FPIF) contract over an approximate 48-month period of performance, with one FPIF option for the low-rate initial production lot and Firm-Fixed Price (FFP) options for the first seven full-rate production lots. A JATAS technology development phase contract was awarded in FY09 and the EMD contract was awarded in 4th Quarter FY11. 8 test articles were developed for various test events in FY13. There is an FY14 \$20 million House Appropriations Committee (HAC), House Report 113-473, rescission and a FY14 million Senate Appropriations Committee (SAC), Senate Report 113-211, rescission against JATAS Project Unit (PU) 3302. The JATAS project ends in FY14 in accordance with the Acquisition Decision Memorandum (ADM) dated 7 Feb 2014.

### **E. Performance Metrics**

JATAS EMD contract awarded in fourth quarter FY11.
JATAS Integrated Baseline Review (IBR) was approved 2nd Quarter FY12

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

R-1 Program Element (Number/Name)

Project (Number/Name)

Date: February 2015

1319 / 4

Appropriation/Budget Activity

PE 0604272N I Tact Air Dir Infrared CM (TADIRCM)

3302 *I JATAS* 

Product Development (\$ in Millions)		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 \	Target Value of Contract
Primary Hdw Dev JATAS II	C/FPIF	ATK : Clearwater, FL	100.721	-	Nov 2013	-		-		-		-	-	100.721	113.991
Aircraft Integration JATAS II	C/CPIF	Bell-Boeing : Philadelphia, PA	15.727	1.229	Feb 2014	-		-		-		-	-	16.956	24.872
Modeling/Simulation JATAS	WR	NAWCWD : Point Mugu, CA	0.426	-		-		-		-		-	-	0.426	-
Sys Eng Govt JATAS	WR	NAWCAD : Pax River, MD	6.197	2.102	Dec 2013	-		-		-		-	-	8.299	-
Sys Eng Govt JATAS	WR	FRC : Jacksonville, FL	0.168	0.075	Dec 2013	-		-		-		-	-	0.243	-
Prior years Prod Dev no longer funded in the FYDP	Various	Various : Various	14.339	-		-		-		-		-	-	14.339	-
JATAS cancelled	TBD	TBD : TBD	0.000	-		-		-		-		-	-	-	-
		Subtotal	137.578	3.406		-		-		-		_	-	140.984	-

#### Remarks

Target value of Bell-Boeing aircraft integration JATAS II contract is shared with another program office.

Support (\$ in Millions)		FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Configuration Mgmt JATAS	WR	NAWCAD : Pax River, MD	0.244	-		-		-		-		-	-	0.244	-
Integrated Logistics JATAS	WR	Various : Various	1.714	0.413	Dec 2013	-		-		-		-	-	2.127	-
SW Dev JATAS	WR	NAWCWD : Point Mugu, CA	2.268	0.937	Dec 2013	-		-		-		-	-	3.205	-
		Subtotal	4.226	1.350		-		-		-		-	-	5.576	-

PE 0604272N: *Tact Air Dir Infrared CM (TADIRCM)* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

R-1 Program Element (Number/Name)

Date: February 2015

Appropriation/Budget Activity 1319 / 4

PE 0604272N / Tact Air Dir Infrared CM

Project (Number/Name) 3302 *I JÀTAS* 

(	IAD	IK	CI	VI)

Test and Evaluation	(\$ in Milli	ons)		FY 2	014 FY 2		2015		2016 ise		2016 CO	FY 2016 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
Developmental T&E JATAS Govt	WR	Various : Various	11.538	5.180	Dec 2013	-		-		-		-	-	16.718	-
Operational T&E JATAS	WR	COTF : Norfolk, VA	0.410	0.419	Jan 2014	-		-		-		-	-	0.829	-
ENG & Eval JATAS	C/CPFF	Various : Various	0.617	0.683	Dec 2013	-		-		-		-	-	1.300	1.300
ENG & Eval Govt JATAS	WR	Various : Various	2.749	3.401	Jan 2014	-		-		-		-	-	6.150	-
Test Assets JATAS	WR	NAWCWD : China Lake, CA	4.436	-		-		-		-		-	-	4.436	-
Developmental T&E JATAS	C/CPFF	NRL : Washington, DC	6.447	2.000	Dec 2013	-		-		-		-	-	8.447	8.447
Developmental T&E JATAS Govt	WR	NAWCWD : China Lake, CA	0.000	1.060	Dec 2013	-		-		-		-	-	1.060	-
ENG & Eval Govt JATAS	WR	NRL : Washington, DC	0.000	1.062	Dec 2013	-		-		-		-	-	1.062	-
		Subtotal	26.197	13.805		-		-		-		-	-	40.002	-

Management Service	s (\$ in M	illions)		FY:	2014	FY 2	2015		2016 ise	FY 2	2016 CO	FY 2016 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
Contractor Eng Supt JATAS	C/CPFF	Various : Various	1.810	0.225	Dec 2013	-		-		-		-	-	2.035	2.035
Govt Eng Supt JATAS	WR	NAWCWD : Point Mugu, CA	5.048	0.717	Dec 2013	-		-		-		-	-	5.765	-
Program Mgmt Supt JATAS	C/CPFF	Various : Various	4.362	1.150	Dec 2013	-		-		-		-	-	5.512	5.512
Travel JATAS	WR	NAVAIR : Various	0.450	0.120	Dec 2013	-		-		-		-	-	0.570	-
Cost Analysis Supt JATAS	WR	NAWCAD : Pax River, MD	1.853	0.500	Dec 2013	-		-		-		-	-	2.353	-
NAWCAD Pax Supt JATAS	WR	NAWCAD : Pax River, MD	0.590	-		-		-		-		-	-	0.590	-

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM) Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy		Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
1319 / 4	PE 0604272N I Tact Air Dir Infrared CM	3302 / JATAS
	(TADIRCM)	

Management Service	s (\$ in M	illions)		FY 2	2014	FY	2015		2016 ase		2016 CO	FY 2016 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
Prior year Mgmt Serv no longer funded in the FYDP	Various	Various : Various	0.016	-		-		-		-		-	-	0.016	-
		Subtotal	14.129	2.712		-		-		-		-	-	16.841	-
															Target

	Prior Years	FY 2014	FY	2015	FY 2 Ba	FY 2016 OCO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	182.130	21.273	-		-	-	-	-	203.403	-

**Remarks** 

PE 0604272N: *Tact Air Dir Infrared CM (TADIRCM)* Navy

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Exhibit R-4, RDT&E Sch	nedule Profi	ile: F	PB 2	016 N	avy																			I	Date	: Feb	oruai	ry 20	15
Appropriation/Budget A 1319 / 4	ctivity										P	<b>-1 P</b> ı E 06 <i>ADII</i>	0427	2N /						ime) CM				(Nu IATA		er/Na	me)		
Proj 3302			FY	2014			FY 2	2015			FY :	2016			FY 2	017			FY 2	2018			FY 2	2019			FY 2	2020	
	Deliveries	1Q	2Q	3Q EDM (2) ▼	4Q	1Q	2Q	3Q	4Q	10	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q

2016PB - 0604272N - 3302

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
	3	Project (N 3302 / JAT	umber/Name) AS

# Schedule Details

	St	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Proj 3302				
Deliveries: Engineering Development Model (EDM) Deliveries (2)	3	2014	3	2014

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2016 N	lavy							Date: Febr	uary 2015	
Appropriation/Budget Activity 1319 / 4					_	am Elemen 72N / Tact A 1)	•	Number/Name) RCM				
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
3304: CIRCM	4.011	3.289	5.556	18.969	-	18.969	42.013	38.413	39.236	24.835	274.593	450.915
Quantity of RDT&E Articles		-	-	-	-	-	-	-	-	-		

## A. Mission Description and Budget Item Justification

Common Infrared Countermeasures (CIRCM) was a new start for the Navy in FY13. This project includes the development, integration, and testing of a laser-based directed infrared countermeasure system for United States Navy and United States Marine Corps assault aircraft. This infrared countermeasure, when integrated with a missile warning detection system, will be capable of countering current and emerging infrared threats. An Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) Acquisition Decision Memorandum (ADM) dated 15 April 2009 designated the Army as the lead service for developing this capability for all rotary-wing, tilt-rotor, and small fixed-wing aircraft across the Department of Defense. It also designated the program as an Aquisition Category (ACAT) ID special interest program. The Army has designated the acquisition effort for this capability as the CIRCM program. Developmental activities in hardware and software will be pursued to reduce the size, weight and power required to achieve a missile warning detection system integrated with an infrared countermeasure. This project develops integrated hardware/software solutions that link on-board integrated Aircraft Survivability Equipment (iASE) that are compatible with mission planning information and stores sensor data for post mission threat analysis. This project also adopts future multi-band, networking capabilities to facilitate real-time transfer of threat information, and off-board queuing and control of onboard sensors.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2016	FY 2016	FY 2016
	FY 2014	FY 2015	Base	OCO	Total
Title: CIRCM Technology Development (TD)	3.289	5.556	18.969	-	18.969
Articles:	_	-	-	-	-
FY 2014 Accomplishments:					
Continue to support TD phase and program support for CIRCM.					
FY 2015 Plans:					
Achieve MS-B; Engineering Manufacturing Development (EMD) contract award.					
FY 2016 Base Plans:					
Begin Development Test and Evaluation (DT&E) phase of the EMD.					
FY 2016 OCO Plans:					
N/A					
Accomplishments/Planned Programs Subtotals	3.289	5.556	18.969	-	18.969

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

N/A

Navy

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Navy			Date: February 2015
1319 / 4	3 (	Project (N 3304 / CIR	umber/Name) PCM

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

#### Remarks

## D. Acquisition Strategy

Common Infrared Countermeasures (CIRCM) was a new start for the Navy in FY13. CIRCM is an Aquisition Category (ACAT) ID Army lead acquisition program for the development, integration and production of an infrared countermeasure for US Army, US Navy, and US Marine Corps assault aircraft. The Army conducted a 21 month competitive prototyping Technology Development (TD) phase with two contractors. During the TD phase the contractors developed TD test articles for various test events with emphasis placed on reliability. Contractors concurrently developed preliminary designs for the CIRCM system; conducted systems requirements review, system functional review, and preliminary design review systems engineering technical review events at appropriate times in the schedule. Upon completion of TD, the Army conducted a competition for award of Engineering Manufacturing Development (EMD) contract(s). The EMD phase will be no more than 26 months and will include critical design reviews, test readiness reviews, 5 EMD test articles and extensive testing. Following EMD there will be Low Rate Initial Production (LRIP) phase where full qualification testing is conducted to support an Army first unit equipped date of FY18. There will be 8 Navy LRIP units delivered in FY18. The Navy's Initial Operational Capability (IOC) will be in FY20.

## E. Performance Metrics

FY15:

Successful critical design reviews. Successful EMD contract award by US Army.

FY16:

Navy

Successful exercise of Navy option on Army EMD contract for EMD test assets.

PE 0604272N: Tact Air Dir Infrared CM (TADIRCM)

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

R-1 Program Element (Number/Name)

Project (Number/Name)

Date: February 2015

Appropriation/Budget Activity 1319 / 4

PE 0604272N I Tact Air Dir Infrared CM

3304 *I CIRCM* 

(TADIRCM)

Product Developmen	ıt (\$ in Mi	illions)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 se	FY 2		FY 2016 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 HDW Dev CIRCM	C/CPIF	Bell-Boeing : Philadelphia, PA	0.000	0.985	Dec 2013	-		15.181	Dec 2015	-		15.181	248.202	264.368	264.561
Sys Eng Govt CIRCM	WR	NAWCAD : Pax River, MD	2.000	0.847	Dec 2013	-		0.871	Dec 2015	-		0.871	18.304	22.022	-
Contractor Eng Supt CIRCM	C/CPFF	Various : Various	0.000	-		2.904	Mar 2015	-		-		-	-	2.904	2.904
		Subtotal	2.000	1.832		2.904		16.052		-		16.052	266.506	289.294	-

## Remarks

Target value of Bell-Boeing primary hardware development contract is shared with Army.

Support (\$ in Millions)				FY 2	2014	FY 2	2015		2016 ise	FY 2	2016 CO	FY 2016 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
Integrated Logistics CIRCM I	WR	Various : Various	0.310	0.210	Dec 2013	0.210	Dec 2014	0.316	Dec 2015	-		0.316	4.184	5.230	-
Integrated Logistics CIRCM II	C/CPFF	Wyle Labs : Huntsville, AL	0.163	0.100	Jun 2014	0.100	Dec 2014	0.102	Mar 2016	-		0.102	4.398	4.863	4.863
SW Dev CIRCM	WR	NAWCWD : Various	0.118	0.120	Dec 2013	0.143	Dec 2014	0.146	Dec 2015	-		0.146	5.366	5.893	-
		Subtotal	0.591	0.430		0.453		0.564		-		0.564	13.948	15.986	-

Test and Evaluation (	(\$ in Milli	ons)		FY 2	2014	FY 2	2015	FY 2 Ba	2016 ise	FY 2	2016 CO	FY 2016 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
Eng & Eval CIRCM	C/CPFF	Various : Various	0.206	0.110	Dec 2013	-		0.112	Dec 2015	-		0.112	2.286	2.714	2.714
Eng & Eval Govt CIRCM	WR	Various : Various	0.489	0.375	Jan 2014	1.000	Dec 2014	1.019	Jan 2016	-		1.019	8.012	10.895	-
		Subtotal	0.695	0.485		1.000		1.131		-		1.131	10.298	13.609	-

PE 0604272N: *Tact Air Dir Infrared CM (TADIRCM)* Navy

UNCLASSIFIED
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Navy

Appropriation/Budget Activity
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R-1 Program Element (Number/Name)
PE 0604272N / Tact Air Dir Infrared CM (TADIRCM)

3304 / CIRCM

Test and Evaluation	(\$ in Milli	ons)		FY	2014	FY	2015		2016 ase		2016 CO	FY 2016 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

#### Remarks

Target value of CIRCM systems engineering and evaluation contract is shared with Army.

Management Service	anagement Services (\$ in Millions)			FY 2014		FY 2	2015	FY 2 Ba			2016 CO	FY 2016 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
Contractor Eng Supt CIRCM	C/CPFF	Various : Various	0.318	0.240	Dec 2013	0.245	Mar 2015	0.250	Mar 2016	-		0.250	2.316	3.369	3.369
Govt Eng Supt CIRCM	WR	NAWCWD : Point Mugu, CA	0.118	0.125	Dec 2013	0.523	Dec 2014	0.533	Dec 2015	-		0.533	9.717	11.016	-
Travel CIRCM	WR	NAVAIR : Various	0.063	0.027	Dec 2013	0.200	Dec 2014	0.204	Dec 2015	-		0.204	0.871	1.365	-
Cost Analysis Supt CIRCM	WR	NAWCAD : Pax River, MD	0.226	0.150	Dec 2013	0.231	Dec 2014	0.235	Dec 2015	-		0.235	3.015	3.857	-
		Subtotal	0.725	0.542		1.199		1.222		-		1.222	15.919	19.607	-

#### Remarks

Target value of CIRCM contractor engineering support contract is shared with Army.

	Prior				FY 2	2016	EV.	2016	FY 2016	Cost To	Total	Target Value of
	Years	FY 2014	FY 2	2015		ise		CO		Complete	Cost	Contract
Project Cost Totals	4.011	3.289	5.556		18.969		-		18.969	306.671	338.496	-

Remarks

PE 0604272N: *Tact Air Dir Infrared CM (TADIRCM)* Navy

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Exhibit R-4, RDT&E Schedule Protophysical Repropriation/Budget Activity									Ti	D_1 D	roc	ram	FI	mor	+ /N:	mber	/Na	mo,		Dro	inct			e: Fe er/Na				
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Exhibit R-4A, RDT&E Schedule Details: PB 2016 Navy			Date: February 2015
' ' '	R-1 Program Element (Number/Name) PE 0604272N I Tact Air Dir Infrared CM (TADIRCM)	Project (N 3304 / CIR	umber/Name) PCM

# Schedule Details

	Sta	art	En	d
Events by Sub Project	Quarter	Year	Quarter	Year
CIRCM				
Acquisition Milestones: Milestones B (MS-B)	3	2015	3	2015
Acquisition Milestones: Milestone C (MS-C)	4	2017	4	2017
Acquisition Milestones: Milestones: Common Infrared Countermeasures (CIRCM) Initial Operational Capability (IOC)	4	2020	4	2020
Systems Development: Technical Readiness Assessment (TRA)	1	2014	3	2014
Systems Development: Technical Readiness Assessment Final Report (TRA FR)	3	2014	3	2014
Systems Development: Functional Configuration Audit (FCA)	2	2017	2	2017
Systems Development: Reviews: Integrated Baseline Review (IBR EMD)	4	2015	4	2015
Systems Development: Reviews: Critical Design Review (CDR)	1	2016	1	2016
Systems Development: Reviews: Production Readiness Review (PRR)	3	2017	3	2017
Test & Evaluation: Developmental Test & Evaluation - TD (DT&E-TD)	1	2014	2	2014
Test & Evaluation: Developmental Test & Evaluation - EMD (DT&E-EMD)	2	2016	2	2018
Test & Evaluation: Navy Test Readiness Review (TRR)	2	2017	2	2017
Test & Evaluation: Technical Evaluation: Integrated Operational Test & Evaluation (IOT&E)	4	2018	4	2019
Production Milestones: Contract Awards: Navy EMD Option Contract Award	2	2016	2	2016
Production Milestones: Contract Awards: Navy LRIP Option	4	2017	4	2017
Production Milestones: Deliveries: EMD Test Article Deliveries	2	2017	2	2017
Production Milestones: Deliveries: Navy LRIP Units	4	2018	4	2018