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

R-1 Program Element (Number/Name)

Appropriation/Budget Activity

1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)

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

Date: March 2014

COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	119.945	66.196	33.906	5.657	-	5.657	43.440	42.210	38.580	39.365	169.438	558.737
3302: <i>JATAS</i>	119.945	62.185	30.584	0.101	-	0.101	-	-	-	-	-	212.815
3304: CIRCM	0.000	4.011	3.322	5.556	-	5.556	43.440	42.210	38.580	39.365	169.438	345.922

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

NOTE: The Cost to Complete on Exhibit R2 and R2a for project unit 3304 should be \$186.548M. 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 and strike aircraft. This includes the development and testing of advanced Infrared Countermeasures systems for emerging threats and emergency contingencies for Aircraft Self-Protection Equipement (ASE) Suite Integration. Realignment of project units from Tactical Aircraft Directed Infrared Countermeasures to Joint and Allied Threat Awareness System began in FY 2011. Common Infrared Countermeasures is a new start for the Navy with efforts that began in FY 2013.

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 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	73.934	37.227	38.092	-	38.092
Current President's Budget	66.196	33.906	5.657	-	5.657
Total Adjustments	-7.738	-3.321	-32.435	-	-32.435
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-3.321			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
 SBIR/STTR Transfer 	-1.790	-			
 Program Adjustments 	-	-	-0.339	-	-0.339
 Rate/Misc Adjustments 	-	-	-32.096	-	-32.096
 Congressional General Reductions Adjustments 	-5.948	-	-	-	-
Aujustinents					

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

UNCLASSIFIED Page 1 of 9

R-1 Line #76

Navy

U	NCLASSIFIED	
Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 Program Element (Number/Name) PE 0604272N / Tact Air Dir Infrared CM (TADIRCM)	
Change Summary Explanation Technical: Not Applicable.		
3302 JATAS Funding and Schedule: The program ends in FY 2014 in 2015 will be realigned to CIRCM (PU 3304). All tasks after FY 2014 w		(ADM). Remaining funds in FY
3304 CIRCM Schedule: A-Kit qualifications for CIRCM H-1 IOT&E cha 2019. B-Kit qualifications for CIRCM H-1 IOT&E changed from 2nd Qt tasks are on schedule and to be completed by the Army.		

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

UNCLASSIFIED Page 2 of 9

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2015 N	lavy							Date: Mar	ch 2014		
Appropriation/Budget Activity 1319 / 4					_	am Elemen 72N / Tact A 1)	•	•	Project (Number/Name) 3302 / JATAS				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 FY 2015 CCO # Total FY 2016 FY 2017				FY 2018	FY 2019	Cost To Complete	Total Cost	
3302: <i>JATAS</i>	119.945	62.185	30.584	0.101	-	0.101	-	-	-	-	-	212.815	
Quantity of RDT&E Articles	0.000	8.000	-	-	-	-	-	_	-	-			

^{*}The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Joint and Allied Threat Awareness System (JATAS AN/AAR-59) 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 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 ACAT IC program.

PU 3302 JATAS began in FY 2011. Prior year efforts (FY 2008 - FY 2010) were funded via PU 3040 TADIRCM.

In FY 2012, JATAS has been assigned a system nomenclature of AN/AAR-59.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Joint and Allied Threat Awareness System (JATAS AN/AAR-59) EMD	54.185	29.090	-
Articles:	-	-	-
Description: Continue Engineering and Manufacturing Development (EMD) phase and provide required program support for EMD phase.			
FY 2013 Accomplishments: Conducted Government Test Readiness Review and Maintenance Demonstration.			
FY 2014 Plans: Begin Initial Test and Evaluation (IT&E).			
FY 2015 Plans: N/A			
Title: Joint and Allied Threat Awareness System (JATAS AN/AAR-59) Integration	8.000	1.494	0.101
Articles:	8.000	-	-

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

Navy Page 3 of 9

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy			Date: March 2014
' ' '	,	Project (N 3302 / JAT	umber/Name) AS

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Description: Provide platform integration support and JATAS A-kit development.			
FY 2013 Accomplishments: Completed development of A-kits to support Initial Test & Evaluation (IT&E) in FY14.			
FY 2014 Plans: Begin IT&E.			
FY 2015 Plans: The program ends in FY 2014 in accordance with the Acquisition Decision Memorandum (ADM). Remaining funds in FY 2015 will be realigned to CIRCM (PU 3304).	I		
Accomplishments/Planned Programs Subtota	l s 62.185	30.584	0.101

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

N/A

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, 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 HFI capability against Type I and III threats during the Engineering and Manufacturing Development phase of this program. Increment II will develop HFI capability against Type II threats. The Joint and Allied Threat Awareness System (JATAS) Engineering and Manufacturing Development (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 FY2009 and the EMD contract was awarded in 4th Quarter FY2011. 8 test articles were developed for various test events in FY 2013.

E. Performance Metrics

Navy

JATAS EMD contract awarded in fourth quarter FY 2011.

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

Page 4 of 9

Exhibit R-2A, RDT&E Project Justification: PB 2015 N	Date: March 2014	
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604272N / Tact Air Dir Infrared CM (TADIRCM)	Project (Number/Name) 3302 / JATAS
JATAS Integrated Baseline Review (IBR) was approved	2nd Quarter FY 2012.	

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

UNCLASSIFIED
Page 5 of 9

xhibit R-4, RDT&E Schedule Prof	ile: P	B 201	5 Na	avy																			Da	te: N	Marc	:h 20)14	
Appropriation/Budget Activity 1319 / 4					PE								roject (Number/Name) 302 / JATAS															
JATAS		FY 2013			F	FY 2014				FY 2015				FY 2016				FY 2	2017		FY 2018				FY 2019			
	1Q	2Q	3Q	4Q	1Q	2Q	30	40	1Q	2Q	3Q	4Q	1Q	2Q	зQ	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquisition Milestones																												
Hardware Development																												
Software Development																												
Reviews		TRR Cont		TRR Govt																								
Production Milestones							╎	✝																				
Contract Awards			İ			İ	İ	İ		İ	İ	İ		İ	İ	İ			İİ			İ	İ			İ	İ	İ
Deliveries																												
	EDM (1) ▼																											
	EDM (3) ▼			EDM (2)	EDM.(2) ▼																							
2015PB - 0604272N - 3302	I	I	ı	I	I	ı	ı	1	1	I	ı	ı	I	ı	ı	ı	I	I		l	I	ı	ı	ı	ı	I	I	

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy											Date: March 2014			
Appropriation/Budget Activity 1319 / 4					_	am Elemen 72N / Tact A 1)	•	Project (Number/Name) 3304 / CIRCM						
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 FY 2015 Total FY 2016 FY 2017				FY 2018	FY 2019	Cost To Complete	Total Cost		
3304: CIRCM	-	4.011	3.322	5.556	-	5.556	43.440	42.210	38.580	39.365	169.438	345.922		
Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-				

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Common Infrared Countermeasures (CIRCM) was a new start for the Navy. 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 IR threats. An USD (AT&L) Acquisition Decision Memorandum dated 15 April 09 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 ACAT ID Special Interest program. The Army has designated the acquisition effort for this capability as the CIRCM program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: CIRCM Technology Development (TD)	4.011	3.322	5.556
Articles:	-	-	-
FY 2013 Accomplishments:			
Support TD phase and program support for CIRCM.			
FY 2014 Plans:			
Continue to Support TD phase and program support for CIRCM.			
FY 2015 Plans:			
Achieve MS-B; Engineering Manufacturing Development contract award.			
Accomplishments/Planned Programs Subtotals	4.011	3.322	5.556

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

N/A

Navy

Remarks

D. Acquisition Strategy

CIRCM was a New Start for the Navy. CIRCM is an ACAT-ID Army lead acquisition program for the development, integration and production of an Infra-red Countermeasure for US Army, US Navy, and US Marine Corps assault aircraft. The Army is conducting a 21 month competitive prototyping TD phase with two contractors. During this time the contractors will develop twelve test articles for various test events with emphasis placed on reliability in FY 2016. Contractor(s) will concurrently develop preliminary designs for the CIRCM system; conduct Systems Requirements Review, System Functional Review, and Preliminary Design

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

UNCLASSIFIED
Page 7 of 9

Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy	Date: March 2014		
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
1319 / 4	PE 0604272N I Tact Air Dir Infrared CM	3304 <i>I CIR</i>	CM
	(TADIRCM)		
D . O . E F	U I I I I I I I CTD U A		landa a caracteria de la companya de la companya de la companya de la companya de la companya de la companya de

Review Systems Engineering Technical Review events at appropriate times in the schedule. Upon completion of TD, the Army will conduct 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, EMD test assets and extensive testing. Following EMD there will be a yet to be defined Low Rate Initial Production phase where full qualification testing is conducted to support a First Unit Equipped date of FY 2018.

E. Performance Metrics

FY 2013:

Navy

Successful demonstration of Common Infrared Countermeasures-Joint and Allied Threat Awareness System (CIRCM-JATAS) Initial Capabilities Document Interoperability in Lab environment. Successful award of Engineering and Manufacturing Develoment (EMD) contract(s). FY 2014:

Successful Critical Design Reviews and Technical Readiness Reviews

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

Page 8 of 9

Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy Date: March 2014 Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name) PE 0604272N I Tact Air Dir Infrared CM 1319 / 4 3304 I CIRCM (TADIRCM) CIRCM FY 2013 FY 2014 FY 2017 FY 2019 FY 2015 FY 2016 FY 2018 1Q 10(20) 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 10, 20, 30, 40, 2Q 3Q 4Q Acquisition Milestones MS-B MS-C Milestones • • Systems Development TRA TRA PR FR Hardware Development Software Development SFR PDR CDR PRR EMD Reviews Test & Evaluation DT&E-TD DT&E-EMD A-Kit Qual B-Kit Qual IOT&E Technical Evaluation Operational Evaluation Production Milestones RIP RIP EMD Contract Awards Prototype Deliveries Prototype Prototype Test Test Ш Art I Art II ▾ Test Art Ш 2015PB - 0604272N - 3304

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

UNCLASSIFIED
Page 9 of 9