#### UNCLASSIFIED

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

**Date:** May 2017

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

3600: Research, Development, Test & Evaluation, Air Force I BA 7:

PE 0207412F I Control and Reporting Center (CRC)

Operational Systems Development

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	-	0.557	13.292	2.450	0.000	2.450	0.009	9.484	13.191	9.849	Continuing	Continuing	
67485L: Theater Air Control System Imp (TACSI)	-	0.557	13.292	2.450	0.000	2.450	0.009	9.484	13.191	9.849	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

### A. Mission Description and Budget Item Justification

PE 0207412F CONTROL AND REPORTING CENTER (CRC)

The CRC is a mobile, ground-based theater air control system (TACS) surveillance and battle management command and control (BMC2) element. It is a customizable, modular, transportable, and persistent weapon system employed at the tactical level to support air and surface operations to provide direct command and control to all air assets in an assigned Area of Responsibility (AOR) and to report back to the Joint Force Air Combat Commander (JFACC). The CRC is a family of systems which include: AN/TYQ-23A(V)1 Tactical Air Operations Module (TAOM), AN/TSC-147 Joint Tactical Information Distribution System (JTIDS) Module (JM) (to be replaced by Link 16 Upgrade) Multifunctional Information Distribution System Joint Tactical Radio System (MIDS JTRS), AN/TRC-213/214 Remote Radio Secure Voice System (RRSVS), and the AN/TPS-75 Radar, CRC's organic radar, which will be replaced by the Three Dimensional Expeditionary Long Range Radar (3DELRR) (PE0207455). Air Combat Command (ACC) CRC Capability Roadmap provides for the modernization of this family of systems and will be programmed into phased updates through 2037.

CRC begins its Phase 1 Modernization effort in FY17. Phase 1 addresses, but is not limited to, AN/TYQ-23A(V)1 OM Increment 1 (Multiple Source Correlator Tracker (MSCT) software upgrades, 3DELRR Integration and Secret Internet Protocol Router Network (SIPRnet) integration), JM Link 16 upgrade and Diminishing Manufacturing Sources and Material Shortages (DMSMS).

In FY17, OM Mod Increment 1 was a new start.

This program is in Budget Activity 7, Operational System Development. This budget activity includes development efforts to upgrade systems that have been fielded or have received approval for full rate production and anticipate production funding in the current or subsequent fiscal year.

PE 0207412F: Control and Reporting Center (CRC)

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	e					Date: May	2017	
Appropriation/Budget Activity	R-1 Program Elem	•	,	(2.7.5)				
3600: Research, Development, Test & Evaluation, Air Force I BA 7: Operational Systems Development	PE 0207412F / Cor	ntrol and Repo	rting Centei	r (CRC)				
B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Ba	se	FY 2018 OC	0	FY 2018 To	otal
Previous President's Budget	0.557	13.292	2.4	43	0.0	00	2.4	443
Current President's Budget	0.557	13.292	2.4	50	0.0		2.4	450
Total Adjustments	0.000	0.000	0.0	07	0.0	00	0.0	007
<ul> <li>Congressional General Reductions</li> </ul>	0.000	0.000						
<ul> <li>Congressional Directed Reductions</li> </ul>	0.000	0.000						
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000						
<ul> <li>Congressional Adds</li> </ul>	0.000	0.000						
<ul> <li>Congressional Directed Transfers</li> </ul>	0.000	0.000						
<ul> <li>Reprogrammings</li> </ul>	0.000	0.000						
<ul> <li>SBIR/STTR Transfer</li> </ul>	0.000 0.000	0.000 0.000						
<ul> <li>Other Adjustments</li> </ul>	0.007		0.0	0.000		0.007		
C. Accomplishments/Planned Programs (\$ in Millions)						FY 2018	FY 2018	FY 2018
				FY 2016	FY 2017	Base	oco	Total
Title: IM Link 46 Linewede								
Title: JM Link 16 Upgrade				0.557	0.000	0.000	-	0.00
Description: JM Link 16 Upgrade will provide for crypto moderniza				0.557	0.000	0.000	-	0.00
Description: JM Link 16 Upgrade will provide for crypto moderniza				0.557	0.000	0.000	-	0.00
<b>Description:</b> JM Link 16 Upgrade will provide for crypto modernization frequency re-mapping requirements. FY 2017 Integrates JM Link 15 FY 2016 Accomplishments:	16 upgrade	into CRC modernizat		0.557	0.000	0.000	-	0.00
. 5	16 upgrade gram suppo	into CRC modernizat		0.557	0.000	0.000	-	0.00
<b>Description:</b> JM Link 16 Upgrade will provide for crypto modernization frequency re-mapping requirements. FY 2017 Integrates JM Link 16 <b>FY 2016 Accomplishments:</b> Initial JM Link 16 upgrade analysis, document preparation and prog <b>FY 2017 Plans:</b>	16 upgrade gram suppo	into CRC modernizat		0.557	0.000	0.000	-	0.00
<b>Description:</b> JM Link 16 Upgrade will provide for crypto modernization frequency re-mapping requirements. FY 2017 Integrates JM Link 16 <b>FY 2016 Accomplishments:</b> Initial JM Link 16 upgrade analysis, document preparation and prog <b>FY 2017 Plans:</b> JM Link 16 Upgrade effort was integrated into CRC Modernization <b>FY 2018 Base Plans:</b>	16 upgrade gram suppo	into CRC modernizat		0.557	13.292	2.450	-	
<b>Description:</b> JM Link 16 Upgrade will provide for crypto modernizating frequency re-mapping requirements. FY 2017 Integrates JM Link 16 <b>FY 2016 Accomplishments:</b> Initial JM Link 16 upgrade analysis, document preparation and prograde JM Link 16 Upgrade effort was integrated into CRC Modernization <b>FY 2018 Base Plans:</b> N/A	gram suppo Phase 1 in T software t	into CRC modernizatert.  FY17.  upgrades and 3 Dime	ensional	0.557				2.45

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C. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Phase 1 FY17 provides for AN/TYQ-23A(V)1 Increment 1 MSCT 5.X software development, integration and test; integration of 3DELRR into MSCT software; SIPR integration; and JM Link 16 upgrade development, prototype and test.					
FY 2018 Base Plans: FY18 will provide for 3DELRR Integration testing, cyber security updates, future phase updates planning and program support.					
Accomplishments/Planned Programs Subtotals	0.557	13.292	2.450	-	2.450

### D. 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
OPAF: BA03: Line Item  " 0000 40 The attention  " 0000 40 The attentio	22.710	1.163	23.233	4.970	28.203	20.131	2.901	2.951	7.216 Continuing Continuing

# 833040: Theater Air Control Sys Improvements

#### Remarks

Air Force

## E. Acquisition Strategy

The CRC Capability Roadmap provides for the modernization of the CRC family of systems and will be programmed into phased updates through 2037 to further advance current and future battlespace awareness and tactical battle management command and control capabilities. A variety of contract and organic vehicles will be used depending on type of effort and skills required. Management strategy relies on Air Force Program Executive Office for Battle Management (AFPEO BM) as the Milestone Decision Authority; and Air Force Life Cycle Management Center (AFLCMC) as the Contracting Authority.

#### F. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

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