

UNCLASSIFIED

PE NUMBER: 0605712F
 PE TITLE: Initial Operational Test & Evaluation

Exhibit R-2, RDT&E Budget Item Justification	DATE May 2009
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BUDGET ACTIVITY 06 RDT&E Management Support	PE NUMBER AND TITLE 0605712F Initial Operational Test & Evaluation
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Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total
Total Program Element (PE) Cost	29.952	29.457	25.833	0.000	0.000	0.000	0.000	0.000	Continuing	TBD
0191 Initial Operational Test & Eval	29.952	29.457	25.833	0.000	0.000	0.000	0.000	0.000	Continuing	TBD

(U) A. Mission Description and Budget Item Justification

Initial Operational Test and Evaluation (IOT&E) is conducted to determine the operational effectiveness and suitability and resolve overall mission capability of systems undergoing research and development (R&D) efforts. It is an evaluation of a system's performance when the complete system is tested and evaluated against operational criteria by personnel with the same qualifications as those who will operate, maintain and support the system when deployed. In general, IOT&E is performed on new systems in development, major modifications, and other systems as directed. This PE funds Congressionally mandated IOT&E to support major weapon system acquisition decisions beyond Low-Rate Initial Production (LRIP), Milestone C, Key Decision Point C, full rate production, fielding, and declaration of Initial Operational Capability (IOC). For major systems designated for use in combat, the law requires IOT&E be completed under realistic field conditions before proceeding beyond LRIP. IOT&E will be planned to completely and unambiguously answer all critical operational issues (COI) as thoroughly as possible. This PE funds the OT participation in Combined Developmental Test/Operational Test (DT/OT), the Air Force participation in Multiservice Operational Test and Evaluation (MOT&E), and Follow-on Operational Test and Evaluation (FOT&E) when it is the continuation of IOT&E activities past the full rate production decision. FOT&E answers specific questions about unresolved COIs and test issues, or completes areas not finished during the IOT&E. This PE also funds related operational test and evaluation (OT&E) activities such as, Operational Utility Evaluations (OUE), Early Operational Assessments (EOA) and Operational Assessments (OA), and independent IOT&E which support major milestones and decision points prior to Milestone C, Key Decision Point C, full rate production, fielding, or declaration of IOC. IOT&E programs are identified in several system categories: Air; Space; Weapons; Command, Control, Communications, Computers, and Intelligence (C4I); Combat Support; and Test Support. Air Force Operational Test and Evaluation Center (AFOTEC) obtains general support services from contracts awarded after employing full and open competition contracting strategies.

This program element is in Budget Activity 6, RDT&E Management Support, because it funds weapon system IOT&E tests conducted to evaluate a system's operational effectiveness and suitability and to identify any operational deficiencies or need for modifications in support of the acquisition process.

Exhibit R-2, RDT&E Budget Item Justification

DATE

May 2009

BUDGET ACTIVITY

06 RDT&E Management Support

PE NUMBER AND TITLE

0605712F Initial Operational Test & Evaluation

(U) **B. Program Change Summary (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) Previous President's Budget	30.011	29.537	29.770
(U) Current PBR/President's Budget	29.952	29.457	25.833
(U) Total Adjustments	-0.059	-0.080	
(U) Congressional Program Reductions			
Congressional Rescissions		-0.080	
Congressional Increases			
Reprogrammings	0.320		
SBIR/STTR Transfer	-0.379		
(U) <u>Significant Program Changes:</u>			
FY08 Reprogramming for OT&E Support			

Exhibit R-2a, RDT&E Project Justification

DATE
May 2009

BUDGET ACTIVITY 06 RDT&E Management Support				PE NUMBER AND TITLE 0605712F Initial Operational Test & Evaluation				PROJECT NUMBER AND TITLE 0191 Initial Operational Test & Eval			
Cost (\$ in Millions)	FY 2008 Actual	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost to Complete	Total	
0191 Initial Operational Test & Eval	29.952	29.457	25.833	0.000	0.000	0.000	0.000	0.000	Continuing	TBD	
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0			

(U) **A. Mission Description and Budget Item Justification**

Initial Operational Test and Evaluation (IOT&E) is conducted to determine the operational effectiveness and suitability and resolve overall mission capability of systems undergoing research and development (R&D) efforts. It is an evaluation of a system's performance when the complete system is tested and evaluated against operational criteria by personnel with the same qualifications as those who will operate, maintain and support the system when deployed. In general, IOT&E is performed on new systems in development, major modifications, and other systems as directed. This PE funds Congressionally mandated IOT&E to support major weapon system acquisition decisions beyond Low-Rate Initial Production (LRIP), Milestone C, Key Decision Point C, full rate production, fielding, and declaration of Initial Operational Capability (IOC). For major systems designated for use in combat, the law requires IOT&E be completed under realistic field conditions before proceeding beyond LRIP. IOT&E will be planned to completely and unambiguously answer all critical operational issues (COI) as thoroughly as possible. This PE funds the OT participation in Combined Developmental Test/Operational Test (DT/OT), the Air Force participation in Multiservice Operational Test and Evaluation (MOT&E), and Follow-on Operational Test and Evaluation (FOT&E) when it is the continuation of IOT&E activities past the full rate production decision. FOT&E answers specific questions about unresolved COIs and test issues, or completes areas not finished during the IOT&E. This PE also funds related operational test and evaluation (OT&E) activities such as, Operational Utility Evaluations (OUE), Early Operational Assessments (EOA) and Operational Assessments (OA), and independent IOT&E which support major milestones and decision points prior to Milestone C, Key Decision Point C, full rate production, fielding, or declaration of IOC. IOT&E programs are identified in several system categories: Air; Space; Weapons; Command, Control, Communications, Computers, and Intelligence (C4I); Combat Support; and Test Support. Air Force Operational Test and Evaluation Center (AFOTEC) obtains general support services from contracts awarded after employing full and open competition contracting strategies.

This program element is in Budget Activity 6, RDT&E Management Support, because it funds weapon system IOT&E tests conducted to evaluate a system's operational effectiveness and suitability and to identify any operational deficiencies or need for modifications in support of the acquisition process.

(U) **B. Accomplishments/Planned Program (\$ in Millions)**

	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
(U) CATEGORY: AIR SYSTEMS. Plan, execute, and report IOT&E activities, to include:	18.991	18.529	17.390

FY08

- ALR-69A Radar Warning Receiver (ALR-69A): Conduct OA.
- B-2 Radar Modernization Program (RMP): Plan IOT&E.
- B-52 COMbat NETwork Communications Technology (CONNECT): Plan OA.
- C-130 Aircraft Modernization Program (AMP): Conduct OA.
- Combat Search and Rescue Vehicle (CSAR-X): Plan for OA.
- CV-22 Osprey (CV-22): Publish final report.

Exhibit R-2a, RDT&E Project Justification

DATE

May 2009

BUDGET ACTIVITY

06 RDT&E Management Support

PE NUMBER AND TITLE

0605712F Initial Operational Test & Evaluation

PROJECT NUMBER AND TITLE

0191 Initial Operational Test & Eval

(U) **B. Accomplishments/Planned Program (\$ in Millions)**FY 2008FY 2009FY 2010

- F-15 Mark XIIIA Mode 5 (F-15 Mode 5): Plan for IOT&E.
- F-22: Plan for FOT&E Incr 3.1.
- Joint Cargo Aircraft (JCA): Plan for DT/OT.
- KC-X Replacement Tanker (KC-X): Early Influence.
- Large Aircraft Infrared Countermeasures (LAIRCM) Phase II: Plan for IOT&E.
- Miniature Air Launched Decoy (MALD): Conduct OA.
- MQ-9 Hunter-Killer (MQ-9): Conduct IOT&E.
- RQ-4 Global Hawk: Conduct OA.
- Other systems.

FY09

- ALR-69A Radar Warning Receiver (ALR-69A): Plan for IOT&E.
- AWACS Block 40/45 (AWACS Block 40/45): Plan for IOT&E.
- B-2 Radar Modernization Program (RMP): Conduct IOT&E.
- B-52 COMbat NETwork Communications Technology (CONNECT): Conduct OA.
- C-130 Aircraft Modernization Program (AMP): Plan for IOT&E.
- Combat Search and Rescue Vehicle (CSAR-X): Plan OA.
- F-15 Mark XIIIA Mode 5 (F-15 Mode 5): Conduct IOT&E.
- F-15E Radar Modernization Program (F-15E RMP): Plan for IOT&E.
- F-22: Plan for FOT&E Incr 3.1.
- HC/MC-130 Recapitalization (HC/MC-130 RECAP): Conduct OA.
- Joint Cargo Aircraft (JCA): Conduct DT/OT.
- KC-X Replacement Tanker (KC-X): Early Influence.
- Large Aircraft Infrared Countermeasures (LAIRCM) Phase II: Plan for IOT&E.
- Miniature Air Launched Decoy (MALD): Conduct IOT&E.
- RQ-4 Global Hawk: Conduct IOT&E.
- Other systems.

FY10

- ALR-69A Radar Warning Receiver (ALR-69A): Conduct IOT&E.
- AWACS Block 40/45 (AWACS Block 40/45): Plan for IOT&E.

Exhibit R-2a, RDT&E Project Justification	DATE May 2009
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BUDGET ACTIVITY 06 RDT&E Management Support	PE NUMBER AND TITLE 0605712F Initial Operational Test & Evaluation	PROJECT NUMBER AND TITLE 0191 Initial Operational Test & Eval
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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<ul style="list-style-type: none"> - B-2 Radar Modernization Program (RMP): Conduct FOT&E. - B-52 COmbat NETwork Communications Technology (CONNECT): Conduct OT. - C-130 Aircraft Modernization Program (AMP): Plan for IOT&E. - F-15E Radar Modernization Program (F-15E RMP): Plan for IOT&E. - F-22: Plan for FOT&E Incr 3.1. - HC/MC-130 Recapitalization (HC/MC-130 RECAP): Plan for IOT&E. - Joint Cargo Aircraft (JCA): Conduct MOT&E. - Large Aircraft Infrared Countermeasures (LAIRCM) Phase II: Conduct IOT&E. - Miniature Air Launched Decoy (MALD): Complete IOT&E. - Other systems. 			
<p>(U) CATEGORY: SPACE SYSTEMS. Plan, execute, and report IOT&E activities, to include:</p> <p>FY08</p> <ul style="list-style-type: none"> - Advanced EHF Satellite Communications (Advanced EHF): Plan for OUE. - Global Positioning System/GPS-III (GPS-III): Plan for OA. - Space Based Infrared System (SBIRS): Conduct OUE. - Space Based Space Surveillance (SBSS): Plan for IOT&E. - Transformational Satellite Communications System (TSAT): Early influence. - Wideband Global SATCOM (WGS): Conduct MOT&E. - Other systems. <p>FY09</p> <ul style="list-style-type: none"> - Advanced EHF Satellite Communications (Advanced EHF): Conduct OUE. - Enhanced Polar System (EPS): Conduct EOA. - Global Positioning System/GPS-III (GPS-III): Conduct OA. - Integrated Space Situation Awareness (ISSA): Conduct OUE. - National Polar-orbiting Operational Environmental Satellite System (NPOESS): Early Influence. - Space Based Infrared System (SBIRS): Conduct OUE. - Space Based Space Surveillance (SBSS): Conduct IOT&E. - Space Command and Control (Space C2): Conduct OA. 	4.524	2.703	1.843

Exhibit R-2a, RDT&E Project Justification	DATE May 2009
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BUDGET ACTIVITY 06 RDT&E Management Support	PE NUMBER AND TITLE 0605712F Initial Operational Test & Evaluation	PROJECT NUMBER AND TITLE 0191 Initial Operational Test & Eval
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	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<p>(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u></p> <ul style="list-style-type: none"> - Third Generation Infrared System (3GIRS): Early influence. - Wideband Global SATCOM (WGS): Publish final report. - Other systems. <p>FY10</p> <ul style="list-style-type: none"> - Advanced EHF Satellite Communications (Advanced EHF): Plan for MOT&E. - Enhanced Polar System (EPS): Conduct OA. - Global Positioning System/GPS-III (GPS-III): Conduct OA. - Integrated Space Situation Awareness (ISSA): Conduct OUE. - National Polar-orbiting Operational Environmental Satellite System (NPOESS): Plan OUE. - Space Based Infrared System (SBIRS): Conduct OUE. - Space Based Space Surveillance (SBSS): Publish Final Report. - Space Command and Control (Space C2): Plan IOT&E. - Third Generation Infrared System (3GIRS): Conduct OA1. - Other systems. 			
<p>(U) CATEGORY: WEAPONS. Plan, execute, and report IOT&E activities, to include:</p> <p>FY08</p> <ul style="list-style-type: none"> - AIM-9X Block II: Plan OT-3C. - Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER): Plan for IOT&E. - Small Diameter Bomb Increment II (SDB II): Plan EOA. - Other systems. <p>FY09</p> <ul style="list-style-type: none"> - AIM-9X Block II: Conduct OT-3C. - Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER): Plan for IOT&E. - Small Diameter Bomb Increment II (SDB II): Conduct EOA. - Other systems. <p>FY10</p>	1.491	1.941	3.195

Exhibit R-2a, RDT&E Project Justification	DATE May 2009
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BUDGET ACTIVITY 06 RDT&E Management Support	PE NUMBER AND TITLE 0605712F Initial Operational Test & Evaluation	PROJECT NUMBER AND TITLE 0191 Initial Operational Test & Eval
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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<ul style="list-style-type: none"> - AIM-9X Block II: Complete OT-3C. - Joint Air-to-Surface Standoff Missile Extended Range (JASSM-ER): Conduct IOT&E. - Small Diameter Bomb Increment II (SDB II): Conduct OA. - Other systems. 			
(U) CATEGORY: COMMAND, CONTROL, COMMUNICATIONS, COMPUTER, AND INTELLIGENCE (C4I). Plan, execute, and report IOT&E activities, to include:	3.633	4.917	3.012
FY08 <ul style="list-style-type: none"> - Air Operations Center as a Weapon System (AOC): Early Influence. - Airborne Signals Intelligence Payload (ASIP): Plan IOT&E. - Airborne Signals Intelligence Payload 1C/2C (ASIP 1C/2C): Plan OA. - B-1 Fully Integrated Data Link (B-1 FIDL): OA. - B-2 Extremely High Frequency Satellite Communications and Computer Upgrade Program (B-2 EHF SATCOM): Early Influence. - Battle Control System - Mobile Increment 3 (BCS-M Increment 3): Early Influence. - Distributed Common Ground System (DCGS): Plan for OUE. - DoD National Airspace System (DoD NAS): Plan for FOT&E. - Family of Advanced Beyond Line-of-Sight Terminals (FAB-T): Plan for OA. - Global Hawk 4 Multiple Platform-Radar Technology Insertion Program (GH 4 MP-RTIP): Conduct OA. - Integrated Broadcast Service (IBS): Plan for OUE. - Joint Interface Control Officer (JICO) Support System (JSS): Plan for Combined Test Force Assessment. - Network-Enabled Command and Control Capability (NECC): Conduct OT. - Single Integrated Air Picture (SIAP): Early Influence. - Other systems. 			
FY09 <ul style="list-style-type: none"> - Air Operations Center as a Weapon System (AOC): Early Influence. - Airborne Signals Intelligence Payload (ASIP): Conduct IOT&E. - Airborne Signals Intelligence Payload 1C/2C (ASIP 1C/2C): Plan OA. - B-1 Fully Integrated Data Link (B-1 FIDL): Conduct OA. - B-2 Extremely High Frequency Satellite Communications and Computer Upgrade Program (B-2 EHF SATCOM): 			

Exhibit R-2a, RDT&E Project Justification

DATE

May 2009

BUDGET ACTIVITY

06 RDT&E Management Support

PE NUMBER AND TITLE

0605712F Initial Operational Test & Evaluation

PROJECT NUMBER AND TITLE

0191 Initial Operational Test & Eval

(U) **B. Accomplishments/Planned Program (\$ in Millions)**FY 2008FY 2009FY 2010

Plan for OA.

- Battle Control System - Fixed (BCS-F): Early Influence.
- Battle Control System - Mobile Increment 3 (BCS-M Increment 3): Combined Test Force Assessment.
- Distributed Common Ground System (DCGS): Conduct OUE.
- DoD National Airspace System (DoD NAS): Conduct FOT&E.
- Expeditionary Combat Support System (ECSS): Plan OA.
- Family of Advanced Beyond Line-of-Sight Terminals (FAB-T): Conduct OA.
- Global Hawk 4 Multiple Platform-Radar Technology Insertion Program (GH 4 MP-RTIP): Plan for IOT&E.
- Integrated Broadcast Service (IBS): Plan for OUE.
- Joint Interface Control Officer (JICO) Support System (JSS): Conduct Combined Test Force Assessment.
- Network-Enabled Command and Control Capability (NECC): Conduct OT.
- Single Integrated Air Picture (SIAP): Conduct OA.
- Other systems

FY10

- Air Operations Center as a Weapon System (AOC): Plan OA.
- Airborne Signals Intelligence Payload (ASIP): Complete IOT&E.
- Airborne Signals Intelligence Payload 1C/2C (ASIP 1C/2C): Conduct OA.
- B-1 Fully Integrated Data Link (B-1 FIDL): Conduct IOT&E.
- B-2 Extremely High Frequency Satellite Communications and Computer Upgrade Program (B-2 EHF SATCOM): Conduct OA.
- Battle Control System - Fixed (BCS-F): Early Influence.
- Battle Control System - Mobile Increment 3 (BCS-M Increment 3): Conduct IOT&E.
- Distributed Common Ground System (DCGS): Plan for IOT&E.
- Expeditionary Combat Support System (ECSS): Plan for IOT&E.
- Family of Advanced Beyond Line-of-Sight Terminals (FAB-T): Conduct OA.
- Global Hawk 4 Multiple Platform-Radar Technology Insertion Program (GH 4 MP-RTIP): Conduct IOT&E.
- Integrated Broadcast Service (IBS): Conduct OUE.
- Joint Interface Control Officer (JICO) Support System (JSS): Conduct MOT&E.
- Network-Enabled Command and Control Capability (NECC): Conduct OT.
- Single Integrated Air Picture (SIAP): Plan for OA.

R-1 Line Item No. 104

Page-8 of 9

Project 0191

Exhibit R-2a (PE 0605712F)

Exhibit R-2a, RDT&E Project Justification	DATE May 2009
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BUDGET ACTIVITY 06 RDT&E Management Support	PE NUMBER AND TITLE 0605712F Initial Operational Test & Evaluation	PROJECT NUMBER AND TITLE 0191 Initial Operational Test & Eval
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(U) <u>B. Accomplishments/Planned Program (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
- Other systems			
(U) CATEGORY: COMBAT SUPPORT. Plan, execute, and report IOT&E activities, to include:	1.313	1.367	0.393

FY08

- Combat Survivor Evader Locator (CSEL): Conduct Combined Test Force Assessment.
- Joint Mission Planning System (JMPS): Conduct IOT&Es.
- Other systems.

FY09

- Combat Survivor Evader Locator (CSEL): Conduct Combined Test Force Assessment.
- Combat Survivor Evader Locator Block 2 (CSEL Blk 2): Plan for MOT&E.
- Joint Counter Radio-Controlled Improvised Explosive Device EW (JCREW): Conduct OA.
- Joint Mission Planning System (JMPS): Conduct IOT&Es.
- Other systems.

FY10

- Combat Survivor Evader Locator Block 2 (CSEL Blk 2): Conduct MOT&E.
- Joint Counter Radio-Controlled Improvised Explosive Device EW (JCREW): Conduct OA.
- Joint Mission Planning System (JMPS): Conduct IOT&Es.
- Other systems.

(U) Total Cost	29.952	29.457	25.833
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(U) <u>C. Other Program Funding Summary (\$ in Millions)</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	<u>Total Cost</u>

(U) N/A

(U) D. Acquisition Strategy

N/A

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