Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense											Date: March 2014	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*					R-1 Program Element (Number/Name) PE 0605804D8Z / *Development Test & Evaluation*							
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	18.389	19.116	19.394	15.187	-	15.187	14.924	14.660	14.397	14.133	Continuing	Continuing
P804: *Development Test & Evaluation*	18.389	17.716	19.394	15.187	-	15.187	14.924	14.660	14.397	14.133	Continuing	Continuing
P806: *Energy*	0.000	1.400	-	-	-	-	-	-	-	-	Continuing	Continuing

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

A. Mission Description and Budget Item Justification

This Program Element (PE) establishes the dedicated funding line to carry out the duties as described in Title 10 US Code, Section 139, the Weapons Systems Acquisition Reform Act of 2009. The Deputy Assistant Secretary of Defense for Development Test and Evaluation (DASD(DT&E)) is the principal advisor to the Secretary of Defense, the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) and the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) on Development Test and Evaluation (DT&E) in the Department of Defense (DoD).

The Development Test and Evaluation (DT&E) program element is budgeted in the Research Development Test and Evaluation (RDT&E) budget activity to support and improve the DT&E efforts of Major Defense Acquisition Program (MDAP), Major Automated Information System (MAIS), and other Special Interest (SI) acquisition programs designated by Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)); as they progress through the acquisition/development lifecycle; assess the DT&E capabilities of the Military Departments and Department of Defense (DoD) Components; oversee the Test and Evaluation (T&E) career field of the defense acquisition workforce; develop policy and guidance for the conduct of DT&E within the DoD; and prepare the annual DT&E report to Congress.

The Department of Operational Energy Plans and Programs (DOEPP) Project 806 is funded within this program element for technical analysis and policy guidance for the DoD operational energy programs and initiatives, including institutionalizing energy in DoD's business processes (e.g., Fully Burdened Cost of Fuel and the Energy Efficiency Key Performance Parameters (KPPs)).

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense	Date: March 2014
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605804D8Z / *Development Test & Evaluation*

B. Program Change Summary ($ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	15.110	15.451	16.091	-	16.091
Current President's Budget	19.116	19.394	15.187	-	15.187
Total Adjustments	4.006	3.943	-0.904	-	-0.904
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-1.612	-			
• Congressional Rescissions	-0.026	-			
• Congressional Adds	5.000	4.000			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.200	-			
• SBIR/STTR Transfer	-0.547	-			
• Strategic Efficiency Savings	-	-	-0.904	-	-0.904
• FFRDC Adjustments	-	-0.057	-	-	-
• Other Program Adjustments	-0.009	-	-	-	-

Change Summary Explanation

The reduction is a strategic efficiency approach to reduce funding and staffing. As a result, we provide a better alignment of funding and provide support to a smaller military force.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense			Date: March 2014
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605804D8Z / *Development Test & Evaluation*	Project (Number/Name) P804 / *Development Test & Evaluation*	

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
P804: *Development Test & Evaluation*	18.389	17.716	19.394	15.187	-	15.187	14.924	14.660	14.397	14.133	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

A. Mission Description and Budget Item Justification

This project provides for the assessment of the Developmental Test and Evaluation (DT&E) efforts of each Major Defense Acquisition Program (MDAP), Major Automated Information System (MAIS), and Special Interest (SI) acquisition programs as designated by USD(AT&L). It also provides for the assessment of DT&E capabilities of the Military Departments and Department of Defense (DoD) Components, oversees the Test & Evaluation (T&E) career field of the defense acquisition workforce, develops policy and guidance for the conduct of DT&E within DoD, and produces the annual DT&E report to Congress. Specific activities include the following:

- Work with MDAP/MAIS/SI Program Managers to develop a comprehensive DT&E strategy that supports acquisition decision milestones. Ensure that the test strategy beginning at Milestone A, is documented in the Test and Evaluation Master Plans (TEMPs). The Deputy Assistant Secretary of Defense (DASD) DT&E also approves or disapproves the developmental test and evaluation plans in the TEMPs.
- Coordinate with the Director of Systems Engineering (SE) to ensure that the DT&E activities of the DoD are fully integrated into, and consistent with, the systems engineering and development planning processes of the Department.
- Provide formal DT&E Assessments prior to major milestone decisions to inform the acquisition decision-makers on the readiness of programs to release the Engineering and Manufacturing Development (EMD) Request For Proposal (RFP) (pre MS B) and begin production (MS C) with the goal of reducing discovery of performance issues later in the acquisition cycle.
- Develop policy and guidance to ensure efficient and effective DT&E across DoD, including policy and guidance for developmental testing of interoperability and information assurance in coordination with the Joint Staff and DoD Chief Information Officer (CIO).
- Provide DT&E assessments in support of Nunn-McCurdy certification review teams, and the Director, Performance Assessment and Root Cause Analysis (PARCA).
- Review the organizations and capabilities of the military departments with respect to developmental test and evaluation and identify needed changes or improvements to such organizations and capabilities, and provide input regarding needed changes or improvements for the test and evaluation strategic plan developed by Test Resource Management Center (TRMC).
-As the T&E Functional Leader, establish, oversee, and maintain the education, training and experience requirements including competencies and certification standards to enhance T&E acquisition workforce. Monitor and facilitate Defense Acquisition University (DAU) updates of T&E courses to ensure the curriculum supports the certification standards and provides the appropriate education and training.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense		Date: March 2014
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605804D8Z / *Development Test & Evaluation*	**Project (Number/Name)** P804 / *Development Test & Evaluation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Title: Developmental Test and Evaluation	17.716	19.394	15.187
FY 2013 Accomplishments: -Worked with Major Defense Acquisition Program (MDAP), Major Automated Information System (MAIS) and Special Interest (SI) Program Managers to develop comprehensive Development Test & Evaluation (DT&E) strategies to support capability development and acquisition. Reviewed and approved all Test and Evaluation Master Plans (TEMPs) submitted to support major acquisition reviews. -Developed the DT&E portion of the Joint Annual Report to Congress that provides an assessment of MDAP DT&E progress and assesses the Test & Evaluation (T&E) workforce. -Refined DT&E policies and methodologies addressing DT&E across all MDAP, MAIS and SI programs. -Published formal DT&E Assessments in support of Milestone B, Milestone C and Operational Test decision processes. -Provided data-based assessments of system performance in support of all scheduled Defense Acquisition Board decisions. -Sustained the Scientific Test & Analysis Techniques Center of Excellence (STAT COE). -Planned and conducted events that support DT&E Cybersecurity strategy. -Promoted the application of sound DT&E and related technical disciplines across the Department's acquisition community and programs.			
FY 2014 Plans: -Work with MDAP/MAIS/SI Program Managers, Chief Developmental Testers, and Lead DT&E organizations to improve DT&E planning through the development of disciplined Evaluation Framework Matrixes and the use of Scientific Test and Analysis Techniques (STAT). -Implement the DASD(DT&E) 'Shift Left' philosophy that focuses on ensuring T&E strategies are developed in advance of releasing EMD RFPs and increasing the amount of data available to support production decisions with specific focus on CyberSecurity and interoperability. -Work with MDAP/MAIS Program Managers to develop comprehensive DT&E strategies to support capability development and acquisition. -Review and approve all TEMPs submitted to support major acquisition reviews for MDAPs. -Develop the DT&E Annual Report to Congress that provides an assessment of MDAP DT&E progress and assesses the T&E workforce. -Refine DT&E policies and methodologies addressing DT&E across all MDAP, MAIS and SI programs. -Publish data-based DT&E assessments of system performance for all MDAP and MAIS programs in support of scheduled Defense Acquisition Board (DAB) decisions for each major milestone. -Review and approve all TEMPs submitted to support major acquisition reviews for MDAPs. -Sustain STAT COE through Fiscal Year 2014.			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense		Date: March 2014
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605804D8Z / *Development Test & Evaluation*	**Project (Number/Name)** P804 / *Development Test & Evaluation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
-Promote the application of sound DT&E and related technical disciplines across the Department's acquisition community and programs. ***FY 2015 Plans:*** -Work with MDAP/MAIS/SI Program Managers, Chief Developmental Testers, and Lead DT&E organizations to improve DT&E planning through the development of disciplined Evaluation Framework Matrixes and the use of Scientific Test and Analysis Techniques (STAT). -Implement the DASD(DT&E) 'Shift Left' philosophy that focuses on ensuring T&E strategies are developed in advance of releasing EMD RFPs and increasing the amount of data available to support production decisions with specific focus on CyberSecurity and interoperability. -Work with MDAP/MAIS Program Managers to develop comprehensive DT&E strategies to support capability development and acquisition. -Review and approve all TEMPs submitted to support major acquisition reviews for MDAPs. -Develop the DT&E Annual Report to Congress that provides an assessment of MDAP DT&E progress and assesses the T&E workforce. -Refine DT&E policies and methodologies addressing DT&E across all MDAP, MAIS and SI programs. -Publish data-based DT&E assessments of system performance for all MDAP and MAIS programs in support of scheduled Defense Acquisition Board (DAB) decisions for each major milestone. -Review and approve all TEMPs submitted to support major acquisition reviews for MDAPs. -Promote the application of sound DT&E and related technical disciplines across the Department's acquisition community and programs.			
Accomplishments/Planned Programs Subtotals	17.716	19.394	15.187

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

- Engaged and conducted oversight on all AT&L-designated MDAP, MAIS, and SI Programs.
- Advised at Defense Acquisition Board (DABs), Overarching Integrated Product Teams (OIPTs), and Nunn-McCurdy Reviews.
- Reviewed and approved Test and Evaluation Master Plans (TEMPs) for MDAP, MAIS, and AT&L-designated Special Interest programs.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense		Date: March 2014
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605804D8Z / *Development Test & Evaluation*	**Project (Number/Name)** P804 / *Development Test & Evaluation*

• Prepared formal DT&E assessments to inform Acquisition decision makers of readiness for production.
• Implemented the education requirements for the T&E career field to require a hard science degree to support the T&E of increasingly more complex systems.
• Participated in the development of a major revision to the DoDI 5000.02.
• Supported OSD led Peer Reviews.
• Refined a DT&E cybersecurity strategy composed of four areas: process (policy and guidance), methodology (best test practices), workforce training, and infrastructure (enclosed and distributed ranges).
• Sustained Scientific Test & Analysis Techniques Center of Excellence (STAT COE) through Fiscal Year 2014.
• Planned and executed pilot events to focus on cybersecurity test infrastructure gaps and to examine different test methodologies.

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense			Date: March 2014
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605804D8Z / *Development Test & Evaluation*	Project (Number/Name) P806 / *Energy*	

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
P806: *Energy*	-	1.400	-	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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

Note

The Hybrid Energy Storage Module Program applies to Fiscal Year 2013 only in PE 0605804D8Z.

A. Mission Description and Budget Item Justification

This project, co-sponsored by ASD(R&E) and ASD(OEPP), addresses advanced technology development of hybrid energy storage associated with providing the capability to enhance fuel efficiency, maximize performance and reliability, and enable future high power weapons and sensor systems on legacy and next generation Army and USMC battlefield generators and vehicles, Air Force and Navy aircraft, and Navy ships. The goals of this project are to demonstrate in each of these areas energy storage systems, with high power and energy densities, high rate capability, scalable to all power levels, that reduces total logistics replenishment of fuel and material, increases platform and vehicle ability to sustain operations during engagement, and reduce non mission capable and maintenance events. Once demonstration is complete, this technology will be further sustained by the Services. In collaboration, this program is closely coordinated with the Advanced Management and Protection of Energy-storage Devices (AMPED) program of the Department of Energy's Advanced Research Projects Agency – Energy (ARPA-E). AMPED technology will be used to potentially extend the operational performance benefits and safety for these applications beyond the hybrid storage module baseline design configurations.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
Title: Hybrid Energy Storage Module Program	1.400	-	-
Description: This project, co-sponsored by ASD(R&E) and ASD(OEPP), addresses advanced technology development of hybrid energy storage associated with providing the capability to enhance fuel efficiency, maximize performance and reliability, and enable future high power weapons and sensor systems on legacy and next generation Army and USMC battlefield generators and vehicles, Air Force and Navy aircraft, and Navy ships. The goals of this project are to demonstrate in each of these areas energy storage systems, with high power and energy densities, high rate capability, scalable to all power levels, that reduces total logistics replenishment of fuel and material, increases platform and vehicle ability to sustain operations during engagement, and reduce non mission capable and maintenance events. Once demonstration is complete, this technology will be further sustained by the Services. In collaboration, this program is closely coordinated with the Advanced Management and Protection of Energy-storage Devices (AMPED) program of the Department of Energy's Advanced Research Projects Agency – Energy (ARPA-E). AMPED technology will be used to potentially extend the operational performance benefits and safety for these applications beyond the hybrid storage module baseline design configurations.			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense		Date: March 2014
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605804D8Z / *Development Test & Evaluation*	**Project (Number/Name)** P806 / *Energy*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2013	FY 2014	FY 2015
FY 2013 Accomplishments: -Tactical Track: Efforts ongoing by Acumentrics Inc to develop the Hybrid Energy Storage Demonstrator. Initial breadboard demonstrations showed successful operation coordinating multiple power sources. -Aircraft Track: Source selection for the Aircraft demonstration unit was completed and contracting effort was initiated. The demonstration unit will improve three key characteristics of the MEA: electrical power quality, component lifespan, and overall system performance for all flight conditions, including possible weight and volume savings. ARPA-e AMPED technology is being examined for system integration. -Large Power Track: Source selection for the Large Power demonstrators was completed and contracting effort was initiated. The efforts will develop and demonstrate energy storage system technologies capable of supporting continuous transient loads with integrated power sources for large platforms such as ships. ARPA-e AMPED technology is being examined for system integration. -HESM System Analysis: Modeling and HESM system operational analysis is ongoing for each program track examining impact and quantifying benefits.			
Accomplishments/Planned Programs Subtotals	1.400	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A.

E. Performance Metrics

Transition of HESM demonstration unit.