Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense										DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*				R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*							
COST ($ in Millions)	**FY 2009 Actual**	**FY 2010 Estimate**	**FY 2011 Base Estimate**	**FY 2011 OCO Estimate**	**FY 2011 Total Estimate**	**FY 2012 Estimate**	**FY 2013 Estimate**	**FY 2014 Estimate**	**FY 2015 Estimate**	**Cost To Complete**	**Total Cost**
Total Program Element	23.113	24.447	20.310	0.000	20.310	26.364	23.507	21.883	22.709	Continuing	Continuing
017: *RTOC*	23.113	24.447	20.310	0.000	20.310	26.364	23.507	21.883	22.709	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Under Secretary of Defense (Acquisition, Technology & Logistics) defined mission for the Reduction in Total Ownership Cost (RTOC) program as the reduction of ownership costs for defense systems. The RTOC program funds activities and initiatives that will:

1. Increase the reliability, maintainability, supportability--and thus increase readiness--of new or existing defense systems.
2. Reduce logistics footprint.
3. Generate future cost reductions in total ownership cost.

Individual Service Projects are complete efforts within themselves that yield complete developments/redesigns which the Services are committed to put into production and operation. The initiatives optimize cost avoidance, ultimately reducing the operating and support costs for systems. Each project is evaluated against a rigorous set of criteria to assess its viability and probability of success. Individual projects address specific Service needs and high Operations and Support (O&S) cost areas.

The Department has set a FY 2010 RTOC goal of reducing the total defense systems inflation increase in O&S cost by 30 percent between FY 2004 and FY 2010. This Program Element (PE) provides a major portion of the program funding to achieve this goal. The successful demonstration of the RTOC program initiatives stimulates additional initiatives by the Services to achieve even greater cost avoidances.

Individual RTOC Project Management rests with the Services and their Project Managers. Each Service has an active RTOC Point of Contact (POC) for the initial interface between the Office of the Secretary of Defense (OSD) and the RTOC Project Managers.

The average Return on Investment (ROI) for FY 2009 projects (based on discounted cash flow calculations) is approximately 45:1 with $1.174 billion in cost avoidances across the life cycle of the affected systems. These cost avoidances will be lost without the requested funding in FY 2010, which is needed to complete the projects begun with FY 2009 funding. The average ROI for these FY 2010 new start projects (based on discounted cash flow calculations) is approximately 80:1 with $1.333 billion in cost avoidances across the life cycle of the affected systems.

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense	DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*

B. Program Change Summary ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	24.765	24.447	0.000	0.000	0.000
Current President's Budget	23.113	24.447	20.310	0.000	20.310
Total Adjustments	-1.652	0.000	20.310	0.000	20.310
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.496	0.000			
• Other Program Adjustments	-1.156	0.000	20.310	0.000	20.310

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*	

COST ($ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
017: *RTOC*	23.113	24.447	20.310	0.000	20.310	26.364	23.507	21.883	22.709	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

The Under Secretary of Defense, Acquisition, Technology & Logistics (USD(AT&L), defined the mission for the Reduction in Total Ownership Cost (RTOC) program as the reduction of ownership costs for defense systems. The RTOC program funds activities and initiatives that will:

1. Increase the reliability, maintainability, supportability and thus increase readiness of new or existing defense systems.
2. Reduce logistics footprint.
3. Generate future cost reductions in total ownership cost.

These individual initiatives are complete efforts within themselves that yield complete redesigns which the Services are committed to put into production and operation. The initiatives optimize cost avoidance, ultimately reducing the operating and support (O&S) costs for systems.

The Department has set an FY 2010 RTOC goal of reducing the total defense systems inflation increase in operations and support cost by 30 percent between FY 2004 (baseline) and FY 2010. This Program Element (PE) provides a major portion of the program funding to achieve this goal. The successful demonstration of the RTOC program initiatives should stimulate additional initiatives by the Services to achieve even greater cost avoidances.

Individual RTOC Project Management rests with the Services and their Project Managers. Each Service has an active RTOC Point of Contact (POC) for the initial interface between OSD and the RTOC Project Managers.

The average Return on Investment (ROI) for FY 2008 projects (based on discounted cash flow calculations) is approximately 28:1 with $1.176 billion in cost avoidances across the life cycle of the affected systems. These cost avoidances will be lost without the requested funding in FY 2009, which is needed to complete the projects begun with FY 2008 funding. The average Return on Investment (ROI) for these FY 2009 new start projects (based on discounted cash flow calculations) is approximately 72 with $2.006 billion in cost avoidances across the life cycle of the affected systems.

B. Accomplishments/Planned Program ($ in Millions)

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Reduction of Total Ownership Cost Efforts	23.113	24.447	20.310	0.000	20.310

The Services continued eleven projects and began nineteen new projects. Cost avoidances established for the projects listed below are based on engineering estimates of the benefits provided by project implementations. Sources of cost avoidances are defined as part of the project submittal and come from any O&S cost source (fewer spares, lower maintenance hours, faster turnaround times, reduced scheduled maintenance, reliability/maintainability/supportability problems, etc.). The average ROI for FY 2009 projects (based on discounted cash flow calculations) was approximately 45:1 with $1.174 billion in cost avoidances across the life cycle of the affected systems.

FY 2009 Accomplishments:

Army Projects: Continued four projects and began seven new projects (see list below). Replacement FLIR System is available for use on the HH-60M MEDEVAC Helicopter. The replacement FLIR takes advantage of improved technology (low-light-level TV, Day Camera, Laser Rangefinder, Laser Pointer, and Geo-reference). Software and interface planning is underway. Redesigned HIMARS Fire Control Display to improve reliability was completed. Prototype testing and software compatibility testing has been successfully completed. Redesigned 120MM Mortar M9 baseplate to optimize manufacturing costs and weight reductions has been developed and is undergoing live fire testing. Testing state of the art Low Solar Absorption coating, insulation insertion, and air strip curtain technologies to improve the reflective barrier of the system skin and between the refrigeration system and the sun thereby transferring heat to the surrounding environment and minimizing/diffusing heat transfer to the surface of the fielded refrigerated container. Developed replacement Type IV suspension lines with 9/16th tubular webbing resulting in a more robust design appropriate for high speed drogue applications. Remaining projects included:

HH-60M ECS
HIMARS IM
ECBC
Extraction Parachute (Cargo Drop)
Refrigeration Improvements (Container System)

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
AH-64: Hydraulic Hand Pump AH-64: Servo HH-60: FLIR 81mm: Monopack Guardrail: AQL RF Antenna Panel 120mm Mortor M9: Baseplate Navy Projects: Continued two current projects and began eleven new projects (see list below). Power conservation measures and gained efficiencies through standardization are the major themes for Navy's FY09 projects in order to reduce costly fuel consumption and the dependence on foreign oil. Navy is enhancing propeller performance by minimizing surface roughness from bio-fouling and calcareous deposits. NAVSEA has defined requirements for cathodic protection of Marine 5000 series aluminum alloys that reduce ship corrosion. NAVSEA has developed a solvent-free, high-build antifouling coating for ships and submarines, which now supports the 12-year docking cycle for aircraft carriers. NAVSEA is also working to improve shipboard surface coatings life span by implementing validated repeatable quantitative measures that will improve corrosion reduction, and reduce maintenance requirements and hazardous materials in a shipboard waterfront environment. Remaining projects included: Common: Power Conservation Management F/A-18E/F: Fiber Optic Network V-22: NLG Mech Improvement Common Ship: Coating Surface Ship Propellers ASE: F/A-18E/F SRA Pinpoint Routines Common Ship: High Solids Antifoulant Coating Common Ship: Cathodic Protection of Aluminum ASE: Spectrometer Modification NAVAIR: CMIS TDSA-KITMIS Migration Common Ship: Surface Profile Tool					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
H-60: Blade De-ice Controller F/A-18E/F: Fiber Optic Cable Restore LCS PMO: S1000/SCORM Integration Air Force Projects: Continued five current projects and began one new project (see list below). Delivered updated F-16 avionics test stands capable of detecting intermittent faults in chassis wiring under realistic environmental conditions. Identified aircraft engine reliability prediction methodology for selected aircraft. Began development of a system for the collection, storage, and retrieval and analysis of F-16 avionics test data; system will automate comparison of field and depot test results to determine and reduce the causes of non-repeatable faults. Began development on a methodology to apply individual engine flight data, rather than average fleet statistics, to predict and schedule engine maintenance. Delivered and completed a field trial on a production-ready, cost-effective, lubricant debris particle analyzer prototype to identify bearing failures on turbofan engines. Remaining projects included: F-16: Field Backstop Test data Collection and Analysis System F-22: F119 Engine Ti Repair F-22: F119 Engine Ni 100 Integrally Bladed Rotor Repair AEWS: FPS-117 Radome Fleet Replacement F-16: F110-GE-129/129B RCM Calculator F-16: F-110 Engine Interval Extension *FY 2010 Plans:* Continue sixteen projects begun in FY 2009 and begin nineteen new projects. The objective of each of the Service projects, listed below, is the reduction of operations and support costs for the affected systems. ROI is the primary performance metric used to assess projects and for the RTOC initiative. Project plans include a cost/benefit analysis, which is based on discounted cash flow calculations of project investment costs and projected cost avoidances. Other factors were also considered as the Services developed their ranked order of projects. Improvements in reliability, maintainability, and					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
supportability provide additional criteria for project selection. OMB discount rates are used to provide real comparisons of future value against current uses of resources. Projected cost avoidances are based on engineering estimates of the benefits provided by project implementations. Updated ROI calculations are part of the required semi-annual project reports to provide tracking of this metric. The estimated ROI for FY 2010 projects (based on discounted cash flow calculations) is 80:1 with $1.333 billion in cost avoidances across the life cycle of the affected systems. Army Projects: Continue two projects begun earlier and initiate four new projects (see list below). Leverage missile program technology to incorporate state of the art common ESAF components that will reduce obsolescence on the GMLRS. Redesign H-60 Hydraulic Power Supply to reduce the primary causes of failure, internal and external leaks, overheating, and excessive wear. Design and prototype howitzer front split ring using higher strength steel to double functional life and improving durability and reliability. HH-60 FLIR 120mm Mortar M9 Baseplate HIMARS/GMLRS: ESAF HH-60: Hand Pump SOA CAAS Training Simulation Overwatch display Control Module (TENT) Navy Projects: Continue ten projects begun earlier and begin three new Common Ship projects (see list below). The primary theme for FY10 projects is the improvement of maintenance technologies that will reduce cost and add efficiency. NAVSEA will provide underwater hull condition based maintenance that will reduce maintenance requirements and improve warfighting readiness. NAVSEA will also introduce the use of vapor corrosion inhibitors in ship voids to reduce the effects of corrosion causing moisture within voids in order to double the maintenance interval. NAVSEA will work with NAVAIR to design a new machined hinge replacement for Main Landing Gear door hinges to meet current loading requirements.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Common Ship: Coating Surface Ship Propellers ASE: F/A-18 SRA Pinpoint Routines Common Ship: High Solids Antifoulant Coating Common Ship: Cathodic Protection of Aluminum ASE: Spectrometer Modification NAVAIR: CMIS TDSA-KITMIS Migration Common Ship: Surface Profile Tool H-60: Blade D-ice Controller F/A-18E/F: Fiber Optic Cable Restore LCS PMO: S1000/SCORM Integration Common Ship: Underwater Hull CBM Common Ship: High Solid Silica Alkyds Common Ship: Main Landing gear Door Hinge Air Force Projects: Continue four projects begun earlier and begin twelve new projects (see list below). Deliver prototype composite material replacement radomes and towers that meet or exceed the structural requirements of current radomes and towers, while reducing total ownership cost and environmental impacts. Develop and validate through prototyping a process for repairing single titanium and nickel blades that are part of the Integrally Bladed Rotor (IBR); develop process to reduce need to replace entire IBR assembly, if a single blade is damaged. Develop and prototype process for repair of landing gear cylinders using the magnetron sputtering process. Develop and prototype portable tool to organically inspect low observable tiles. Continue development on a methodology to apply individual engine flight data, rather than average fleet statistics, to predict and schedule engine maintenance. Begin to revise and update multiple aircraft and engine repair and coating processes to reflect modern processes that are more cost effective and environmentally sound. Test prototype digital heads up display for the F-15 to replace current cathode ray tube (CRT) based displays that are costly to maintain. F-16: Field Backstop Test Data Collection and Analysis System					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
F-22: F-119 Engine Ti Repair F-22: F-119 Engine NI 100 Integrally Bladed Rotor (IBR) Repair F-16: F-110 Engine Interval Extension Multiple Systems: Stripping Solution F-22/F-35: Laser Shock Peening Multiple Systems: Powder Coating Multiple Systems: No-Strip Touch-Up Repair Multiple Systems: Coating Removal Process Multiple Systems: Laser Inspection of GTE F-15/F-16: Laser Cladding/LAM Multiple Systems: Low Radioactivity Thermal Barrier Multiple Systems: Parent Material Restoration F-15: Digital Heads Up Display Multiple Systems: Single Part Wheel Paint Low Observable Multifunction Material Inspection System (LOMMIS) *FY 2011 Base Plans:* The primary objectives for projects, listed below (from various services), will continue to be the reduction of operations and support costs for the affected systems. Continue eleven projects begun earlier and initiate twenty-two new projects. ROI will continue to be the primary performance metric for the projects. Each project plan includes a cost/benefit analysis, which is based on discounted cash flow calculations of project investment costs and projected cost avoidances. OMB discount rates will be used to provide real comparisons of future value against current uses of resources. Improvements in reliability, maintainability and supportability are important factors in project selections. Projected cost avoidances are based on engineering estimates of the benefits to be provided by project implementations. Updated ROI calculations are part of the required semi-annual project reports to provide tracking of this metric. The estimated ROI for FY 2011 projects (based on discounted cash					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
flow calculations) is 53:1 with $2.049 billion in cost avoidances across the life cycle of the affected systems. Army Projects: Begin five new projects (see list below). Redesign five of the MLRS M270A1 Fire Control System (FCS) electronic boxes that compute all fire mission data. Redesign Launcher-Loader Module (LLM) portion that performs all operations necessary to complete a fire mission. Eliminate two of the five electronic boxes mitigating the obsolescence issue and reducing the operational and sustainment burden. Evaluate and implement a coating process to improve the reliability of the UH-72A main rotor blade in harsh environments. Develop and prototype, improved AH-64 transmission drop-in filter capable of decreasing the affect of contaminants smaller than 10-microns. MLRS M270A1 V1 FCS Spindle UH-72A: Main Rotor Blade Coating Rapid Low Cost Manufacturing of Functionally Graded Nano-Structured Rifling Broaches & Cutting Tools for Newly Developed Ultra High-Strength Gun Steels AH-64D: Transmission Filters Navy Projects: Continue one projects begun earlier and begin eleven new projects (see list below). The primary themes for FY11 are power conservation, better corrosion control through improved surface coatings, and maintenance cost reductions through streamlining. Conservation projects include the replacement of legacy fluorescent lighting with LED lighting on test ship (USS PEARL HARBOR) to lower maintenance and energy costs, the reduction of energy costs through improved steering capabilities on amphibious (L-Class) ships, and the reduction of cooling water use onboard Aegis (CG and DDG) Class ships to reduce weight and chill water system load requirements. Corrosion control projects include the use of prototype cameras in shipboard tank voids to analyze condition and structural degradation eliminating the need to open tank. Test alternative corrosion coatings on shipboard crash-cranes. Maintenance cost reduction projects include the redesign of night vision goggles used in tactical aircraft; introducing the usage of conditioned based maintenance					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
practices in the new LCS class ships; and upgrading high-maintenance components in shipboard munitions transporters to reduce maintenance requirements. Other projects include the streamlining of airborne networking infrastructure on P-3 platforms to reduce redundancies; and the leveraging of industry electronic banking advances to streamline shipboard banking and expenditure transactions for Sailors at sea. Common Ship: High Solid Silica Alkyds Common Ship: Underwater Hull CBM LSD Class SSL Fuel ISIS ESBBS LHD Class S&S AN/AVS-9 TACAIR Mount MHU-191 Upgrade Alternate Coating System for Shipboard Crash Crane Afn ISEA Alignment Next Gen Navy Cash Littoral Combat Ship: Condition based Maintenance /Remote Monitoring Aegis: Electronic Cooling Water Reduction Air Force Projects: Continue ten projects begun earlier and begin six new projects (see list below). Deliver qualified repair, repair source data, and first article tooling to support the process for repairing single titanium and nickel blades that are part of an Integrally Bladed Rotor (IBR). Continue to revise and update multiple aircraft engine repair and coating processes to reflect modern processes that are more cost effective and environmentally sound. Begin to modernize aircraft inspection data collection process to develop a methodology for forecasting unplanned maintenance. Begin to prototype replacement sensor cooler for Large Aircraft Infrared Countermeasure System (LAIRCM). Multiple Systems: Stripping Solution F-22/F-35: Laser Shock Peening Multiple Systems: Powder Coating					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	**R-1 ITEM NOMENCLATURE** PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	**PROJECT** 017: *RTOC*

B. Accomplishments/Planned Program ($ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Multiple Systems: No-Strip Touch-Up Repair Multiple Systems: Coating Removal Process Multiple Systems: Laser Inspection of GTE F-15/F-16: Laser Cladding/LAM Multiple Systems: Low Radioactivity Thermal Barrier Multiple Systems: Parent Material Restoration Multiple Systems: Single Part Wheel Paint Process Guide Pulse Tube Cooler LP704 Non-Solvent Cleaning Low Percent Analysis LP 753 High Velocity Oxy Fuel (HVOF) ID Gun Supersonic Particle Dep					
Accomplishments/Planned Programs Subtotals	23.113	24.447	20.310	0.000	20.310

C. Other Program Funding Summary ($ in Millions)

N/A

D. Acquisition Strategy

There is an annual USD(AT&L) call for proposed project plans in October. Projects are submitted by the Services annually in January. The project plan format is provided with the call for submission of Service projects. Each project plan contains:

1. Problem statement
2. Impact statement
3. Technical description
4. Risk analysis
5. Proposed phases
6. Expected deliverables and results or outcomes
7. Program management

Exhibit R-2A, RDT&E Project Justification: PB 2011 Office of Secretary Of Defense		DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*

8. Cost/benefit analysis
9. Schedule
10. Implementation plan

The project evaluation criteria are also provided as part of the call for use by the Services in arriving at their prioritized project list. There are five objective and six subjective categories for evaluation.

The Services receive project plans and make a Service priority ranking based on detailed analysis of each proposed initiative against the eleven evaluation criteria. This priority ranking is sent to the OSD lead. Upon acceptance and approval of the projects by OSD, the projects are briefed to the R-TOC Forum and Congressional staff, as required. Funding is distributed equally between the Services based on priority and the evaluation process results.

Upon final funding approval, OSD transfers individual project funding to the appropriate funding sites that are provided by the Services. After receiving the project funding, the Services are responsible for the funding and management of the projects. OSD retains oversight and direction of the R-TOC Initiative through the OSD lead office.

A semi-annual Project Report format has been defined, approved by the Services, and is required for each funded project. These reports are submitted to the OSD R-TOC Initiative lead office. OSD analyzes project status, progress and project statistics and informs the Service POCs of any project problems. Projects are also required to report verbally at the quarterly R-TOC Forums, as appropriate.

E. Performance Metrics

Not applicable.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Office of Secretary Of Defense			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*	

Product Development ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
RTOC	TBD	TBD TBD	0.000	24.447		20.310		0.000		20.310	Continuing	Continuing	Continuing
		Subtotal	0.000	24.447		20.310		0.000		20.310			

Remarks

Support ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.000	0.000		0.000		0.000		0.000			

Remarks

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
		Subtotal	0.000	0.000		0.000		0.000		0.000			

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Office of Secretary Of Defense			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY 0400: *Research, Development, Test & Evaluation, Defense-Wide* BA 4: *Advanced Component Development & Prototypes (ACD&P)*	R-1 ITEM NOMENCLATURE PE 0605017D8Z: *Reduction of Total Ownership Cost (RTOC)*	PROJECT 017: *RTOC*	

Management Services ($ in Millions)

				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks													

	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	24.447		20.310		0.000		20.310			

Remarks