

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Office of the Secretary Of Defense	Date: May 2017
---	-----------------------

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I BA 6: RDT&E Management Support</i>					R-1 Program Element (Number/Name) PE 0605104D8Z I <i>Technical Studies Support and Analysis</i>							
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	108.887	24.121	23.069	22.386	-	22.386	22.760	23.345	23.605	24.287	Continuing	Continuing
P421: <i>Technical Studies</i>	108.887	24.121	23.069	22.386	-	22.386	22.760	23.345	23.605	24.287	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program is a key source of funding for the Office of the Secretary of Defense and the Joint Staff to manage studies, analyses, strategic planning, and technical support efforts to improve and support policy development, decision making, management and administration of DoD programs and activities. Studies and analyses will examine current and alternative policies, plans, operations, strategies and budgets, providing essential means for managing and responding to the shifting and complex international, political, technological, economic, military, and acquisition environments in which national security planning decisions are made. Independent analyses from subject matter experts are instrumental for senior defense planners in making informed choices regarding requirements for force planning and strategic deployment of assets taking into account technological challenges and resource constraints, and there is a strong need to incorporate the findings of operational analysis in force planning requirements and projections. With the complexities of emerging security threats in the current geopolitical environment, the need for objective analysis and forward looking planning for the mid and long-term is vital.

<u>B. Program Change Summary (\$ in Millions)</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018 Base</u>	<u>FY 2018 OCO</u>	<u>FY 2018 Total</u>
Previous President's Budget	24.887	23.069	23.040	-	23.040
Current President's Budget	24.121	23.069	22.386	-	22.386
Total Adjustments	-0.766	0.000	-0.654	-	-0.654
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	0.000	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.766	-			
• General Program Services Reductions	-	-	-0.499	-	-0.499
• DTIC Offset	-	-	-0.155	-	-0.155

Change Summary Explanation

Reductions are reflected for implementation of efficiencies initiatives and Service Requirements Review Board Guidance.

As part of the Department of Defense reform agenda, the budget estimate reflects a stable trend in the number and cost of reports and studies in the near-term.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense										Date: May 2017		
Appropriation/Budget Activity 0400 / 6					R-1 Program Element (Number/Name) PE 0605104D8Z / <i>Technical Studies Support and Analysis</i>				Project (Number/Name) P421 / <i>Technical Studies</i>			
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
P421: <i>Technical Studies</i>	108.887	24.121	23.069	22.386	-	22.386	22.760	23.345	23.605	24.287	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This program is a key source of funding for the Office of the Secretary of Defense and the Joint Staff to manage studies, analyses, strategic planning, and technical support efforts to improve and support policy development, decision making, management and administration of DoD programs and activities. Studies and analyses will examine current and alternative policies, plans, operations, strategies and budgets, providing essential means for managing and responding to the shifting and complex international, political, technological, economic, military, and acquisition environments in which national security planning decisions are made. Independent analyses from subject matter experts are instrumental for senior defense planners in making informed choices regarding requirements for force planning and strategic deployment of assets taking into account technological challenges and resource constraints, and there is a strong need to incorporate the findings of operational analysis in force planning requirements and projections. With the complexities of emerging security threats in the current geopolitical environment, the need for objective analysis and forward looking planning for the mid and long-term is vital.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2016	FY 2017	FY 2018
Title: Technical Studies and Analyses Support for the Office of the Secretary of Defense	24.121	23.069	22.386
FY 2016 Accomplishments:			
Technical Support for the USD(Acquisition, Technology & Logistics): Studies and analyses of:			
Electronic warfare capabilities, munitions planning, strategic and conventional system technologies, weapons platform software sustainment, cyber risk assessments, strategic force modernization requirements, weapons of mass destruction force protection capabilities, foreign military systems and technologies proliferation, industrial supply chain resilience, strategic deterrence capabilities, industrial base capabilities assessments, defense manufacturing technology, global defense industry trends, technologies for evolving mission requirements, allied defense capabilities, logistics sustainability, NATO policy planning, munitions safety, identifying acquisition program risk, defense acquisition workforce requirements, small business defense suppliers, and support to new and ongoing Defense Science Board task forces (Constrained Military Operations, Logistics, Cyber Deterrence, Military Satellite Communications, Weapons of Mass Destruction, and Space Resilience).			
Technical Support for the Director, Cost Assessment and Program Evaluation: Studies and analyses regarding the following areas:			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense		Date: May 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605104D8Z / <i>Technical Studies Support and Analysis</i>	Project (Number/Name) P421 / <i>Technical Studies</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017
<p>Requirements regarding investment and resource planning such as strategic tradeoffs and risk management, strategic strike capabilities, air-land tactical mobile communications, air strike chain capabilities, unconventional defense options for allied states, imagery capabilities, hard and deeply buried targets, close air support and interdiction capabilities, maintaining medical readiness, strategic communications, personnel force models, technical studies and analyses to support independent cost estimates and economic research, comparative analyses of alternative strategic and conventional weapons systems configurations and force levels, and continuation of development of critical management instruments for measuring the long-term trends, strength and affordability of the defense program.</p> <p>Technical Support for the USD(Policy): Studies, analyses, and activities in the following areas:</p> <p>Requirements regarding geopolitical posture and policy such as regional and strategic defense policy planning, space strategy, deterrence and counterproliferation requirements, scenario-based escalation dynamics analyses, strengthening security assistance mechanisms, international defense trade and industrial relationships, technological and cyber effects policy, information operations capabilities, escalation control, nuclear strategy, and strategic-level simulations of areas of interest for legislative and executive branch decision-makers.</p> <p>Technical Support for the USD(Personnel & Readiness): Studies and analyses in the following areas:</p> <p>Requirements for sustaining and planning for the force of the future such as active and reserve recruiting and retention issues, flag officer requirements, improving recruiting capabilities, compensation analyses, improving strategic readiness, improvements to training capabilities, reserve component readiness and sustainability, military family and educational issues, and strategies for managing the Total Force portfolio.</p> <p>Technical Support for the USD(Intelligence): Studies and analyses in the following areas:</p> <p>Targeting data collection and analyses capabilities, mobile target tracking capabilities, and operational military concepts planning.</p> <p>Technical Support for the Joint Staff conducting joint research with OSD:</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense		Date: May 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605104D8Z / <i>Technical Studies Support and Analysis</i>	Project (Number/Name) P421 / <i>Technical Studies</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017
<p>Joint studies and analyses with OSD regarding operational lessons learned, joint military requirements analytic capabilities, and cyber effects on weapons systems.</p> <p>FY 2017 Plans: Technical Support for the USD(Acquisition, Technology & Logistics): Studies and analyses of:</p> <p>Electronic warfare capabilities, joint warfighting command and control in contested environments, combat aircraft service life optimization, WMD defense capabilities, weapons systems architecture, laser systems, ordinance modernization strategies, cyber resilience in industrial control systems, weapons systems software assurance, foreign investment in domestic suppliers, munitions industrial requirements, leveraging additive manufacturing capabilities to strengthen supply chain resilience, technology transfer capabilities, strategic basing requirements, defense acquisition workforce planning, weapons system sustainment in contingency operations, identifying acquisition program risk, support to Defense Science Board task forces on various evolving technological and warfare issues, and leveraging small business technology innovations.</p> <p>Technical Support for the Director, Cost Assessment and Program Evaluation: Studies and analyses regarding the following areas:</p> <p>Requirements regarding investment and resource planning such as future force structure requirements and weapons system requirements, recapitalization planning of strategic forces, product support cost analysis considerations during the acquisition process, commercial aircraft pricing and market factors, contingency force structure capabilities planning, technical studies and analyses to support independent cost estimates and economic research, weapons systems capabilities projection, and continuation of development of critical management instruments for measuring the long-term trends, strength and affordability of the defense program</p> <p>Technical Support for the USD(Policy): Studies, analyses, and activities in the following areas:</p> <p>Requirements regarding national security geopolitical posture and policies such as regional and strategic defense strategy, countering extremist movements, international defense policy planning, strategic force planning, homeland defense and humanitarian response capabilities, deterrence and counterproliferation requirements, international defense trade and industrial relationships, alliance sustainment, technological and other external effects on strategic requirements, space and cyber strategic guidance planning, contingency and stability operations, and strategic-level simulations of areas of interest for legislative and executive branch decision-makers.</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense			Date: May 2017		
Appropriation/Budget Activity 0400 / 6		R-1 Program Element (Number/Name) PE 0605104D8Z / <i>Technical Studies Support and Analysis</i>		Project (Number/Name) P421 / <i>Technical Studies</i>	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
<p>Technical Support for the USD(Personnel & Readiness): Studies and analyses in the following areas:</p> <p>Requirements regarding sustainment and planning for the force of the future such as active and reserve recruiting and retention issues, health care requirements for current and retired personnel, survivor benefits, compensation analyses, identifying critical personnel requirements, reserve component readiness and sustainability, military family and educational issues, gender and equal opportunity, and strategies for managing the Total Force portfolio.</p> <p>Technical Support for the Joint Staff conducting joint research with OSD:</p> <p>Joint Studies and analyses with OSD based upon operations research, cyber capabilities and strategy, command and control, mobility capabilities, supply chain requirements, training requirements, force programming planning, and basing requirements.</p> <p>FY 2018 Plans: Technical Support for the USD(Acquisition, Technology & Logistics): Studies and analyses of:</p> <p>Technical areas such as joint warfighting capability and technology planning, strategic and conventional system requirements, technology assurance, munitions requirements, counter WMD defense capabilities, space portfolio architectures, industrial base capabilities assessments, cyber capabilities, defense manufacturing technology, acquisition policy effectiveness, global defense industry trends, technologies for evolving mission requirements, allied defense capabilities, strategic basing requirements, DoD installations planning, logistics supply chain and energy requirements, NATO policy planning, treaty compliance requirements, identifying acquisition program risk, support to Defense Science Board task forces on various evolving technological and warfare issues, and small business technology investment and acquisition strategy,</p> <p>Technical Support for the Director, Cost Assessment and Program Evaluation: Studies and analyses regarding the following areas:</p> <p>Requirements regarding investment and resource planning such as emerging strategic and tactical systems requirements, strategic mobility, maintaining force readiness, personnel force models, assessments in support of scenario analyses, special operations and force support requirements, technical studies and analyses to support independent cost estimates and economic research, comparative analyses of alternative strategic and conventional weapons systems configurations and force levels, and</p>					

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense		Date: May 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605104D8Z / <i>Technical Studies Support and Analysis</i>	Project (Number/Name) P421 / <i>Technical Studies</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017
<p>continuation of development of critical management instruments for measuring the long-term trends, strength and affordability of the defense program and supporting development of the Future Years Defense Program.</p> <p>Technical Support for the USD(Policy): Studies, analyses, and activities in the following areas:</p> <p>Requirements regarding national security geopolitical posture and policies such as regional and strategic defense strategy, international defense policy planning, strategic force requirements, homeland defense and humanitarian response capabilities, deterrence and counterproliferation requirements, international defense trade and industrial relationships, NATO requirements planning, technological and other external effects on strategic requirements, space and cyber strategic guidance planning, contingency and stability operations, countering emerging terrorist threats, and strategic-level simulations of areas of interest for legislative and executive branch decision-makers.</p> <p>Technical Support for the USD(Personnel & Readiness): Studies and analyses in the following areas:</p> <p>Requirements regarding sustainment and planning for the force of the future such as active and reserve recruiting and retention issues, medical force infrastructure, compensation analyses, identifying critical personnel requirements, reserve component readiness and sustainability, military family and educational issues, gender and equal opportunity, and strategies for managing the Total Force portfolio.</p> <p>Technical Support for the Joint Staff conducting joint research with OSD:</p> <p>Joint Studies and analyses with OSD based upon operations research, cyber force planning, command and control, mobility capabilities, supply chain requirements, joint testing and training requirements, homeland defense, force programming planning, and basing requirements.</p>			
Accomplishments/Planned Programs Subtotals		24.121	23.069
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: FY 2018 Office of the Secretary Of Defense		Date: May 2017
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605104D8Z / <i>Technical Studies Support and Analysis</i>	Project (Number/Name) P421 / <i>Technical Studies</i>
<p><u>D. Acquisition Strategy</u> N/A</p> <p><u>E. Performance Metrics</u> FY 2018 BA: \$22.386 FY 2017 BA Assoc w/Metrics: \$22.386 Percent FY 2018 BA Assoc w/Metrics: 100%</p> <p>This program conducts approximately seventy-five actions per fiscal year to support a wide variety of national security goals of the Department and is designed to encourage a collaborative research approach among the components of OSD and the Joint Staff. The research and study projects supported by this program are closely integrated with the strategic goals of the Department of Defense. The focus of studies varies across a wide spectrum including weapons systems cost analysis, strengthening and leveraging alliances, human resource and military personnel management, examination of innovative technologies, application of technology to operational doctrine, and many other issues of emerging importance. Most of the actions are long to intermediate-range in outlook, and the program allows organizational leaders to plan and guide their research toward meeting their highest-priority goals and other high-level guidance such as executive branch performance management objectives, the Quadrennial Defense Review, the President's National Security Strategy, and the National Military Strategy of the United States of America.</p> <p>In following the program efficiencies guidance of the Secretary of Defense, the scope of studies and analyses has been limited as necessary in order to focus upon issues of the highest strategic importance to the Department of Defense while continuing to make every effort to support requirements for the Office of the Secretary of Defense developing from legislative direction.</p>		