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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Office of Secretary Of Defense **Date:** March 2014

Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 1: Basic Research</i>					PE 0601110D8Z / <i>Basic Research Initiatives</i>							
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	-	17.368	11.169	44.564	-	44.564	46.709	46.799	48.047	50.533	Continuing	Continuing
P010: <i>Basic Research Initiatives</i>	-	17.368	11.169	11.371	-	11.371	11.528	11.548	12.148	12.248	Continuing	Continuing
P101: <i>National Security Science and Engineering Faculty Fellowship (NSSEFF)</i>	-	-	-	33.193	-	33.193	35.181	35.251	35.899	38.285	Continuing	Continuing

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

Note

The National Security Science and Engineering Faculty Fellowship (NSSEFF) program is realigned from the National Defense Education Program (NDEP), program element (PE) 0601120D8Z, to this PE beginning in FY 2015.

This program element (PE) incorporates Minerva Research Initiative activities, which include university-led basic research in social science and sponsored research faculty chair positions at defense education institutions, and activities to implement the basic research office strategic plan for the Department of Defense (DoD).

A. Mission Description and Budget Item Justification

Basic research provides the DoD with a deep and broad awareness of current directions in science and engineering through the scientific performers in areas of research that are important to U.S. military capabilities including, among others, physics and the physical sciences, materials science, chemistry and chemical engineering, electrical engineering, applied mathematics, computer science, mechanical and aerodynamic engineering, ocean sciences, biological sciences, and the social sciences. Basic research sustains scientific and engineering communities in areas that form the critical technical underpinnings of DoD capabilities. Basic research through exploration and discovery provides the unique means for disruptive non-incremental advances that can improve or radically change military capabilities, strategy, and operations.

The Minerva Research Initiative is a university-based social science basic research program directed from within the Office of the Secretary of Defense (OSD) and executed by the Services, consistent with the January 2012 priorities document "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" and the Quadrennial Defense Review (QDR) requirements. This program seeks to build a deeper understanding of the social, cultural, and political forces that shape regions of the world of strategic importance to the United States. Deeper understanding of the cultural and political environments where threats, such as radical actors and regime disruptions, develop supports more effective strategic and operational policy decisions.

The Strategic Support for Basic Research (SSBR) program funds initiatives to implement the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) strategic plan for defense basic research. This plan defines specific and quantifiable actions to help create conditions for defense basic research investments capable of creating high-payoff, transformative scientific breakthroughs for DoD. The SSBR initiatives support the five aims of: (1) providing scientific leadership; (2) attracting

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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 1: Basic Research</i>	R-1 Program Element (Number/Name) PE 0601110D8Z / <i>Basic Research Initiatives</i>
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the Nation's best Scientists and Engineers (S&Es); (3) ensuring the coherence and balance of the Basic Research portfolio; (4) fostering connections between DoD performers and DoD; and (5) improving the efficiency of the defense research business environment.

The National Security Science and Engineering Faculty Fellowship (NSSEFF) program supports world-class researchers in scientific areas of critical importance to DoD and ensures the cultivation of exceptional talent. NSSEFF provides a critical resource for connections between academia and the DoD science and engineering enterprise. Fellows' work spans all seven DoD S&T priorities and defines a broad set of emerging scientific areas. Fellows serve as speakers at DoD events, reviewers on panels for DoD science, and as collaborators with DoD laboratory scientists and engineers.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	19.405	11.171	13.091	-	13.091
Current President's Budget	17.368	11.169	44.564	-	44.564
Total Adjustments	-2.037	-0.002	31.473	-	31.473
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-1.524	-			
• Congressional Rescissions	-0.025	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.479	-			
• Realignment of the NSSEFF Program	-	-	33.193	-	33.193
• Strategic Efficiency Savings	-	-	-1.720	-	-1.720
• FFRDC Adjustments	-	-0.002	-	-	-
• Other Program Adjustments	-0.009	-	-	-	-

Change Summary Explanation

The National Security Science and Engineering Faculty Fellowship (NSSEFF) program is realigned from PE 0601120D8Z to this PE in FY 2015.

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.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Office of Secretary Of Defense										Date: March 2014		
Appropriation/Budget Activity 0400 / 1					R-1 Program Element (Number/Name) PE 0601110D8Z / Basic Research Initiatives				Project (Number/Name) P010 / Basic Research Initiatives			
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
P010: Basic Research Initiatives	-	17.368	11.169	11.371	-	11.371	11.528	11.548	12.148	12.248	Continuing	Continuing

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

A. Mission Description and Budget Item Justification

Basic research provides the DoD with a deep and broad awareness of current directions in science and engineering through the scientific performers in areas of research that are important to U.S. military capabilities including, among others, physics and the physical sciences, materials science, chemistry and chemical engineering, electrical engineering, applied mathematics, computer science, mechanical and aerodynamic engineering, ocean sciences, biological sciences, and the social sciences. Basic research sustains scientific and engineering communities in areas that form the critical technical underpinnings of DoD capabilities. Basic research through exploration and discovery provides the unique means for disruptive non-incremental advances that can improve or radically change military capabilities, strategy, and operations.

The Minerva Research Initiative is a university-based social science basic research program directed from within the Office of the Secretary of Defense (OSD) and executed by the Services, consistent with the January 2012 priorities document "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" and the Quadrennial Defense Review (QDR) requirements. This program seeks to build a deeper understanding of the social, cultural, and political forces that shape regions of the world of strategic importance to the United States.

The Strategic Support for Basic Research (SSBR) program funds initiatives to implement the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) strategic plan for defense basic research. This plan defines specific and quantifiable actions to help create conditions for defense basic research investments capable of creating high-payoff, transformative scientific breakthroughs for DoD. The SSBR initiatives support the five aims of (1) providing scientific leadership; (2) attracting the Nation's best Scientists and Engineers (S&Es); (3) ensuring the coherence and balance of the Basic Research portfolio; (4) fostering connections between DoD performers and DoD; and (5) improving the efficiency of the defense research business environment.

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

	FY 2013	FY 2014	FY 2015
Title: Minerva Research Initiative	16.000	8.671	8.871
Description: The Minerva Research Initiative is a university-based social science basic research program directed from within the OSD and executed by the Services, consistent with the January 2012 priorities document "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense" and the QDR requirements. This program seeks to build a deeper understanding of the social, cultural, and political forces that shape regions of the world of strategic importance to the United States.			
FY 2013 Accomplishments: A Department-wide solicitation of topics to be set as Minerva priority social science research areas drew responses from Service leadership, the Defense Advanced Research Projects Agency (DARPA), Combatant Commands (COCOMs), J5, the intelligence community, and others. The resulting broad agency announcement (BAA) and correlated source selection process identified			

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Appropriation/Budget Activity 0400 / 1	R-1 Program Element (Number/Name) PE 0601110D8Z / <i>Basic Research Initiatives</i>	Project (Number/Name) P010 / <i>Basic Research Initiatives</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
several new university-led research grants to be awarded in these newly derived focus areas. The FY 2013 BAA yielded 270 white papers; 14 proposals were selected for award in accordance with recommendations from a panel of defense Science and Technology (S&T), defense policy, and academic experts as well as the appropriated FY 2013 budget. Sponsored eight faculty chair positions for Minerva Research Fellows at defense education institutions (war colleges and Service academies). FY 2014 Plans: A Department-wide solicitation of topics to be set as Minerva priority social science research areas will engage Service leadership, DARPA, J5, the intelligence community, and others in the defense community. The resulting BAA and correlated source selection process will select new university-led research grants to be awarded in these newly derived focus areas. The Minerva Research Fellows program is being restructured to more effectively build in-house social science capabilities and better connect social science research insights to current and future defense leadership at professional military education institutions (PMEs) and elsewhere. An ongoing pilot program has been designed to augment existing institutional resources rather than funding new research faculty by enabling activities such as PME curriculum development, new academic-government exchange opportunities, and research-informed tabletop exercises. FY 2015 Plans: Continue and start new university-led research initiatives. Based on lessons learned during FY 2014 pilot at defense education institutions, the Minerva program will continue strengthening DoD-internal social science capabilities by enabling activities such as PME curriculum development, new academic-government exchange opportunities, and research-informed tabletop exercises.			
Title: Strategic Support for Basic Research (SSBR) Description: The SSBR program funds initiatives to implement the ASD(R&E) strategic plan for defense basic research. This plan defines specific and quantifiable actions to help create conditions for defense basic research investments capable of creating high-payoff, transformative scientific breakthroughs for DoD. The SSBR initiatives support the five aims of (1) providing scientific leadership; (2) attracting the Nation's best scientists and engineers; (3) ensuring the coherence and balance of the Basic Research portfolio; (4) fostering connections between DoD performers and DoD; and (5) improving the efficiency of the defense research business environment. FY 2013 Accomplishments: Conducted workshops for scientific situational awareness. Convened National research leaders to provide external perspectives on potential breakthroughs and barriers to advancement in rapidly evolving fields of basic research. Analyzed university-related		1.368	2.498
			2.500

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2013	FY 2014
business practices for improvement. Acquired scientific expertise to oversee engineering and science initiatives. Established DoD-wide Basic Research objectives and priorities. FY 2014 Plans: Conduct workshops for scientific situational awareness. Convene National research leaders to provide external perspectives on potential breakthroughs and barriers to advancement in rapidly evolving fields of basic research. Continue to analyze university-related business practices for improvement. Continue support for scientific expertise to oversee engineering and science initiatives. Conduct ASD(R&E) Deans Dialog event to foster active connections with research universities. FY 2015 Plans: Conduct workshops for scientific situational awareness. Convene National research leaders to provide external perspectives on potential breakthroughs and barriers to advancement in rapidly evolving fields of basic research. Continue to analyze university-related business practices for improvement. Continue support for scientific expertise to oversee engineering and science initiatives. Conduct ASD(R&E) Deans Dialog event to foster active connections with research universities.			
Accomplishments/Planned Programs Subtotals		17.368	11.169
C. Other Program Funding Summary (\$ in Millions)			
N/A			
Remarks			
D. Acquisition Strategy			
N/A			
E. Performance Metrics			
N/A			

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Appropriation/Budget Activity 0400 / 1					R-1 Program Element (Number/Name) PE 0601110D8Z / Basic Research Initiatives				Project (Number/Name) P101 / National Security Science and Engineering Faculty Fellowship (NSSEFF)			
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
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# The FY 2015 OCO Request will be submitted at a later date.												
Note The National Security Science and Engineering Faculty Fellowship (NSSEFF) program will be realigned from the National Defense Education Program (NDEP) PE 0601120D8Z to this PE beginning in FY 2015.												
A. Mission Description and Budget Item Justification The National Security Science and Engineering Faculty Fellowship (NSSEFF) program supports world-class researchers in scientific areas of critical importance to DoD and ensures the cultivation of exceptional talent. NSSEFF provides a critical resource for connections between academia and the DoD science and engineering enterprise. Fellows’ work is selected on the basis of basic research priorities and other emerging areas of potential importance to DoD basic scientific research and defines a broad set of emerging scientific areas. Fellows serve as speakers at DoD events, reviewers on panels for DoD science, and as collaborators with DoD laboratory scientists and engineers.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2013	FY 2014	FY 2015	
Title: National Security Science and Engineering Faculty Fellowship (NSSEFF)									-	-	33.193	
Description: NSSEFF ensures that DoD has a research portfolio that supports the foremost creative, innovative, and productive university researchers. The objectives of the program are to: (1) conduct innovative, unclassified, basic scientific and engineering research on topics of interest to DoD; (2) provide university researchers with an overview of DoD’s missions, employed technologies, and current and future challenges; (3) foster research collaborations between science and engineering faculty members and DoD; and (4) increase the cadre of ready and relevant technical expertise which DoD can call upon.												
FY 2015 Plans: Continue support for current NSSEFF Fellows. Review program topic areas, eligibility, review process and selection criteria. Solicit for a new class of NSSEFF Fellows. Conduct a NSSEFF program review and report on Fellows' progress. Use this venue to identify and facilitate new connections between Fellows and DoD scientists and engineers. Organize and conduct a DoD-wide activity at a DoD Laboratory to further develop the collaborative relationships between DoD researchers and NSSEFF Fellows in areas of scientific or technological importance to DoD.												
Accomplishments/Planned Programs Subtotals									-	-	33.193	

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C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy N/A		
E. Performance Metrics N/A		