

# UNCLASSIFIED

**Exhibit R-2, RDT&E Budget Item Justification:** PB 2013 Office of Secretary Of Defense **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research				PE 0602228D8Z: Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	22.678	-	-	-	-	-	-	-	-	Continuing	Continuing
P489: Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)	22.678	-	-	-	-	-	-	-	-	Continuing	Continuing

## A. Mission Description and Budget Item Justification

The HBCU/MI program provides support in fields of science and engineering that are important to national defense. The Department of Defense (DoD) HBCU/MI Program encourages participation of small minority schools as well as large minority research institutions. This competitive program provides support through grants or contracts for research, education assistance, instrumentation purchases, and technical assistance as described below:

- Research. The research grants are to further the knowledge in the basic scientific disciplines through theoretical and empirical activities. Collaborative research allows university professors to work directly with military laboratories or other universities.
- Education. Education assistance funds are used by minority institutions to strengthen their academic programs in science, technology, engineering, and mathematics (STEM) thereby increasing the number of under-represented minorities obtaining undergraduate and graduate degrees in these fields. These grants provide equipment, scholarships, cooperative work/study opportunities, visiting faculty programs, summer programs, and a variety of other enhancements designed to support students and to encourage them to pursue careers in STEM.
- Infrastructure. This program allows universities to purchase basic laboratory equipment for research and education program enhancements and highly sophisticated research instruments, such as lasers and spectrometers.
- Technical assistance. These funds are used to design programs that enhance the ability of minority institutions to successfully compete for future Defense funding. The objective is to assist the HBCU/MI community in areas such as proposal writing and administration of grants and contracts.

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<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 2: <i>Applied Research</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0602228D8Z: <i>Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)</i>
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<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013 Base</b>	<b>FY 2013 OCO</b>	<b>FY 2013 Total</b>
Previous President's Budget	15.067	-	-	-	-
Current President's Budget	22.678	-	-	-	-
Total Adjustments	7.611	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.452	-			
• SBIR/STTR Transfer	-0.634	-			
• Congressional Adjustments	8.000	-	-	-	-
• Economic Assumptions	-0.117	-	-	-	-
• FFRDC	-0.085	-	-	-	-
• Other Program Adjustments	-0.005	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Office of Secretary Of Defense								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 2: Applied Research				R-1 ITEM NOMENCLATURE PE 0602228D8Z: Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)				PROJECT P489: Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
P489: Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)	22.678	-	-	-	-	-	-	-	-	Continuing	Continuing
A. Mission Description and Budget Item Justification											
<p>The HBCU/MI program provides support in fields of science and engineering that are important to national defense. The Department of Defense (DoD) HBCU/MI Program encourages participation of small minority schools as well as large minority research institutions. This competitive program provides support through grants or contracts for research, education assistance, instrumentation purchases, and technical assistance as described below:</p> <ul style="list-style-type: none"><li>• Research. The research grants are to further the knowledge in the basic scientific disciplines through theoretical and empirical activities. Collaborative research allows university professors to work directly with military laboratories or other universities.</li><li>• Education. Education assistance funds are used by minority institutions to strengthen their academic programs in science, technology, engineering, and mathematics (STEM) thereby increasing the number of under-represented minorities obtaining undergraduate and graduate degrees in these fields. These grants provide equipment, scholarships, cooperative work/study opportunities, visiting faculty programs, summer programs, and a variety of other enhancements designed to support students and to encourage them to pursue careers in STEM.</li><li>• Infrastructure. This program allows universities to purchase basic laboratory equipment for research and education program enhancements and highly sophisticated research instruments, such as lasers and spectrometers.</li><li>• Technical assistance. These funds are used to design programs that enhance the ability of minority institutions to successfully compete for future Defense funding. The objective is to assist the HBCU/MI community in areas such as proposal writing and administration of grants and contracts.</li></ul>											
B. Accomplishments/Planned Programs (\$ in Millions)								FY 2011	FY 2012	FY 2013	
Title: Historically Black Colleges and Universities and Minority Institutions (HBCU/MI)								22.678	-	-	
Description: The HBCU/MI program provides support for research and collaboration with DoD facilities and personnel. The research grants further knowledge in the basic physical scientific and engineering disciplines through theoretical and empirical activities. Collaborative research allows university professors to work directly with military laboratories or other universities.											
FY 2011 Accomplishments: Developed and issued one solicitation for research projects and equipment. The solicitation closed on May 25, 2011 and the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) News Release announcing the winners was published											

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<p>on December 7, 2011. The DoD HBCU/MI program awarded 33 basic research grants totaling \$17.3 million. Continued efforts with HBCUs/MIs that included the following. (1) Supported research and collaboration with DoD facilities and personnel. (2) Conducted research and educational collaboration between the Naval Air Warfare Center and other HBCUs/MIs in support of the Avionic Enabling Technology Development for Manned and Unmanned Airborne System project. Forty-one interns worked at DoD Labs in the summer of 2011. Twenty were hired by DoD Labs upon completion of internships (\$2.0 million). (3) Provided funding in the amount of \$2.0 million in support of the John Hopps Defense Research Scholars Program at Morehouse College. Other funding supported grants initiatives for policy and E-Government and Service administrative tax in the amount of \$1.378 million.</p> <p><b>FY 2012 Plans:</b> Issue program solicitation to select new awards in support of basic research and student involvement with principal investigators at HBCUs/MIs.</p> <p>Continue the research and educational collaboration project between Naval Air Warfare Center and HBCUs/MIs in support of the Avionic Enabling Technology Development for Manned and Unmanned Airborne System. Goal is to increase the number of 2012 summer interns from 40 to 50 participants.</p> <p>Collect and assess the data from the DoD Components on the actions described in the ASD(R&amp;E) December 2, 2011 memo, "Reinvigorating Our Relationship with HBCUs and MIs."</p> <p>Conduct annual review of the six DoD Centers of Excellence started in FY 2011.</p> <p>Continue to expand partnerships among major institutions of higher education and the HBCUs/MIs.</p> <p><b>FY 2013 Plans:</b> Conduct annual competition of the HBCU/MI program.</p> <p>Continue to assess the DoD-wide HBCU/MI programs in order to strengthen the competitive position of these institutions within DoD.</p> <p>Conduct annual review of the six DoD Centers of Excellence started in FY 2011.</p> <p>Continue to examine the effectiveness of DoD-wide efforts to increase the number of minorities graduating from HBCUs/MIs in STEM fields and the transition of these students into DoD or the federal workforce.</p>				

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2011</b>	<b>FY 2012</b>
Conduct outreach workshops to expose HBCUs/MIs to opportunities in DoD.			
<b>Accomplishments/Planned Programs Subtotals</b>		22.678	-
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A			
<b>D. Acquisition Strategy</b> N/A			
<b>E. Performance Metrics</b> <p>Since 2007, the following data has been collected as a grant requirement:</p> <ul style="list-style-type: none"> <li>Percent of students graduating with undergraduate degrees in Science, Mathematics, Engineering, and Technology fields.</li> <li>Percent of students pursuing graduate and Ph.D. degrees.</li> <li>Number of undergraduate students achieving specified GPA average.</li> <li>Number of students participating in the Centers of Excellence for Research and Engineering.</li> <li>Number of students working in Defense Laboratories.</li> </ul> <p>This data constitutes the "Existing Baseline" for measurement and improvement in future years.</p>			