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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2011 United States Special Operations Command **DATE:** February 2010

<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 1160472BB: <i>Information and Broadcast Systems Advanced Technology/S225</i>
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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	8.405	4.967	4.942	0.000	4.942	4.924	4.909	4.992	5.075	Continuing	Continuing
<i>S225: SOF Information and Broadcast Systems Advanced Technology/S225</i>	8.405	4.967	4.942	0.000	4.942	4.924	4.909	4.992	5.075	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

This Program Element (PE) conducts rapid prototyping, advanced technology demonstrations, and advanced concept technology demonstrations of information and broadcast systems technology. This includes planning, analysis, evaluation, and production information systems capabilities and distribution and dissemination broadcast systems capabilities. It provides a means for demonstrating and evaluating the utility of emerging/advanced technologies in as realistic an operational environment as possible by SOF users. This PE integrates efforts with each other and conducts technology demonstrations in conjunction with joint experiments and other assessment events. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The PE also addresses unique, joint special mission or area-specific needs for which a few-of-a-kind prototypes must be developed on a rapid response basis, or are of sufficient time sensitivity to accelerate the prototyping effort of a normal acquisition program in any phase.

**B. Program Change Summary (\$ in Millions)**

	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011 Base</u>	<u>FY 2011 OCO</u>	<u>FY 2011 Total</u>
Previous President's Budget	10.960	4.988	0.000	0.000	0.000
Current President's Budget	8.405	4.967	4.942	0.000	4.942
Total Adjustments	-2.555	-0.021	4.942	0.000	4.942
• Congressional General Reductions		-0.021			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-2.148	0.000			
• SBIR/STTR Transfer	-0.407	0.000			
• Other Adjustment	0.000	0.000	4.942	0.000	4.942

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**Change Summary Explanation**

Funding:

FY09: Decrease of -\$2.555 million is due to Small Business Innovative Research transfer (-\$0.407 million) and reprogramming for Foliage Penetration efforts (-\$2.148 million).

FY10: Decrease of -\$0.021 million due to Section 8097 Congressional general reductions.

FY11: Increase of \$4.942 million is due to the DoD not estimating FY 2011 cost when the FY 2010 President's Budget was prepared.

Schedule: None.

Technical: None.

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 United States Special Operations Command									<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 0400: <i>Research, Development, Test &amp; Evaluation, Defense-Wide</i> BA 3: <i>Advanced Technology Development (ATD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 1160472BB: <i>Information and Broadcast Systems Advanced Technology/S225</i>				<b>PROJECT</b> S225: <i>SOF Information and Broadcast Systems Advanced Technology/S225</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
<i>S225: SOF Information and Broadcast Systems Advanced Technology/S225</i>	8.405	4.967	4.942	0.000	4.942	4.924	4.909	4.992	5.075	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

This project conducts rapid prototyping of information and broadcast system technology. This includes cyber capabilities that predict the best media channels to reach potential target audiences, data mining and information collections tools, propaganda and social behavior analytical tools, cultural analysis toolsets and emerging technologies that support the planning and analytical needs for the Psychological Operations (PSYOP) forces. It provides a means for demonstrating and evaluating the utility of emerging/advanced technologies in as realistic an operational environment as possible by SOF users. This project integrates efforts within this project and conducts technology demonstrations in conjunction with joint experiments and other assessment events and performs market research on emerging technologies that support all phases of PSYOP. Evaluation results are included in a transition package, which assists in the initiation of or insertion into an acquisition program. The project also addresses unique, joint special mission or area-specific needs.

Seeks technologies that will transform current PSYOP capabilities through two major objectives: 1) Exploit technologies capable of disseminating products to reach target audiences across a variety of media to include audiences in denied areas. 2) Automate and improve PSYOP planning and analytical capability through technologies that are integrated into SOF planning systems (Cultural Analysis, Targeting, Theme Development, Media & Product Selection, Distribution & Dissemination, and Measures of Effectiveness). Develop software applications that increase the efficiency and shorten the timeline to get PSYOP dissemination packages approved. Develop hardware/software tools that facilitate the collaboration and sharing of information and other critical data.

PSYOP Modernization. This initiative will initiate and continue development of emergent technologies available in the marketplace to transform and modernize PSYOP planning, analysis, development, broadcast, distribution, dissemination, and feedback capabilities. This initiative will also continue development of appropriate emerging technologies initially identified by ATDs and ACTDs to transition to acquisition programs. Technologies include: multi-frequency broadcasts systems; digital broadcast capabilities; remote controlled electronic paper; near real-time command and control of unattended PSYOP systems, especially in denied areas; focused/beam speaker sound technologies; visual projection technologies; advanced commercial broadcast technologies including amplitude modulation (AM) and frequency modulation (FM) radio transmitters and antenna; television (TV) transmitter and antenna systems; internet and telephony dissemination and broadcast systems, technologies capable of disseminating PSYOP products to reach target audiences across a wide variety of media into denied areas; and technologies that automate and improve PSYOP planning and analytical capability through integrated capabilities.

**B. Accomplishments/Planned Program (\$ in Millions)**

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>								
				<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
PSYOP "Global Reach" ACTD  <i>FY 2009 Accomplishments:</i> FY09 Demonstrated and performed an extended user evaluation (EUE) for the broadcast payloads on Predator type Unmanned Aerial Vehicle platforms. Demonstrated and performed EUE for the broadcast payload for High Altitude Unmanned Aerial System (Global Observer or HALE). Both of these EUEs will be in preparation for transition. In addition, demonstrated and performed EUE for the PSYOP Planning and Analysis System, which will lead to the transition of software/hardware.				2.684	0.000	0.000	0.000	0.000
PSYOP Modernization  <i>FY 2009 Accomplishments:</i> FY09 Explored emergent technologies available in the marketplace to transform and modernize PSYOP technology capabilities across several PSYOP shortcomings to include: the next generation loudspeaker system, long range broadcast system, PSYOP media displays, and next generation leaflet delivery system. These efforts will also enhance and modernize PSYOP broadcast systems and PSYOP print systems.  <i>FY 2010 Plans:</i> FY10 Continue exploring emerging technologies available in the marketplace to transform and modernize PSYOP technology capabilities across several PSYOP shortcomings to include: the next generation loudspeaker system, scatterable variants and modular systems that meet multiple concepts of operations scenarios, long range broadcast system, Commando SOLO and terrestrial capabilities that are air droppable, stand alone and networked, and next generation leaflet delivery capabilities. Efforts enhance and modernize PSYOP broadcast systems and PSYOP print systems. Develop toolsets to increase the ability of the PSYOP soldier to select appropriate dissemination assets for influence. Research analytic toolsets that focus on predicting human/cultural behavior and appropriate stimuli for influence.				5.721	4.967	4.942	0.000	4.942

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<b>B. Accomplishments/Planned Program (\$ in Millions)</b>						
		<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
<i>FY 2011 Base Plans:</i> FY11 Transitions previously developed technologies to programs of record such as Fly-Away Broadcast System, Media Production Center and Commando SOLO. These capabilities developed under the PSYOP modernization effort will drastically enhance the legacy programs and position the warfighter to fight future wars.						
Accomplishments/Planned Programs Subtotals		8.405	4.967	4.942	0.000	4.942
<b>C. Other Program Funding Summary (\$ in Millions)</b>						
N/A						
<b>D. Acquisition Strategy</b>						
N/A						
<b>E. Performance Metrics</b>						
N/A						

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