

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)	DATE MAY 2009
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APPROPRIATION / BUDGET ACTIVITY RDT&E, DEFENSE-WIDE / 7	R-1 ITEM NOMENCLATURE / PROJECT NO. PE 1160488BB SOF PSYOP/D476
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COST (Dollars in Millions)	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	Cost to Complete	Total Cost
PE1160488BB		15.512	9.887						Cont.	Cont.
D476, SOF PSYOPS		15.512	9.887						Cont.	Cont.

A. Mission Description and Budget Item Justification: The SOF PSYOP program element provides for the development, test and integration of Psychological Operations (PSYOP) equipment. PSYOP are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately, the behavior of foreign governments, organizations, groups, and individuals. This program element funds transformational systems and equipment to conduct PSYOP in support of combatant commanders.

B. Program Change Summary:

	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>
Previous President's Budget		15.554	9.174
Current President's Budget		15.512	9.887
Total Adjustments		-0.042	0.713
Congressional Program Reductions		-0.042	
Congressional Increases			
Reprogrammings			
Other Program Adjustments			0.713

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<p>Funding:</p> <p>FY09: Decrease of -\$0.042 million is due to Congressional reduction for Section 8101 (-0.042 million).</p> <p>FY10: Net increase of \$0.713 million supports Commando Solo engineering study for digital broadcast technologies (\$0.851 million) and a decrease for economic assumptions (-\$0.137 million).</p> <p>Schedule: None.</p> <p>Technical: None.</p>		

Exhibit R-2a, RDT&E Project Justification		Date: MAY 2009
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Cost (\$ in millions)	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
	6.563	15.512	9.887					
RDT&E Articles Quantity								

A. Mission Description and Budget Item Justification: This project provides for the development and acquisition of Psychological Operations (PSYOP) equipment. PSYOP are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately, the behavior of foreign governments, organizations, groups, and individuals. This project funds transformational systems and equipment to conduct PSYOP in support of combatant commanders. The PSYOP sub-projects funded are grouped by the level of organization they support. Sub-projects include:

- The PSYOP Broadcast System consists of fixed and deployable multi-media production facilities for radio and television programming, distribution systems, and dissemination systems to provide PSYOP support to theater commanders. This program is comprised of several interfacing systems that can stand alone or interoperate with other PSYOP systems as determined by mission requirements. This program includes the fixed site media production center; a deployable theater media production center; a distribution system that provides a product distribution link to systems worldwide; a media system; a transit case fly-away broadcast systems that consists of any combination of amplitude modulation (AM), frequency modulation (FM), shortwave (SW), and television (TV) transmitters, and radio/TV production systems; and long range broadcast system. The long range broadcast system will include unmanned aerial vehicle payloads, scatterable media, telephony, and Internet broadcast. PSYOP media displays will consist of easily transportable, state of the art, electronic media displays designed to disseminate and direct broadcast electronic messages, which will influence foreign target audiences, and will support the PSYOP direct broadcast mission requirements. The Special Operations Media System-B is a tactical deployable radio and television broadcast system. It is designed to act as the forward deployed broadcast platform of products. It has limited production capabilities and is made up of two independent systems: a mobile radio broadcast system (AM, FM, SW) and a mobile television broadcast system (VHF, UHF)) capable of receiving audio and video products for broadcasting.
- The Family of Loudspeakers program consists of modular amplifiers and speakers that can be interconnected to form sets of loudspeakers that will provide high quality recorded audio, live dissemination, and acoustic deception capability. Equipment is transported, operated, and mounted in ground vehicles, watercraft, and rotary wing aircraft, and dismounted for ground operations (tripod/manpack). This capability permits loudspeaker missions to be conducted over larger areas than previous equipment and provides a greater standoff distance for U.S.

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Forces/assets. The next generation loudspeaker system will consist of seven variants: manpack; ground vehicle/watercraft; unmanned air vehicle; unmanned ground vehicle; scatterable media long duration; scatterable media short duration; and sonic projection (focused sound). The next generation system will provide capability improvements to include wireless networking, improved acoustic performance, unmanned ground and air vehicle transportability, scatterable speaker, long distance sonic projection sound and solid state modular amplifiers/speakers that can be interconnected using secure wireless technology to form sets of loudspeakers that provide high quality recorded audio, live dissemination, and acoustic deception capability.

- The Next Generation Leaflet Delivery System will provide forces a family of systems consisting of unmanned air vehicles, drones, missiles, and leaflet boxes that safely and accurately disseminate variable size and weight paper and electronic leaflets to large area targets, at short (10-750 miles) and long (>750 miles) ranges. These systems can be utilized in peacetime and all threat environments across the spectrum of conflict, and are compatible with current and future U.S. aircraft.

Commando Solo: Commando Solo supports combat operations by flying broadcast missions for the purpose of broadcasting radio and/or television signals deep into denied territory. These broadcasts are made from EC-130J aircraft that are equipped with high powered transmitters and large antenna arrays that operate in the 0.45 - 1,000 MHz frequency range. The Commando Solo program acquisition strategy modifies three EC-130J aircraft with a hardwired Commando Solo capability.

B. Accomplishments/Planned Program

	FY08	FY09	FY10	
PSYOP Broadcast System	5.838	8.485	8.070	
RDT&E Articles Quantity				

FY08 Continued primary hardware development, systems engineering, and developmental test and evaluation (DT&E) on the long range broadcast technology, broadcast modernization efforts, and planning and analysis system. Commenced primary hardware and software development, systems engineering and DT&E on media displays.

FY09 Continue primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media displays.

FY10 Continues primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media displays.

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	FY08	FY09	FY10	FY11
Family of Loudspeakers	0.725	4.829	.831	
RDT&E Articles Quantity				

FY08 Conducted systems engineering and DT&E on the next generation manpack and vehicle watercraft variants.
 FY09 Conduct primary hardware and software development, systems engineering, and DT&E on the next generation unmanned ground vehicle, unmanned aerial vehicle, scatterable media long duration and scatterable media short duration variants.
 FY10 Conducts primary hardware and software development, systems engineering and DT&E on sonic projection variant.

	FY08	FY09	FY10	FY11
Next Generation Leaflet Delivery System		2.198		
RDT&E Articles Quantity				

FY09 Continue development of leaflet delivery variants identified by the FY08 Analysis of Alternatives and market analysis.

	FY08	FY09	FY10	FY11
Commando SOLO			.986	
RDT&E Articles Quantity				

FY10 Initiates engineering study of government and commercial digital broadcast technologies applicable to PSYOP.

C: Other Program Funding Summary:

	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	To <u>Complete</u> Cont.	Total <u>Cost</u> Cont.
PROC, PSYOP Equipment	46.137	55.614	43.081							

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C. Acquisition Strategy:

- PSYOP Broadcast System consists of wide-area systems providing radio, television programming and multi-media production, distribution and dissemination support to the theater commander. This system is comprised of several interfacing systems that can stand alone or interoperate with other systems as determined by mission requirements. These various sub-programs are in a post-Milestone C or various stages of milestone decisions. Media displays consists of electronic media displays, modular systems, electronic paper, and electronic games. The program acquires and modifies, as necessary, COTS/GOTS systems and equipment to provide the system capabilities.
- The Next Generation Leaflet Delivery System consists of four variants: unmanned aerial vehicle system, drone, missile, and leaflet box. The program will conduct an Analysis of Alternatives; and acquire and modify, as necessary, COTS/GOTS systems and equipment to replace the legacy leaflet delivery system.
- The Next Generation Loudspeaker System consists of seven variants. The program acquires and modifies, as necessary, COTS/GOTS systems and equipment to replace or enhance current system capabilities.
- Commando Solo funds modifications of the Commando Solo special mission equipment that broadcasts television and radio messages to target audiences in denied areas. Enhancements are periodically required to meet theater commander operational requirements and maintain compatibility with forces equipment upgrades to allow in-flight receipt of products for dissemination. The program acquires and integrates into the EC-130J commercial and GOTS systems to replace or enhance current system capabilities and address equipment shortfalls due to obsolescence.

APPROPRIATION / BUDGET ACTIVITY			SOF PSYOP/PE1160488BB								
RDT&E DEFENSE-WIDE / 7			PSYOP Advanced Development /D476								
Actual or Budget Value (\$ in millions)											
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	Budget Cost FY09	Award Date FY09	Budget Cost FY10	Award Date FY10	Budget Cost FY11	Award Date FY11	To Complete	Total Program
<u>Product Development</u>											
PSYOP Broadcast System	Various	Various	5.838	8.485	Dec-08	8.070	Jan-10			3.350	25.743
Family of Loudspeakers	Various	Various	0.725	4.829	Dec-08	0.831	Jan-10				6.385
Next Generation Leaflet Delivery System	Various	Various		2.198	Dec-08						2.198
Commando SOLO	TBD	TBS				0.986	Jan-10				0.986
Subtotal Product Development			6.563	15.512		9.887				3.350	35.312
<u>Support Cost</u>											
Support Cost											
Subtotal Support Cost											
<u>Test and Evaluation</u>											
Test and Evaluation											
Subtotal Test and Evaluation											
<u>Management Services</u>											
Management Services											
Subtotal Management Services											
Prior years			30.447								30.447
Total Cost			37.010	15.512		9.887				3.350	65.759

Exhibit R-4, RDT&E Program Schedule Profile													Date: MAY 2009																			
Appropriation/Budget Activity					Program Element Number and Name												Project Number and Name															
RDT&E/7					PE1160488BB/SOF PSYOP												Project D476/PSYOP Advanced Development															
Fiscal Year	2008				2009				2010				2011				2012				2013				2014				2015			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
PSYOP Broadcast System-Long Range Broadcast System Unmanned Aerial Vehicle-Payload Hardware Development and Testing			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲																				
Family of Loudspeakers Next Generation Loudspeaker	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲																				
Next Generation Leaflet Delivery System Development					▲	▲	▲	▲																								
Commando Solo											▲	▲																				

