Exhibit R-2, RDT&E Budget Item Justification: PB 2012 United States Special Operations Command

R-1 ITEM NOMENCLATURE

0400: Research, Development, Test & Evaluation, Defense-Wide

PE 1160488BB: Military Information Support Operations (MISO) (Formerly SOF PSYOPS)

**DATE:** February 2011

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
Total Program Element	10.746	4.193	2.990	-	2.990	-	-	-	-	Continuing	Continuing
D476: Military Information Support Operations	10.746	4.193	2.990	-	2.990	-	-	-	-	Continuing	Continuing

### A. Mission Description and Budget Item Justification

Beginning in FY2012, Program Element 1160488BB was renamed Military Information Support Operations (MISO). Former name was SOF PSYOPS.

The MISO program element provides for the development, test and integration of MISO equipment. MISO 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 MISO in support of combatant commanders.

B. Program Change Summary (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Previous President's Budget	9.846	4.193	2.990	-	2.990
Current President's Budget	10.746	4.193	2.990	-	2.990
Total Adjustments	0.900	-	-	-	-
<ul> <li>Congressional General Reductions</li> </ul>		-			
<ul> <li>Congressional Directed Reductions</li> </ul>		-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>		-			
<ul> <li>Congressional Directed Transfers</li> </ul>		-			
Reprogrammings	1.212	-			
SBIR/STTR Transfer	-0.312	-			

## **Change Summary Explanation**

Funding:

FY 2010 Net increase of \$0.900 million is due to the EC 130J Multi Mission Upgrades Congressional Add (+\$3.983 million) that was reprogrammed from PE 1160403BB, SO Aviation Systems Advanced Development via 1415-3 internal reprogramming action (10-21 IR), a reprogramming to higher command priorities (-\$2.771 million) and a transfer of funds to Small Business Innovative Research (-\$0.312 million).

FY 2011 None.

FY 2012 None.

xhibit R-2, RDT&E Budget Item Justification: PB 2012 United St	ates Special Operations Command	DATE: February 2011
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
1400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160488BB: Military Information Support	Operations (MISO) (Formerly SOF PSYOPS)
BA 7: Operational Systems Development		
Schedule: None.		
ochedule. None.		
Technical: None.		

Exhibit R-2A, RDT&E Project Just	ification: PE	3 2012 Unite	d States Sp	ecial Operati	ions Comma	nd			DATE: Feb	ruary 2011	
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 7: Operational Systems Develop	& Evaluation	n, Defense-V		PE 116048	IOMENCLA 8BB: Military (MISO) (For	Information		PROJECT D476: Milita	ary Information	on Support C	Operations
COST (\$ in Millions)	FY 2010	FY 2011	FY 2012 Base	FY 2012 OCO	FY 2012 Total	FY 2013	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost
D476: Military Information Support Operations	10.746	4.193	2.990	-	2.990	-	-	-	-	Continuing	Continuing

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

Quantity of RDT&E Articles

This project provides for the development and acquisition of Military Information Support Operations (MISO) equipment. MISO 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 MISO in support of combatant commanders. The MISO sub-projects funded are grouped by the level of organization they support. Sub-projects include:

- 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. 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 MISO Broadcast System consists of fixed and deployable multi-media production facilities for radio and television programming, distribution systems, and dissemination systems to provide MISO support to theater commanders. This program is comprised of several interfacing systems that can stand alone or interoperate with other MISO systems as determined by mission requirements. This program includes the fixed site media production center; a lightweight, deployable media production capability; 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 a combination of amplitude modulation (AM), frequency modulation (FM), shortwave (SW), and television (TV) transmitters, and radio/TV production systems; software defined radio and a long range broadcast system which transmits analog and digital broadcasts. The long range broadcast system will include unmanned aerial vehicle payloads, scatterable media, telephony, and Internet broadcast. MISO 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 MISO 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 consists 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. Additionally, lightweight and tactical media development work stations will allow soldiers to produce MISO products in deployed locations.

Exhibit R-2A, RDT&E Project Justification: PB 2012 United States S	pecial Operations Command		DATE: Fe	bruary 2011		
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	Γ			
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160488BB: Military Information Support	D476: Mili	itary Informa	tion Support	Operations	
BA 7: Operational Systems Development	Operations (MISO) (Formerly SOF PSYOPS)					
Commando Solo: Commando Solo supports combat operations by	flying broadcast missions for the purpose of broad	dcasting and	alog and digi	ital radio and	/or	
television signals deep into denied territory. These broadcasts are ma	ade from EC-130J aircraft that are equipped with h	nigh powere	d transmitte	rs and large a	antenna	
arrays that operate in the 0.45 - 1,000 MHz frequency range. The Co	mmando Solo program acquisition strategy include	es conducti	ng engineeri	ng analyses	to develop	
digital broadcast capabilities for the EC-130J and C-130J aircraft. Co	mmando SOLO will leverage development and ha	rdware fron	n the Fly-Aw	ay Broadcast	t System.	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2010	FY 2011	FY 2012	
Title: Family of Loudspeakers 0.802 -						

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2010	FY 2011	FY 2012
Title: Family of Loudspeakers	0.802	-	-
FY 2010 Accomplishments: Conducted primary hardware and software development, systems engineering and Development Test and Evaluation (DT&E) on sonic projection variant.			
Title: MISO Broadcast System	4.612	3.169	2.990
FY 2010 Accomplishments: Continued primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media display.			
FY 2011 Plans: Continue primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media displays.			
FY 2012 Plans: Continues primary hardware development, systems engineering, and DT&E on the long range broadcast technology, broadcast modernization efforts and media displays.			
Title: EC-130J Commando Solo	5.332	1.024	-
FY 2010 Accomplishments: Initiated engineering study of government and commercial digital broadcast technologies applicable to MISO.			
FY 2011 Plans: Continues engineering study of government and commercial digital broadcast technologies applicable to MISO leading to the development of a performance specification.			
Accomplishments/Planned Programs Subtotals	10.746	4.193	2.990

Exhibit R-2A, RDT&E Project Justification: PB 2012 United States Sp	ecial Operations Command		DATE: February 2011						
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT							
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 1160488BB: Military Information Support	D476: Milita	ary Information Support Operations						
BA 7: Operational Systems Development Operations (MISO) (Formerly SOF PSYOPS)									

#### C. Other Program Funding Summary (\$ in Millions)

			FY 2012	FY 2012	FY 2012					Cost To	
<u>Line Item</u>	FY 2010	FY 2011	<u>Base</u>	OCO	<u>Total</u>	FY 2013	FY 2014	FY 2015	FY 2016	Complete	<b>Total Cost</b>
PROC1: Military Information	34.358	25.266	4.142	0.000	4.142	1.197	1.012	1.074	1.136	Continuing	Continuing
Support Operations Systems											

#### **D. Acquisition Strategy**

- The Family of Loudspeakers Next Generation Loudspeaker System consists of seven variants. The program acquires and modifies, as necessary, commercial off-the-shelf/government off-the-shelf (COTS/GOTS) systems and equipment to replace or enhance current system capabilities.
- MISO 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 consist of electronic media displays, modular systems, electronic paper, and electronic games. The program acquires and modifies, as necessary, commercial off-the-shelf /government off-the-shelf COTS/GOTS systems and equipment to provide the 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.

#### **E. Performance Metrics**

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2012 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATU

R-1 ITEM NOMENCLATURE PROJECT

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160488BB: Military Information Support Operations (MISO) (Formerly SOF PSYOPS)

D476: Military Information Support Operations

**DATE:** February 2011

<b>Product Development</b>	(\$ in Millio	ns)		FY 2	2011	1	2012 ise		2012 CO	FY 2012 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Family of Loudspeakers	C/Various	Various:Various	5.739	-		-		-		-	0.000	5.739	
MISO Broadcast System	C/Various	Various:Various	14.489	3.169	Jan 2011	2.990	Mar 2011	-		2.990	2.990	23.638	
Commando Solo	C/TBD	TBD:TBD	5.332	1.024	Jan 2011	-		-		-	0.000	6.356	
		Subtotal	25.560	4.193		2.990		-		2.990	2.990	35.733	
						· · · · · · · · · · · · · · · · · · ·							

	Total Prior Years Cost	FY	2011	FY 2 Ba	FY 2	FY 2012 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	25.560	4.193		2.990	-	2.990	2.990	35.733	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2012 United States Special Operations Command

APPROPRIATION/BUDGET ACTIVITY

0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

PROJECT

PE 1160488BB: Military Information Support
Operations (MISO) (Formerly SOF PSYOPS)

D476: Military Information Support Operations

		FY	201	0		FY	201	1		FY	2012			FY	201	3		FY	201	4		FY	201	5		FY	201	6
	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
Family of Loudspeakers		,					•	•		•					,	,											·	
Family of Loudspeakers next Generation Loudspeaker																												
MISO Broadcast System																												
Long Range Broadcast System Unmanned Aerial Vehicle-Payload Hardware Development and Testing																												
Commando Solo																												
Commando Solo																												

Exhibit R-4A, RDT&E Schedule Details: PB 2012 United States Special Operations Command

perations Command DATE: February 2011

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

**PROJECT** 

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development

PE 1160488BB: Military Information Support Operations (MISO) (Formerly SOF PSYOPS)

D476: Military Information Support Operations

## Schedule Details

	St	art	E	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Family of Loudspeakers				
Family of Loudspeakers next Generation Loudspeaker	1	2010	4	2010
MISO Broadcast System				
Long Range Broadcast System Unmanned Aerial Vehicle-Payload Hardware Development and Testing	1	2010	4	2012
Commando Solo				
Commando Solo	2	2010	4	2011