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

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 1160474BB: <i>SOF Communications Equipment and Electronics Systems/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	0.000	0.730	1.922	0.000	1.922	1.392	0.787	0.800	0.814	Continuing	Continuing
S700: <i>SOF Communications Equipment and Electronics Systems</i>	0.000	0.730	1.922	0.000	1.922	1.392	0.787	0.800	0.814	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element provides for communication systems to meet emergent requirements to support Special Operations Forces (SOF). The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require communications equipment that improves their warfighting capability without degrading their mobility. Therefore, SOF Communications Advanced Development is a continuing effort to develop lightweight and efficient SOF Command, Control, Communications, and Computer (C4) capabilities.

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	0.000	0.733	0.000	0.000	0.000
Current President's Budget	0.000	0.730	1.922	0.000	1.922
Total Adjustments	0.000	-0.003	1.922	0.000	1.922
• Congressional General Reductions		-0.003			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	1.922	0.000	1.922

Change Summary Explanation

Funding:

UNCLASSIFIED

R-1 Line Item #262

Page 1 of 7

UNCLASSIFIED

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

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	PE 1160474BB: <i>SOF Communications Equipment and Electronics Systems/S225</i>

FY09: None.

FY10: Decrease of -\$0.003 million is due to Section 8097 Congressional general reductions.

FY11: Increase of \$1.922 million is due to the DoD not estimating FY 2011 cost when the FY 2010 President's Budget was prepared.

Schedule: None.

Technical: None.

UNCLASSIFIED

R-1 Line Item #262

Page 2 of 7

UNCLASSIFIED

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

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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
<i>S700: SOF Communications Equipment and Electronics Systems</i>	0.000	0.730	1.922	0.000	1.922	1.392	0.787	0.800	0.814	Continuing	Continuing
Quantity of RDT&E Articles											

A. Mission Description and Budget Item Justification

This project provides for communication systems to meet emergent requirements to support Special Operations Forces (SOF). The SOF mission mandates that SOF systems remain technologically superior to any threat to provide a maximum degree of survivability. SOF units require communications equipment that improves their warfighting capability without degrading their mobility. Therefore, SOF Communications Advanced Development is a continuing effort to develop lightweight and efficient SOF Command, Control, Communications, and Computer (C4) capabilities.

United States Special Operations Command (USSOCOM) has developed an overall strategy to ensure that Command, Control, Communications, Computer and Intelligence (C4I) systems continue to provide SOF with the required capabilities throughout the 21st century. USSOCOM's C4I systems comprise an integrated network of systems providing positive command and control and the timely exchange of intelligence and threat warning to all organizational echelons. The C4I systems that support this new architecture employ the latest standards and technology by transitioning from separate systems to full integration within the Global Information Grid (GIG). The GIG is a multitude of existing and projected national assets that allows SOF elements to operate with any force combination in multiple environments. The sub-projects funded in this project meet annual emergent requirements and are grouped by the level of organizational element they support: Operational Element (Team), Above Operational Element (Deployed) and Above Operational Element (Garrison).

OPERATIONAL ELEMENT (TEAM)

- The SOF Deployable Node provides new technology for the next generation antenna capability for all systems: heavy, medium, and light. This program consists of a family of deployable super high frequency, multi-band, satellite communications assemblages capable of supporting high-capacity, voice, data, video teleconferencing and video at all levels of classification.

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

UNCLASSIFIED

R-1 Line Item #262

Page 3 of 7

UNCLASSIFIED

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
SOF Deployable Node <i>FY 2010 Plans:</i> Develop and test next generation antennas for the family of SOF Deployable Nodes. Continue to develop, test and evaluate an interim mobile strategic entry point. Refine, test and evaluate tropospheric beyond line of sight capability. Test and evaluate new 1.2 meter Hawkeye III Lite antenna. Test and evaluate communications-on-the-move capability and the AN/PSC-14 Broadband Global Area Network SATCOM. <i>FY 2011 Base Plans:</i> Develop, test, and evaluate next generation SOF Deployable Node4 Lite manpack and multi-purpose baseband, and the next generation SOF Deployable Medium terminal. Test and evaluate migration to Ka-band 1.6 meter antenna. Develop and test next generation enhanced line of sight capability. Test and evaluate new wideband SATCOM systems and encryption devices.	0.000	0.730	1.922	0.000	1.922
Accomplishments/Planned Programs Subtotals	0.000	0.730	1.922	0.000	1.922

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

Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PROC: <i>Comm/Equip and Electronics</i>	83.162	56.910	58.390		58.390	79.935	99.202	79.884	74.911	Continuing	Continuing

D. Acquisition Strategy

- SOF Deployable Node is a fielded program being upgraded for next generation evolutionary technology insertions for all systems: heavy, medium, and light variants.

E. Performance Metrics

N/A

UNCLASSIFIED

R-1 Line Item #262

Page 4 of 7

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 United States Special Operations Command **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 1160474BB: <i>SOF Communications Equipment and Electronics Systems/S225</i>	PROJECT S700: <i>SOF Communications Equipment and Electronics Systems</i>
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Product Development (\$ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
SOF Deployable Node Antenna	MIPR	AFRL AFRL	0.000	0.730	Apr 2010	1.922	Apr 2011	0.000		1.922	Continuing	Continuing	Continuing
Subtotal			0.000	0.730		1.922		0.000		1.922			

Remarks

Project Cost Totals	Total Prior Years Cost	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
	0.000	0.730	1.922	0.000	1.922			

Remarks

UNCLASSIFIED

R-1 Line Item #262

Page 5 of 7

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2011 United States Special Operations Command **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY 0400: <i>Research, Development, Test & Evaluation, Defense-Wide</i> BA 7: <i>Operational Systems Development</i>	R-1 ITEM NOMENCLATURE PE 1160474BB: <i>SOF Communications Equipment and Electronics Systems/S225</i>	PROJECT S700: <i>SOF Communications Equipment and Electronics Systems</i>
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Exhibit R-4, RDT&E Program Schedule Profile

Date: FEBRUARY 2010

Appropriation/Budget Activity	Program Element Number and Name	Project Number and Name
RDT&E7	PE1160474BB/SOF Communications Equipment and Electronics Systems	Project S700/SOF Communications Equipment and Electronics Systems

Fiscal Year	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
SOF Deployable Node Evolutionary Technology Insertions							▲	▲			▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 United States Special Operations Command **DATE:** February 2010

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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
SOF Deployable Node Evolutionary Technology Insertions	3	2010	4	2015

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