Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603889N: Counterdrug RDT&E Projects

BA 4: Advanced Component Development & Prototypes (ACD&P)

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	Total Cost
Total Program Element	62.439	0.000		0.000	0.000		0.000	0.000	0.000	0.000	390.306
2219: Counterdrug RDTE Support	61.641	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	372.755
9999: Congressional Adds	0.798	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.551

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

The Counterdrug RDTE Projects Program mission is to develop and deploy technology that disrupts, deters, and denies the flow of drugs, people, information, money and weapons related to narcoterrorism.

The Research of Frequency Selective Surfaces and Thermal Signatures project is a Congressional plus up. Micro antenna-array technology will be developed to enhance, camouflage, or conceal the infrared (IR) signatures of controlled assets. The overall project objective is to investigate the utility of frequency selective surfaces (FSS) and thin-film materials as tags that can be viewed using airborne or national sensors. Arrays of infrared micro antennas will be applied to the exterior surface of a controlled item to alter the object's emission in the portion of the IR band commonly used by thermal imagers. The micro antenna array will be tailored to control the emitted infrared spectral pattern in order to disguise, conceal, or tag the asset of interest. The tag could also be remotely monitored using available thermal imaging technology. Key features include the ability to discriminate friend-from-foe and the tailoring of the thermal profile to enhance long-distance stand-off monitoring. The Volume Point Sensors project is a Congressional plus up. It is to demonstrate, based on recent research, that the existing or legacy electrical power lines can be used to charge and maintain all plug-in Chemical Biological Nuclear (CBN) point sensors as well as send sensor data and communications to in-line hubs, with out multiplexing coding and switching infrastructure cost. This system will provide the Ability to detect counter drug ops and transmit information over power lines and power grids.

**Exhibit R-2**, **RDT&E Budget Item Justification:** PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603889N: Counterdrug RDT&E Projects

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

	FY 2009	FY 2010	<u>FY 2011 Base</u>	FY 2011 OCO	FY 2011 Total
Previous President's Budget	0.000	0.000	0.000	0.000	0.000
Current President's Budget	62.439	0.000	0.000	0.000	0.000
Total Adjustments	62.439	0.000	0.000	0.000	0.000
<ul> <li>Congressional General Reductions</li> </ul>		0.000			
<ul> <li>Congressional Directed Reductions</li> </ul>		0.000			
<ul> <li>Congressional Rescissions</li> </ul>	0.000	0.000			
<ul> <li>Congressional Adds</li> </ul>		0.000			
<ul> <li>Congressional Directed Transfers</li> </ul>		0.000			
<ul> <li>Reprogrammings</li> </ul>	63.771	0.000			
SBIR/STTR Transfer	-1.332	0.000			

### **Congressional Add Details (\$ in Millions, and Includes General Reductions)**

**Project:** 9999: Congressional Adds

Congressional Add: Over-the-Horizon Vessel Tracking

	1 1 2003	1 1 2010
	0.798	0.000
Congressional Add Subtotals for Project: 9999	0.798	0.000
Congressional Add Totals for all Projects	0.798	0.000

EV 2009

**EV 2010** 

# **Change Summary Explanation**

Technical: Not applicable.

Schedule: Not applicable.

FY11 from previous President's Budget is shown as zero because no FY11-15 data was presented in President's Budget 2010.

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy **DATE:** February 2010

APPROPRIATION/BUDGET ACTIVITY **PROJECT R-1 ITEM NOMENCLATURE** 

1319: Research, Development, Test & Evaluation, Navy 2219: Counterdrug RDTE Support PE 0603889N: Counterdrug RDT&E Projects

BA 4: Advanced Component Develo	pment & Pro	ototypes (AC	D&P)								
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
2219: Counterdrug RDTE Support	61.641	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	372.755
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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

The Counterdrug RDT&E mission is to develop and deploy technology that disrupts, deters, and denies the flow of drugs, people, information, money and weapons related to narcoterrorism.

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

		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Counterdrug RDTE Support		61.641	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Conducted studies, analyses and experimentation.						
	Accomplishments/Planned Programs Subtotals	61.641	0.000	0.000	0.000	0.000

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

N/A

# D. Acquisition Strategy

Competitive procurement through RDT&E Indefinite Delivery, Indefinite Quantity (IDIQ) Contract

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

The CNTPO program goal is to identify and respond to R&D requirements that support ongoing counter narcoterrorism missions being conducted by the Department of Defense, other Federal agencies, partner nations and State and local authorities. CNTPO will conduct studies, analyses and experimentation in both laboratory and non-laboratory environments to support the DoD strategy for disrupting, deterring, and denying the flow of drugs, people, information, money and weapons related to illegal drug trafficking and narcoterrorism.

**Exhibit R-2A**, **RDT&E Project Justification:** PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0603889N: Counterdrug RDT&E Projects

9999: Congressional Adds

BA 4: Advanced Component Development & Prototypes (ACD&P)

DA 4. Advanced Component Develo	pinent a ric	notypes (AC	ישטי								
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
9999: Congressional Adds	0.798	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.551
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

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

Congressional Add

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

	FY 2009	FY 2010
Congressional Add: Over-the-Horizon Vessel Tracking	0.798	0.000
FY 2009 Accomplishments: Over-the-Horizon Vessel Tracking		
Congressional Adds Subtotals	0.798	0.000

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

N/A

## **D. Acquisition Strategy**

N/A

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

Congressional Add