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 0603851M: Joint Non-Lethal Weapons Testing

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 Complete	Total Cost
Total Program Element	50.424	49.086	43.272	0.000	43.272	50.974	50.994	50.355	51.394	Continuing	Continuing
2319: Non-Lethal Weapons	46.036	46.776	43.272	0.000	43.272	50.974	50.994	50.355	51.394	Continuing	Continuing
9999: Congressional Adds	4.388	2.310	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.511

A. Mission Description and Budget Item Justification

The DoDs Joint Non-Lethal Weapons Program (JNLWP) was established by the Secretary of Defense, who assigned centralized responsibility for DoD joint research and development of non-lethal weapons and technology to the Commandant of the Marine Corps as the Executive Agent. The Under Secretary of Defense for Acquisition, Technology and Logistics (USD AT&L) provides direct oversight of the JNLWP.

The efforts described in this Program Element (PE) reflect Joint Service research and development (R&D) investment decisions provided by the Joint NLW Integrated Product Team, a multi-service flag level corporate board that executes the JNLWP for the Commandant of the Marine Corps. Research conducted is based on the needs and capabilities of the Services, the Special Operations Command, and the Coast Guard, as identified in the DoDs Non-Lethal Weapons Joint Capabilities Document. This coordinated joint R&D development approach addresses mutual capability gaps and assures the best non-lethal technologies and equipment are provided to the operating forces while eliminating duplicative Service investment.

This program funds Joint Service research, development, test and evaluation of non-lethal weapon (NLW) systems and technologies that by their design, provide a new non-lethal capability to minimize fatal or permanent injuries and undesired damage to property and the environment. Instead, these systems are designed to stun, incapacitate, or hinder

movement of individuals, crowds, or equipment. The availability of NLWs allows commanders less than lethal options, particularly in urban warfare and military operations other than war, i.e., peacekeeping, humanitarian assistance and disaster relief, as well as special operations.

The Joint Non-Lethal Weapons Directorate was established by the Commandant of the Marine Corps to manage the day to day research and development activities of the Joint Non-Lethal Weapons Program. The JNLWP funding is distributed amongst the USA, USAF, USN, USMC, SOCOM, and USCG in support of NLW research and development efforts. Each Service is responsible for their procurement and operating support costs.

Exhibit K-2, KDT&E Budget item Justification. FD 2011 Navy		DATE. Feb	ruary 2010
Exhibit P 2 PDT8 E Rudget Item Justification: DR 2011 Nove	RDT&E Budget Item Justification: PB 2011 Navy DATE: February 2010		

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0603851M: Joint Non-Lethal Weapons Testing

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

B. Program Change Summary (\$ in Millions)

FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
49.150	46.971	0.000	0.000	0.000
50.424	49.086	43.272	0.000	43.272
1.274	2.115	43.272	0.000	43.272
	-0.205			
	0.000			
0.000	0.000			
	2.320			
	0.000			
0.001	0.000			
-0.722	0.000			
0.000	0.000	43.272	0.000	43.272
0.000	0.000	0.000	0.000	0.000
-0.005	0.000	0.000	0.000	0.000
2.000	0.000	0.000	0.000	0.000
	49.150 50.424 1.274 0.000 0.001 -0.722 0.000 0.000 -0.005	49.150 46.971 50.424 49.086 1.274 2.115 -0.205 0.000 0.000 0.000 2.320 0.000 0.001 0.000 -0.722 0.000 0.000 0.000 0.000 0.000 -0.005 0.000	49.150 46.971 0.000 50.424 49.086 43.272 1.274 2.115 43.272 -0.205 0.000 0.000 0.000 2.320 0.000 0.001 0.000 -0.722 0.000 0.000 0.000 -0.005 0.000 0.000 0.000 0.000 0.000	49.150 46.971 0.000 0.000 50.424 49.086 43.272 0.000 1.274 2.115 43.272 0.000 0.000 0.000 0.000 0.000 0.001 0.000 0.000 0.000 0.000 0.000 43.272 0.000 0.000 0.000 0.000 0.000 -0.005 0.000 0.000 0.000

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

Project: 9999: Congressional Adds

Congressional Add: Non-Lethal Defense Technologies

Congressional Add: Boat Trap System For Port Security/Water Craft Int

Congressional Add: Eye Safe Laser Warning Systems

	FY 2009	FY 2010
	0.000	2.310
	2.393	0.000
	1.995	0.000
Congressional Add Subtotals for Project: 9999	4.388	2.310
Congressional Add Totals for all Projects	4.388	2.310

Change Summary Explanation

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

DATE: February 2010

APPROPRIATION/BUDGET ACTIV 1319: Research, Development, Test BA 4: Advanced Component Develo	t & Evaluatio		CD&P)	R-1 ITEM N PE 060385 Testing			eapons	PROJECT 2319: Non-	Lethal Weap	oons	
COST (\$ in Millions)	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To	Total

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
2319: Non-Lethal Weapons	46.036	46.776	43.272	0.000	43.272	50.974	50.994	50.355	51.394	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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

This project develops non-lethal weapon (NLW) systems that by their design, provide a new non-lethal capability to minimize fatal or permanent injuries and undesired damage to property and the environment. Instead, these systems are designed to stun, incapacitate, or hinder movement of individuals, crowds, or equipment. The availability of NLWs allows commanders less than lethal options, particularly in urban warfare and military operations other than war, i.e., peacekeeping, humanitarian assistance and disaster relief, as well as special operations.

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
*Modeling and Simulation (M&S) of NLWs.	1.379	1.101	1.167	0.000	1.167
FY 2009 Accomplishments: Continue modeling and simulation (M&S) of NLWs in warfighter training/war gaming models and performance effects data collection/population to demonstrate/analyze NL effects and optimize training.					
FY 2010 Plans: Continue modeling and simulation (M&S) of NLWs in warfighter training/war gaming models and performance effects data collection/population to demonstrate/analyze NL effects and optimize training.					

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

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE
PE 0603851M: Joint Non-Lethal Weapons
Testing

PROJECT
2319: Non-Lethal Weapons
Testing

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue modeling and simulation (M&S) of NLWs in warfighter training/war gaming models and performance effects data collection/population to demonstrate/analyze NL effects and optimize training.					
*Evaluations of NLWs.	1.357	1.402	1.486	0.000	1.486
FY 2009 Accomplishments: Continue evaluation of NLWs by Service warfighting laboratories and Joint Forces Command (JFCOM) for direct user feedback of various non-lethal (NL) technologies and munitions.					
FY 2010 Plans:					
Continue evaluation of NLWs by Service warfighting laboratories and Joint Forces Command (JFCOM) for direct user feedback of various non-lethal (NL) technologies and munitions.					
FY 2011 Base Plans:					
Continue evaluation of NLWs by Service warfighting laboratories and Joint Forces Command (JFCOM) for direct user feedback of various non-lethal (NL) technologies and munitions.					
*JNLW Program's execution oversight and technologies database support.	3.393	3.563	3.777	0.000	3.777
FY 2009 Accomplishments: Continue execution oversight, administration and support of the Joint NLW Program and technologies database.					
FY 2010 Plans:					
Continue execution oversight, administration and support of the Joint NLW Program and technologies database.					

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R-1 Line Item #69 Page 4 of 18

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

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE
PE 0603851M: Joint Non-Lethal Weapons
Testing

PROJECT
2319: Non-Lethal Weapons

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: Continue execution oversight, administration and support of the Joint NLW Program and technologies database.					
*Pursuit of new technology for NL capabilities.	0.118	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: Continued pursuit of new technology through open competition of industry, academia and government laboratory sources for NL capabilities.					
*Airburst Non-Lethal Munition	3.000	2.600	0.000	0.000	0.000
FY 2009 Accomplishments: Continue development of the XM112 40mm extended range NL munition for the next generation combat weapon which exploits air-burst munitions with NL payloads at longer ranges with existing systems.					
FY 2010 Plans: Continue development of the XM112 40mm extended range NL munition for the next generation combat weapon which exploits air-burst munitions with NL payloads at longer ranges with existing systems.					
*Program Support of the Joint NLW Program.	2.055	2.125	2.253	0.000	2.253
FY 2009 Accomplishments: Continue program support efforts for each Service's coordination and participation in the Joint NLW Program. This includes SOCOM and USCG.					

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Feb	ruary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851M: Joint Non-Lethal Weal Testing	pons	PROJECT 2319: Non-	Lethal Weap	ons	
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Continue program support efforts for each Service's coordination Program. This includes SOCOM and USCG.	and participation in the Joint NLW					
FY 2011 Base Plans: Continue program support efforts for each Service's coordination Program. This includes SOCOM and USCG.	and participation in the Joint NLW					
*Active Denial Technology (ADT) Transition.		4.429	1.000	1.950	0.000	1.950
FY 2009 Accomplishments: Continue maturation of active denial technologies in preparation programs of record. Changes between FY10 and FY11 capture s Advanced Technology Development to higher levels of research	solid state ADT transitions from					
FY 2010 Plans: Continue maturation of active denial technologies in preparation programs of record. Changes between FY10 and FY11 capture s Advanced Technology Development to higher levels of research	solid state ADT transitions from					
FY 2011 Base Plans: Continue maturation of active denial technologies in preparation programs of record. Changes between FY10 and FY11 capture s Advanced Technology Development to higher levels of research	solid state ADT transitions from					
*Distributed Sound and Light Array (DSLA).		0.500	0.270	0.000	0.000	0.000
FY 2009 Accomplishments: Continue multi-sensory counter-personnel research on non-lethal as a hail and warning device.	I acoustical/optical weapons for use					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Feb	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851M: Joint Non-Lethal We Testing	eapons	PROJECT 2319: Non-	Lethal Weap	ons	
B. Accomplishments/Planned Program (\$ in Millions)			'			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Continue multi-sensory counter-personnel research on non-letha as a hail and warning device.	l acoustical/optical weapons for use					
*Studies and Analysis		6.031	6.031	5.232	0.000	5.232
FY 2009 Accomplishments: Continue medical and NL casualty data research and collection; acceptability analysis; and technical studies/analysis of emerging application. FY 2010 Plans:						
Continue medical and NL casualty data research and collection; acceptability analysis; and technical studies/analysis of emerging application.						
FY 2011 Base Plans: Continue medical and NL casualty data research and collection; acceptability analysis; and technical studies/analysis of emerging application.						
*JNLW Emerging Technologies		11.086	16.780	15.216	0.000	15.216
FY 2009 Accomplishments: Continue the advanced development of emerging technologies ir critical joint mission tasks. Increases to this line item represent nadvanced technology development efforts.						

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R-1 Line Item #69 Page 7 of 18

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

APPROPRIATION/BUDGET ACTIVITY
1319: Research, Development, Test & Evaluation, Navy
BA 4: Advanced Component Development & Prototypes (ACD&P)

R-1 ITEM NOMENCLATURE
PE 0603851M: Joint Non-Lethal Weapons
Testing

PROJECT
2319: Non-Lethal Weapons
Testing

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

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: Continue the advanced development of emerging technologies into the acquisition process to satisfy critical joint mission tasks. Increases to this line item represent maturing technology transitions from advanced technology development efforts.					
FY 2011 Base Plans: Continue the advanced development of emerging technologies into the acquisition process to satisfy critical joint mission tasks. Increases to this line item represent maturing technology transitions from advanced technology development efforts.					
*System development and Design of technology development.	7.062	7.390	6.672	0.000	6.672
FY 2009 Accomplishments: Continue system development and design of technology development downselected items to proceed into the acquisition cycle to provide NL technology solutions to critical joint mission tasks.					
FY 2010 Plans: Continue system development and design of technology development downselected items to proceed into the acquisition cycle to provide NL technology solutions to critical joint mission tasks.					
FY 2011 Base Plans: Continue system development and design of technology development downselected items to proceed into the acquisition cycle to provide NL technology solutions to critical joint mission tasks.					
*Develop/expand the NATO Measures of Effectives (MOE) efforts.	1.026	1.854	1.873	0.000	1.873
FY 2009 Accomplishments: Continue to develop/expand the NATO Measures of Effectives (MOE) efforts, chaired by the U.S. to provide input for Defense Capabilities Initiative (DCI) and NATO assessment of NLW in the Defense					

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R-1 Line Item #69 Page 8 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851M: Joint Non-Lethal Wea	apons	PROJECT 2319: Non-	Lethal Weap	ons	
B. Accomplishments/Planned Program (\$ in Millions)			1			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
planning process. Expanded interaction with component comma emerging NLW capabilities and their utility in theater operations FY 2010 Plans:	and Homeland Security missions.					
Continue to develop/expand the NATO Measures of Effectives (I provide input for Defense Capabilities Initiative (DCI) and NATO planning process. Expanded interaction with component comma emerging NLW capabilities and their utility in theater operations.	assessment of NLW in the Defense nder (COCOM) staffs to identify					
FY 2011 Base Plans: Continue to develop/expand the NATO Measures of Effectives (I provide input for Defense Capabilities Initiative (DCI) and NATO planning process. Expanded interaction with component comma emerging NLW capabilities and their utility in theater operations.	assessment of NLW in the Defense nder (COCOM) staffs to identify					
*Mission Payload Module Non Lethal Weapon System (formerly TUG FY 2009 Accomplishments: Continue development of a tube launched NL munition for integr boats and ships, with a range of 30-150 meters (T) and 10 - 500 (MPM) will provide an improved Non-Lethal (NL) capability applied defending areas, controlling access and engaging threats while protection of friendly forces. The weapons platform will provide go of effects, selectability, and scalability for these non-lethal effects	ation on HMMWVs, tactical vehicles, meters (O). Mission Payload Module cable to controlling crowds, denying/providing increased standoff for preater range, area coverage, duration	3.800	2.060	3.046	0.000	3.046
FY 2010 Plans: Continue development of a tube launched NL munition for integr boats and ships, with a range of 30-150 meters (T) and 10 - 500 (MPM) will provide an improved Non-Lethal (NL) capability applies	meters (O). Mission Payload Module					

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R-1 Line Item #69 Page 9 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603851M: Joint Non-Lethal Wea	apons	PROJECT 2319: Non-	Lethal Weap	ons	
B. Accomplishments/Planned Program (\$ in Millions)			'			
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
defending areas, controlling access and engaging threats while protection of friendly forces. The weapons platform will provide g of effects, selectability, and scalability for these non-lethal effects. FY 2011 Base Plans: Continue development of a tube launched NL munition for integration boats and ships, with a range of 30-150 meters (T) and 10 - 500 (MPM) will provide an improved Non-Lethal (NL) capability applied defending areas, controlling access and engaging threats while protection of friendly forces. The weapons platform will provide g of effects, selectability, and scalability for these non-lethal effects.	reater range, area coverage, duration than current NLW systems. ation on HMMWVs, tactical vehicles, meters (O). Mission Payload Module cable to controlling crowds, denying/providing increased standoff for reater range, area coverage, duration					
*Joint Integration Program (JIP).		0.800	0.600	0.600	0.000	0.600
FY 2009 Accomplishments: Continue to select and test newly developed commercial product requirements for specific NL capability set common items.	s that may meet the Joint Services'					
FY 2010 Plans: Continue to select and test newly developed commercial product requirements for specific NL capability set common items.	s that may meet the Joint Services'					
FY 2011 Base Plans: Continue to select and test newly developed commercial product requirements for specific NL capability set common items.	s that may meet the Joint Services'					
Accomp	olishments/Planned Programs Subtotals	46.036	46.776	43.272	0.000	43.272

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R-1 Line Item #69 Page 10 of 18

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0603851M: Joint Non-Lethal Weapons	2319: Non-	Lethal Weapons
BA 4: Advanced Component Development & Prototypes (ACD&P)	Testina		

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

N/A

D. Acquisition Strategy

The JNLW Program strategy is to continue to pursue the fielding of NLW systems through modifying Commercial-Off-The-Shelf (COTS) products for near term capabilities and the development of new technology NLW systems in various stages of acquisition. These are balanced with efforts in modeling and simulation, experimentation, and state-of-the-art

technology investment. The acquisition strategy for each weapon system is largely Lead Service dependent. The JNLWP provides RDT&E funding while the Services are responsible for procurement and operations and maintenance funding. For complex development programs, such as directed energy research, JNLWP RDT&E funds will augment Service RDT&E

funding in support of joint applications.

E. Performance Metrics

Milestone Reviews

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

1319: Research, Development, Test & Evaluation, Navy

PE 0603851M: Joint Non-Lethal Weapons Testing

2319: Non-Lethal Weapons

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

Product Development (\$ in Millions)

•		,											
				FY 2	2010	FY 2 Bas		FY 2 OC		FY 2011 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
NLW Product Development	MIPR	ARDEC Picatinny, NJ	30.488	5.200		5.500		0.000		5.500	0.000	41.188	Continuing
NLW Product Development	MIPR	SOCOM McDill AFB, FL	10.641	1.580		1.956		0.000		1.956	0.000	14.177	Continuing
NLW Product Development	WR	NSWC Various	13.813	2.500		2.842		0.000		2.842	0.000	19.155	Continuing
NLW Product Development	MIPR	USAF Eglin AFB, FL	13.615	1.849		1.500		0.000		1.500	0.000	16.964	Continuing
NLW Product Development	MIPR	USAF Kirtland AFB, NM	20.061	1.000		1.000		0.000		1.000	0.000	22.061	Continuing
NLW Product Development	MIPR	USAF Brooks AFB, TX	32.084	6.500		5.539		0.000		5.539	0.000	44.123	Continuing
NLW Product Development	MIPR	JWCF Fort Monroe, VA	12.157	0.000		0.000		0.000		0.000	0.000	12.157	Continuing
NLW Product Development	Various/ Various	MCSC Quantico, VA	15.787	0.350		0.350		0.000		0.350	0.000	16.487	Continuing
NLW Product Development	MIPR	NSMA Arlington, VA	21.277	2.000		1.000		0.000		1.000	0.000	24.277	Continuing
NLW Product Development	C/CPFF	MCLB Albany, GA	8.316	0.000		0.000		0.000		0.000	0.000	8.316	Continuing
NLW Product Development	MIPR	M&S Various	14.642	1.101		1.167		0.000		1.167	0.000	16.910	Continuing
NLW Product Development	Various/ Various	JIP Various	11.212	0.700		0.600		0.000		0.600	0.000	12.512	Continuing
			63.541	21.217		19.020		0.000		19.020	0.000	103.778	Continuing

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy BA 4: Advanced Component Development & Prototypes (ACD&P) **R-1 ITEM NOMENCLATURE**

PE 0603851M: Joint Non-Lethal Weapons

Testing

PROJECT

2319: Non-Lethal Weapons

Product Development (\$ in Millions)

				FY 20	010	FY 2 Ba		FY 2		FY 2011 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
NLW Product Development	Various/ Various	Uniformed Services Various											
		Subtotal	267.634	43.997		40.474		0.000		40.474	0.000	352.105	

Remarks

Joint Program funds are distributed amongst the USA, USAF, USN, USMC, SOCOM, and USCG in support of NLW research and development efforts.

Support (\$ in Millions)

				FY 2	010	FY 2 Ba	-	FY 2 OC		FY 2011 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
NLW Support Cost	WR	MCSC Quantico, VA	10.216	0.318		0.337		0.000		0.337	0.000	10.871	Continuing
NLW Support Cost	WR	NSWC Dahlgren, VA	10.376	1.311		1.311		0.000		1.311	0.000	12.998	Continuing
NLW Support Cost	Various/ Various	Various Various	29.126	0.650		0.650		0.000		0.650	0.000	30.426	Continuing
		Subtotal	49.718	2.279		2.298		0.000		2.298	0.000	54.295	

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Navy

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

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

R-1 ITEM NOMENCLATURE

PE 0603851M: Joint Non-Lethal Weapons

Testing

PROJECT

2319: Non-Lethal Weapons

Test and Evaluation (\$ in Millions)

				FY 20	010	FY 2 Ba		FY 2		FY 2011 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
MPM T&E Cost	Various/ Various	Various Various	2.553	0.500		0.500		0.000		0.500	0.000	3.553	Continuing
		Subtotal	2.553	0.500		0.500		0.000		0.500	0.000	3.553	

Remarks

	Total Prior Years Cost	FY 2010	FY 2	-	FY 2	-	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	319.905	46.776	43.272		0.000		43.272	0.000	409.953	

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

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

R-1 ITEM NOMENCLATURE

PE 0603851M: Joint Non-Lethal Weapons

Testing

PROJECT

2319: Non-Lethal Weapons

	F	Υ 2	200	9	F	Υ 2	201	0	F	Y 2	201	1	F	Y 2	201	2	F	Y 2	201	3	F	Υ 2	201	4	F	Y 2	201	5
	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
AIRBURST NON-LETHAL MUNITION (ANLM) - MS B																												
AIRBURST NON-LETHAL MUNITION (ANLM) - MS C																												
BLANK																												
MISSION PAYLOAD MODULE (MPM) - MS B																												
MISSION PAYLOAD MODULE (MPM) - MS C																												

Exhibit R-4A, RDT&E Schedule Details: PB 2011 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

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

R-1 ITEM NOMENCLATURE

PE 0603851M: Joint Non-Lethal Weapons

Testing

PROJECT

2319: Non-Lethal Weapons

Schedule Details

	St	art	E	nd
Event	Quarter	Year	Quarter	Year
AIRBURST NON-LETHAL MUNITION (ANLM) - MS B	2	2009	2	2009
AIRBURST NON-LETHAL MUNITION (ANLM) - MS C	2	2009	4	2011
BLANK	1	2009	1	2009
MISSION PAYLOAD MODULE (MPM) - MS B	2	2011	2	2011
MISSION PAYLOAD MODULE (MPM) - MS C	1	2013	1	2013

DATE: February 2010

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APPROPRIATION/BUDGET ACTI 1319: Research, Development, Tes BA 4: Advanced Component Devel	st & Evaluatio		CD&P)		IOMENCLA 1M: Joint No		eapons	PROJECT 9999: Cong	ressional Ac	lds	
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	4.388	2.310	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.511
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

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

This project develops non-lethal weapon (NLW) systems that by their design, provide a new non-lethal capability to minimize fatal or permanent injuries and undesired damage to property and the environment. As identified in the Non-Lethal Effects Joint Capabilities Document, the ability to non-lethally stop vehicles is the top capability gap as identified by the Services.

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

	FY 2009	FY 2010
Congressional Add: Non-Lethal Defense Technologies	0.000	2.310
FY 2010 Plans: C10C131 - This Congressional plus-up is intended to assist in the cross-comparison of technology, human effects and long term programmatics of several new initiatives and the independent technical assessment of Joint Non-Lethal Weapons.		
Congressional Add: Boat Trap System For Port Security/Water Craft Int	2.393	0.000
FY 2009 Accomplishments: C9878A - This Congressional plus-up was intended to advance technology to broaden the boat trap system effectiveness against several threat water-crafts.		
Congressional Add: Eye Safe Laser Warning Systems	1.995	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2011 Navy			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0603851M: Joint Non-Lethal Weapons	9999: Cong	ressional Adds
BA 4: Advanced Component Development & Prototypes (ACD&P)	Testing		

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

	FY 2009	FY 2010
FY 2009 Accomplishments: C9D09A - This Congressional plus-up was intended to advance technology to further develop eye safe laser warning systems. The Service requirement for this item is based on the need to develop eye safe systems to prevent warfighter mishaps in accordance with the laser safety review board guidance.		
Congressional Adds Subtotals	4.388	2.310

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

N/A

D. Acquisition Strategy

The JNLW Program strategy is to continue to pursue the fielding of NLW systems through modifying Commercial-Off-The-Shelf (COTS) products for near term capabilities and the development of new technology NLW systems in various stages of acquisition. These are balanced with efforts in modeling and simulation, experimentation, and state-of-the-art

technology investment. The acquisition strategy for each weapon system is largely Lead Service dependent. The JNLWP provides RDT&E funding while the Services are responsible for procurement and operations and maintenance funding. For complex development programs, such as directed energy research, JNLWP RDT&E funds will augment Service RDT&E

funding in support of joint applications.

E. Performance Metrics

N/A