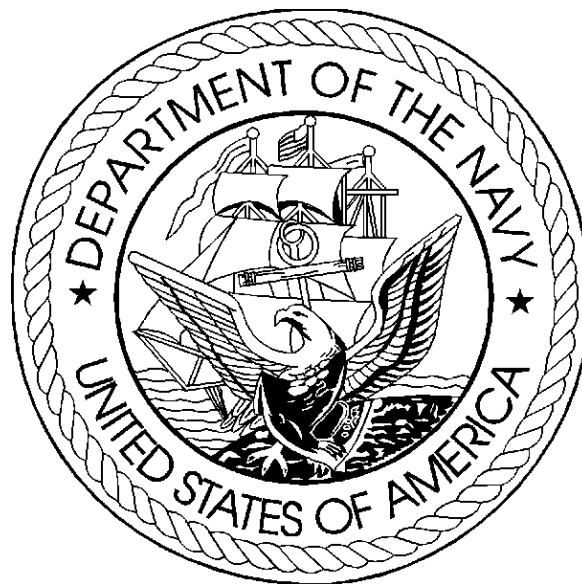


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**Department of Defense
Fiscal Year (FY) 2013 President's Budget Submission**

February 2012



Navy

Justification Book Volume 4

Research, Development, Test & Evaluation, Navy

Budget Activity 6

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Department of Defense Appropriations Act, 2013

Research, Development, Test and Evaluation, Navy

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, \$16,882,877,000, to remain available for obligation until September 30, 2014.

For an additional amount for Research, Development, Test and Evaluation, Navy, \$60,119,000, to remain available until September 30, 2014: Provided, That such amounts in this paragraph are designated by the Congress for Overseas Contingency Operations pursuant to section 251(b)(2)(A) of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended.

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Department of the Navy
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 (Dollars in Thousands)

18 Jan 2012

Summary Recap of Budget Activities -----	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total
Basic Research	538,716	605,319		605,319
Applied Research	704,164	822,951		822,951
Advanced Technology Development	769,394	692,105		692,105
Advanced Component Development & Prototypes	3,971,685	4,430,747	1,500	4,432,247
System Development & Demonstration	6,309,828	6,263,080	11,050	6,274,130
RDT&E Management Support	1,179,998	838,757		838,757
Operational Systems Development	4,391,753	4,086,616	41,334	4,127,950
Total Research, Development, Test & Evaluation	17,865,538	17,739,575	53,884	17,793,459
 Summary Recap of FYDP Programs -----				
Strategic Forces	118,511	151,960		151,960
General Purpose Forces	1,426,503	1,419,726	7,550	1,427,276
Intelligence and Communications	1,368,028	1,321,973		1,321,973
Research and Development	13,354,716	13,458,494	12,550	13,471,044
Central Supply and Maintenance	65,553	80,477		80,477
Training Medical and Other	4,104			
Administration and Associated Activities	377			
Classified Programs	1,527,746	1,306,945	33,784	1,340,729
Total Research, Development, Test & Evaluation	17,865,538	17,739,575	53,884	17,793,459

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Summary Recap of Budget Activities -----	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Basic Research	605,021		605,021
Applied Research	790,302		790,302
Advanced Technology Development	584,402		584,402
Advanced Component Development & Prototypes	4,335,297	4,600	4,339,897
System Development & Demonstration	5,747,232	2,173	5,749,405
RDT&E Management Support	845,077	5,200	850,277
Operational Systems Development	3,975,546	48,146	4,023,692
Total Research, Development, Test & Evaluation	16,882,877	60,119	16,942,996
Summary Recap of FYDP Programs -----			
Strategic Forces	161,263		161,263
General Purpose Forces	1,422,932	6,762	1,429,694
Intelligence and Communications	1,176,330	7,600	1,183,930
Research and Development	12,883,923	11,973	12,895,896
Central Supply and Maintenance	87,270		87,270
Training Medical and Other			
Administration and Associated Activities			
Classified Programs	1,151,159	33,784	1,184,943
Total Research, Development, Test & Evaluation	16,882,877	60,119	16,942,996

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Se c
1	0601103N	University Research Initiatives	01	104,088	133,157		133,157	U
2	0601152N	In-House Laboratory Independent Research	01	18,011	18,092		18,092	U
3	0601153N	Defense Research Sciences	01	416,617	454,070		454,070	U
	Basic Research			538,716	605,319		605,319	
4	0602114N	Power Projection Applied Research	02	100,159	104,796		104,796	U
5	0602123N	Force Protection Applied Research	02	143,063	196,734		196,734	U
6	0602131M	Marine Corps Landing Force Technology	02	42,131	44,745		44,745	U
7	0602235N	Common Picture Applied Research	02	68,155	65,184		65,184	U
8	0602236N	Warfighter Sustainment Applied Research	02	109,716	101,072		101,072	U
9	0602271N	Electromagnetic Systems Applied Research	02	86,966	108,185		108,185	U
10	0602435N	Ocean Warfighting Environment Applied Research	02	47,231	50,076		50,076	U
11	0602651M	Joint Non-Lethal Weapons Applied Research	02	5,762	5,937		5,937	U
12	0602747N	Undersea Warfare Applied Research	02	66,056	108,639		108,639	U
13	0602750N	Future Naval Capabilities Applied Research	02					U
14	0602782N	Mine and Expeditionary Warfare Applied Research	02	34,925	37,583		37,583	U
	Applied Research			704,164	822,951		822,951	
15	0603114N	Power Projection Advanced Technology	03	125,673	114,270		114,270	U
16	0603123N	Force Protection Advanced Technology	03	63,732	45,020		45,020	U
17	0603235N	Common Picture Advanced Technology	03	91,526	48,985		48,985	U
18	0603236N	Warfighter Sustainment Advanced Technology	03	95,045	71,149		71,149	U
19	0603271N	Electromagnetic Systems Advanced Technology	03	94,558	122,458		122,458	U

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
1	0601103N	University Research Initiatives	01	113,690		113,690	U
2	0601152N	In-House Laboratory Independent Research	01	18,261		18,261	U
3	0601153N	Defense Research Sciences	01	473,070		473,070	U
		Basic Research		605,021		605,021	
4	0602114N	Power Projection Applied Research	02	89,189		89,189	U
5	0602123N	Force Protection Applied Research	02	143,301		143,301	U
6	0602131M	Marine Corps Landing Force Technology	02	46,528		46,528	U
7	0602235N	Common Picture Applied Research	02	41,696		41,696	U
8	0602236N	Warfighter Sustainment Applied Research	02	44,127		44,127	U
9	0602271N	Electromagnetic Systems Applied Research	02	78,228		78,228	U
10	0602435N	Ocean Warfighting Environment Applied Research	02	49,635		49,635	U
11	0602651M	Joint Non-Lethal Weapons Applied Research	02	5,973		5,973	U
12	0602747N	Undersea Warfare Applied Research	02	96,814		96,814	U
13	0602750N	Future Naval Capabilities Applied Research	02	162,417		162,417	U
14	0602782N	Mine and Expeditionary Warfare Applied Research	02	32,394		32,394	U
		Applied Research		790,302		790,302	
15	0603114N	Power Projection Advanced Technology	03	56,543		56,543	U
16	0603123N	Force Protection Advanced Technology	03	18,616		18,616	U
17	0603235N	Common Picture Advanced Technology	03				U
18	0603236N	Warfighter Sustainment Advanced Technology	03				U
19	0603271N	Electromagnetic Systems Advanced Technology	03	54,858		54,858	U

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Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Se
20	0603640M	USMC Advanced Technology Demonstration (ATD)	03	110,068	124,115		124,115	U
21	0603651M	Joint Non-Lethal Weapons Technology Development	03	10,832	11,286		11,286	U
22	0603673N	Future Naval Capabilities Advanced Technology Development	03					U
23	0603729N	Warfighter Protection Advanced Technology	03	54,356	56,819		56,819	U
24	0603747N	Undersea Warfare Advanced Technology	03	51,283	41,959		41,959	U
25	0603758N	Navy Warfighting Experiments and Demonstrations	03	51,115	49,996		49,996	U
26	0603782N	Mine and Expeditionary Warfare Advanced Technology	03	21,206	6,048		6,048	U
		Advanced Technology Development		769,394	692,105		692,105	
27	0603128N	Unmanned Aerial System	04	36,000				U
28	0603207N	Air/Ocean Tactical Applications	04	115,072	84,962		84,962	U
29	0603216N	Aviation Survivability	04	9,151	10,893		10,893	U
30	0603237N	Deployable Joint Command and Control	04	3,997	3,702		3,702	U
31	0603251N	Aircraft Systems	04		10,497		10,497	U
32	0603254N	ASW Systems Development	04	7,969	7,896		7,896	U
33	0603261N	Tactical Airborne Reconnaissance	04	6,755	5,944		5,944	U
34	0603382N	Advanced Combat Systems Technology	04	1,613	1,418		1,418	U
35	0603502N	Surface and Shallow Water Mine Countermeasures	04	94,539	127,757		127,757	U
36	0603506N	Surface Ship Torpedo Defense	04	49,625	118,764		118,764	U
37	0603512N	Carrier Systems Development	04	99,704	54,072		54,072	U
38	0603513N	Shipboard System Component Development	04	51				U
39	0603525N	PILOT FISH	04	79,699	95,605		95,605	U

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20	0603640M	USMC Advanced Technology Demonstration (ATD)	03	130,598		130,598	U
21	0603651M	Joint Non-Lethal Weapons Technology Development	03	11,706		11,706	U
22	0603673N	Future Naval Capabilities Advanced Technology Development	03	256,382		256,382	U
23	0603729N	Warfighter Protection Advanced Technology	03	3,880		3,880	U
24	0603747N	Undersea Warfare Advanced Technology	03				U
25	0603758N	Navy Warfighting Experiments and Demonstrations	03	51,819		51,819	U
26	0603782N	Mine and Expeditionary Warfare Advanced Technology	03				U
		Advanced Technology Development		584,402		584,402	
27	0603128N	Unmanned Aerial System	04				U
28	0603207N	Air/Ocean Tactical Applications	04	34,085		34,085	U
29	0603216N	Aviation Survivability	04	8,783		8,783	U
30	0603237N	Deployable Joint Command and Control	04	3,773		3,773	U
31	0603251N	Aircraft Systems	04	24,512		24,512	U
32	0603254N	ASW Systems Development	04	8,090		8,090	U
33	0603261N	Tactical Airborne Reconnaissance	04	5,301		5,301	U
34	0603382N	Advanced Combat Systems Technology	04	1,506		1,506	U
35	0603502N	Surface and Shallow Water Mine Countermeasures	04	190,622		190,622	U
36	0603506N	Surface Ship Torpedo Defense	04	93,346		93,346	U
37	0603512N	Carrier Systems Development	04	108,871		108,871	U
38	0603513N	Shipboard System Component Development	04				U
39	0603525N	PILOT FISH	04	101,169		101,169	U

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Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Se c
40	0603527N	RETRACT LARCH	04	159,117	73,421		73,421	U
41	0603536N	RETRACT JUNIPER	04	127,544	130,153		130,153	U
42	0603542N	Radiological Control	04	1,292	1,338		1,338	U
43	0603553N	Surface ASW	04	44,172	29,787		29,787	U
44	0603561N	Advanced Submarine System Development	04	549,702	861,366		861,366	U
45	0603562N	Submarine Tactical Warfare Systems	04	5,520	9,233		9,233	U
46	0603563N	Ship Concept Advanced Design	04	17,835	14,308		14,308	U
47	0603564N	Ship Preliminary Design & Feasibility Studies	04	10,087	22,210		22,210	U
48	0603570N	Advanced Nuclear Power Systems	04	364,644	463,683		463,683	U
49	0603573N	Advanced Surface Machinery Systems	04	5,295	18,239		18,239	U
50	0603576N	CHALK EAGLE	04	447,620	582,025		582,025	U
51	0603581N	Littoral Combat Ship (LCS)	04	191,613	292,665		292,665	U
52	0603582N	Combat System Integration	04	33,323	34,123		34,123	U
53	0603609N	Conventional Munitions	04	5,333	4,753		4,753	U
54	0603611M	Marine Corps Assault Vehicles	04	214,597	37,000		37,000	U
55	0603635M	Marine Corps Ground Combat/Support System	04	26,899	54,877		54,877	U
56	0603654N	Joint Service Explosive Ordnance Development	04	31,354	33,654	1,500	35,154	U
57	0603658N	Cooperative Engagement	04	57,198	54,783		54,783	U
58	0603713N	Ocean Engineering Technology Development	04	12,715	9,996		9,996	U
59	0603721N	Environmental Protection	04	19,473	21,714		21,714	U
60	0603724N	Navy Energy Program	04	33,124	70,538		70,538	U

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Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
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40	0603527N	RETRACT LARCH	04	74,312		74,312	U
41	0603536N	RETRACT JUNIPER	04	90,730		90,730	U
42	0603542N	Radiological Control	04	777		777	U
43	0603553N	Surface ASW	04	6,704		6,704	U
44	0603561N	Advanced Submarine System Development	04	555,123		555,123	U
45	0603562N	Submarine Tactical Warfare Systems	04	9,368		9,368	U
46	0603563N	Ship Concept Advanced Design	04	24,609		24,609	U
47	0603564N	Ship Preliminary Design & Feasibility Studies	04	13,710		13,710	U
48	0603570N	Advanced Nuclear Power Systems	04	249,748		249,748	U
49	0603573N	Advanced Surface Machinery Systems	04	29,897		29,897	U
50	0603576N	CHALK EAGLE	04	509,988		509,988	U
51	0603581N	Littoral Combat Ship (LCS)	04	429,420		429,420	U
52	0603582N	Combat System Integration	04	56,551		56,551	U
53	0603609N	Conventional Munitions	04	7,342		7,342	U
54	0603611M	Marine Corps Assault Vehicles	04	95,182		95,182	U
55	0603635M	Marine Corps Ground Combat/Support System	04	10,496		10,496	U
56	0603654N	Joint Service Explosive Ordnance Development	04	52,331	4,600	56,931	U
57	0603658N	Cooperative Engagement	04	56,512		56,512	U
58	0603713N	Ocean Engineering Technology Development	04	7,029		7,029	U
59	0603721N	Environmental Protection	04	21,080		21,080	U
60	0603724N	Navy Energy Program	04	55,324		55,324	U

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Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Se
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61	0603725N	Facilities Improvement	04	3,727	3,754		3,754	U
62	0603734N	CHALK CORAL	04	70,284	79,415		79,415	U
63	0603739N	Navy Logistic Productivity	04	4,009	4,137		4,137	U
64	0603746N	RETRACT MAPLE	04	221,725	276,171		276,171	U
65	0603748N	LINK PLUMERIA	04	59,443	52,588		52,588	U
66	0603751N	RETRACT ELM	04	163,393	150,584		150,584	U
67	0603755N	Ship Self Defense - Dem/Val	04	3,422				U
68	0603764N	LINK EVERGREEN	04	48,618	144,985		144,985	U
69	0603787N	Special Processes	04	35,802	43,365		43,365	U
70	0603790N	NATO Research and Development	04	8,888	9,140		9,140	U
71	0603795N	Land Attack Technology	04	899	421		421	U
72	0603851M	Joint Non-Lethal Weapons Testing	04	42,464	40,992		40,992	U
73	0603860N	Joint Precision Approach and Landing Systems - Dem/Val	04	155,538	118,255		118,255	U
74	0603889N	Counterdrug RDT&E Projects	04	8,700				U
75	0603925N	Directed Energy and Electric Weapon Systems	04	7,959				U
76	0604272N	Tactical Air Directional Infrared Countermeasures (TADIRCM)	04	50,166	64,097		64,097	U
77	0604279N	ASE Self-Protection Optimization	04	7,000	697		697	U
78	0604653N	Joint Counter Radio Controlled IED Electronic Warfare (JCREW)	04	68,421	62,044		62,044	U
79	0604659N	Precision Strike Weapons Development Program	04	5,322	3,450		3,450	U
80	0604707N	Space and Electronic Warfare (SEW) Architecture/Engineering Support	04	31,785	33,573		33,573	U
81	0604775N	Defense Rapid Innovation Program	04	104,466				U

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
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61	0603725N	Facilities Improvement	04	3,401		3,401	U
62	0603734N	CHALK CORAL	04	45,966		45,966	U
63	0603739N	Navy Logistic Productivity	04	3,811		3,811	U
64	0603746N	RETRACT MAPLE	04	341,305		341,305	U
65	0603748N	LINK PLUMERIA	04	181,220		181,220	U
66	0603751N	RETRACT ELM	04	174,014		174,014	U
67	0603755N	Ship Self Defense - Dem/Val	04				U
68	0603764N	LINK EVERGREEN	04	68,654		68,654	U
69	0603787N	Special Processes	04	44,487		44,487	U
70	0603790N	NATO Research and Development	04	9,389		9,389	U
71	0603795N	Land Attack Technology	04	16,132		16,132	U
72	0603851M	Joint Non-Lethal Weapons Testing	04	44,994		44,994	U
73	0603860N	Joint Precision Approach and Landing Systems - Dem/Val	04	137,369		137,369	U
74	0603889N	Counterdrug RDT&E Projects	04				U
75	0603925N	Directed Energy and Electric Weapon Systems	04				U
76	0604272N	Tactical Air Directional Infrared Countermeasures (TADIRCM)	04	73,934		73,934	U
77	0604279N	ASE Self-Protection Optimization	04	711		711	U
78	0604653N	Joint Counter Radio Controlled IED Electronic Warfare (JCREW)	04	71,300		71,300	U
79	0604659N	Precision Strike Weapons Development Program	04	5,654		5,654	U
80	0604707N	Space and Electronic Warfare (SEW) Architecture/Engineering Support	04	31,549		31,549	U
81	0604775N	Defense Rapid Innovation Program	04				U

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Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	S e c
82	0604786N	Offensive Anti-Surface Warfare Weapon Development	04					U
83	0605812M	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	04					U
84	0303354N	ASW Systems Development - MIP	04	2,150	1,078		1,078	U
85	0303562N	Submarine Tactical Warfare Systems - MIP	04	4,231				U
86	0304270N	Electronic Warfare Development - MIP	04	641	625		625	U
		Advanced Component Development & Prototypes		3,971,685	4,430,747	1,500	4,432,247	
87	0604212N	Other Helo Development	05	51,825	42,651		42,651	U
88	0604214N	AV-8B Aircraft - Eng Dev	05	22,063	30,676		30,676	U
89	0604215N	Standards Development	05	41,991	49,439		49,439	U
90	0604216N	Multi-Mission Helicopter Upgrade Development	05	54,404	17,654		17,654	U
91	0604218N	Air/Ocean Equipment Engineering	05	5,496	5,922		5,922	U
92	0604221N	P-3 Modernization Program	05	3,517	3,417		3,417	U
93	0604230N	Warfare Support System	05	3,685	9,944		9,944	U
94	0604231N	Tactical Command System	05	87,273	77,245		77,245	U
95	0604234N	Advanced Hawkeye	05	168,157	130,994		130,994	U
96	0604245N	H-1 Upgrades	05	58,638	67,569		67,569	U
97	0604261N	Acoustic Search Sensors	05	63,041	48,838		48,838	U
98	0604262N	V-22A	05	42,686	84,477		84,477	U
99	0604264N	Air Crew Systems Development	05	5,914	3,249		3,249	U
100	0604269N	EA-18	05	20,246	17,100		17,100	U
101	0604270N	Electronic Warfare Development	05	78,147	89,418	5,600	95,018	U

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Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
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82	0604786N	Offensive Anti-Surface Warfare Weapon Development	04	86,801		86,801	U
83	0605812M	Joint Light Tactical Vehicle (JLTV) Engineering and Manufacturing Development Ph	04	44,500		44,500	U
84	0303354N	ASW Systems Development - MIP	04	13,172		13,172	U
85	0303562N	Submarine Tactical Warfare Systems - MIP	04				U
86	0304270N	Electronic Warfare Development - MIP	04	643		643	U
		Advanced Component Development & Prototypes		4,335,297	4,600	4,339,897	
87	0604212N	Other Helo Development	05	33,978		33,978	U
88	0604214N	AV-8B Aircraft - Eng Dev	05	32,789		32,789	U
89	0604215N	Standards Development	05	84,988		84,988	U
90	0604216N	Multi-Mission Helicopter Upgrade Development	05	6,866		6,866	U
91	0604218N	Air/Ocean Equipment Engineering	05	4,060		4,060	U
92	0604221N	P-3 Modernization Program	05	3,451		3,451	U
93	0604230N	Warfare Support System	05	13,071		13,071	U
94	0604231N	Tactical Command System	05	71,645		71,645	U
95	0604234N	Advanced Hawkeye	05	119,065		119,065	U
96	0604245N	H-1 Upgrades	05	31,105		31,105	U
97	0604261N	Acoustic Search Sensors	05	34,299		34,299	U
98	0604262N	V-22A	05	54,412		54,412	U
99	0604264N	Air Crew Systems Development	05	2,717		2,717	U
100	0604269N	EA-18	05	13,009		13,009	U
101	0604270N	Electronic Warfare Development	05	51,304		51,304	U

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102	0604273N	VH-71A Executive Helo Development	05	147,268	60,751		60,751	U
103	0604274N	Next Generation Jammer (NGJ)	05	83,948	170,910		170,910	U
104	0604280N	Joint Tactical Radio System - Navy (JTRS-Navy)	05	609,159	675,521		675,521	U
105	0604307N	Surface Combatant Combat System Engineering	05	195,569	223,217		223,217	U
106	0604311N	LPD-17 Class Systems Integration	05	1,636	884		884	U
107	0604329N	Small Diameter Bomb (SDB)	05	15,732	29,635		29,635	U
108	0604366N	Standard Missile Improvements	05	93,410	46,705		46,705	U
109	0604373N	Airborne MCM	05	42,519	41,142		41,142	U
110	0604376M	Marine Air Ground Task Force (MAGTF) Electronic Warfare (EW) for Aviation	05					U
111	0604378N	Naval Integrated Fire Control - Counter Air Systems Engineering	05	29,569	24,898		24,898	U
112	0604404N	Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS) System	05		75,700		75,700	U
113	0604501N	Advanced Above Water Sensors	05	254,778	247,071		247,071	U
114	0604503N	SSN-688 and Trident Modernization	05	100,717	90,180		90,180	U
115	0604504N	Air Control	05	5,511	5,521		5,521	U
116	0604512N	Shipboard Aviation Systems	05	68,438	45,445		45,445	U
117	0604518N	Combat Information Center Conversion	05	4,915	3,400		3,400	U
118	0604558N	New Design SSN	05	166,888	112,158		112,158	U
119	0604562N	Submarine Tactical Warfare System	05	48,269	48,466		48,466	U
120	0604567N	Ship Contract Design/ Live Fire T&E	05	157,828	121,089		121,089	U
121	0604574N	Navy Tactical Computer Resources	05	4,420	3,848		3,848	U

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102	0604273N	VH-71A Executive Helo Development	05	61,163		61,163	U
103	0604274N	Next Generation Jammer (NGJ)	05	187,024		187,024	U
104	0604280N	Joint Tactical Radio System - Navy (JTRS-Navy)	05	337,480		337,480	U
105	0604307N	Surface Combatant Combat System Engineering	05	260,616		260,616	U
106	0604311N	LPD-17 Class Systems Integration	05	824		824	U
107	0604329N	Small Diameter Bomb (SDB)	05	31,064		31,064	U
108	0604366N	Standard Missile Improvements	05	63,891		63,891	U
109	0604373N	Airborne MCM	05	73,246		73,246	U
110	0604376M	Marine Air Ground Task Force (MAGTF) Electronic Warfare (EW) for Aviation	05	10,568		10,568	U
111	0604378N	Naval Integrated Fire Control - Counter Air Systems Engineering	05	39,974		39,974	U
112	0604404N	Unmanned Carrier Launched Airborne Surveillance and Strike (UCLASS) System	05	122,481		122,481	U
113	0604501N	Advanced Above Water Sensors	05	255,516		255,516	U
114	0604503N	SSN-688 and Trident Modernization	05	82,620		82,620	U
115	0604504N	Air Control	05	5,633		5,633	U
116	0604512N	Shipboard Aviation Systems	05	55,826		55,826	U
117	0604518N	Combat Information Center Conversion	05	918		918	U
118	0604558N	New Design SSN	05	165,230		165,230	U
119	0604562N	Submarine Tactical Warfare System	05	49,141		49,141	U
120	0604567N	Ship Contract Design/ Live Fire T&E	05	196,737		196,737	U
121	0604574N	Navy Tactical Computer Resources	05	3,889		3,889	U

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122	0604601N	Mine Development	05	4,399	3,933		3,933	U
123	0604610N	Lightweight Torpedo Development	05	25,852	32,592		32,592	U
124	0604654N	Joint Service Explosive Ordnance Development	05	10,418	9,960	3,500	13,460	U
125	0604703N	Personnel, Training, Simulation, and Human Factors	05	10,098	12,992		12,992	U
126	0604727N	Joint Standoff Weapon Systems	05	12,503	7,506		7,506	U
127	0604755N	Ship Self Defense (Detect & Control)	05	48,526	71,222		71,222	U
128	0604756N	Ship Self Defense (Engage: Hard Kill)	05	35,284	6,631		6,631	U
129	0604757N	Ship Self Defense (Engage: Soft Kill/EW)	05	90,484	184,087		184,087	U
130	0604761N	Intelligence Engineering	05	15,831	2,196		2,196	U
131	0604771N	Medical Development	05	28,407	31,084	1,950	33,034	U
132	0604777N	Navigation/ID System	05	58,727	39,331		39,331	U
133	0604800M	Joint Strike Fighter (JSF) - EMD	05	602,142	651,786		651,786	U
134	0604800N	Joint Strike Fighter (JSF) - EMD	05	654,198	658,549		658,549	U
135	0605013M	Information Technology Development	05	22,048	19,461		19,461	U
136	0605013N	Information Technology Development	05	27,976	29,760		29,760	U
137	0605018N	Navy Integrated Military Human Resources System (N-IMHRS)	05	14,965	55,017		55,017	U
138	0605212N	CH-53K RDTE	05	558,152	624,461		624,461	U
139	0605450N	Joint Air-to-Ground Missile (JAGM)	05	80,911	108,395		108,395	U
140	0605500N	Multi-Mission Maritime Aircraft (MMA)	05	907,465	618,684		618,684	U
141	0204202N	DDG-1000	05	348,763	257,580		257,580	U
142	0304231N	Tactical Command System - MIP	05	1,311	979		979	U

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122	0604601N	Mine Development	05	8,335		8,335	U
123	0604610N	Lightweight Torpedo Development	05	49,818		49,818	U
124	0604654N	Joint Service Explosive Ordnance Development	05	10,099		10,099	U
125	0604703N	Personnel, Training, Simulation, and Human Factors	05	7,348		7,348	U
126	0604727N	Joint Standoff Weapon Systems	05	5,518		5,518	U
127	0604755N	Ship Self Defense (Detect & Control)	05	87,662		87,662	U
128	0604756N	Ship Self Defense (Engage: Hard Kill)	05	64,079		64,079	U
129	0604757N	Ship Self Defense (Engage: Soft Kill/EW)	05	151,489		151,489	U
130	0604761N	Intelligence Engineering	05				U
131	0604771N	Medical Development	05	12,707	2,173	14,880	U
132	0604777N	Navigation/ID System	05	47,764		47,764	U
133	0604800M	Joint Strike Fighter (JSF) - EMD	05	737,149		737,149	U
134	0604800N	Joint Strike Fighter (JSF) - EMD	05	743,926		743,926	U
135	0605013M	Information Technology Development	05	12,143		12,143	U
136	0605013N	Information Technology Development	05	72,209		72,209	U
137	0605018N	Navy Integrated Military Human Resources System (N-IMHRS)	05				U
138	0605212N	CH-53K RDTE	05	606,204		606,204	U
139	0605450N	Joint Air-to-Ground Missile (JAGM)	05				U
140	0605500N	Multi-Mission Maritime Aircraft (MMA)	05	421,102		421,102	U
141	0204202N	DDG-1000	05	124,655		124,655	U
142	0304231N	Tactical Command System - MIP	05	1,170		1,170	U

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143	0304503N	SSN-688 and Trident Modernization - MIP	05	1,408				U
144	0304785N	Tactical Cryptologic Systems	05	12,303	31,740		31,740	U
145	0305124N	Special Applications Program	05		100,000		100,000	U
		System Development & Demonstration		6,309,828	6,263,080	11,050	6,274,130	
146	0604256N	Threat Simulator Development	06	18,353	28,318		28,318	U
147	0604258N	Target Systems Development	06	68,293	44,700		44,700	U
148	0604759N	Major T&E Investment	06	37,331	37,957		37,957	U
149	0605126N	Joint Theater Air and Missile Defense Organization	06		2,970		2,970	U
150	0605152N	Studies and Analysis Support - Navy	06	9,451	17,435		17,435	U
151	0605154N	Center for Naval Analyses	06	45,582	42,751		42,751	U
152	0605502N	Small Business Innovative Research	06	320,547	10		10	U
153	0605804N	Technical Information Services	06	1,147	571		571	U
154	0605853N	Management, Technical & International Support	06	58,588	58,162		58,162	U
155	0605856N	Strategic Technical Support	06	3,335	3,277		3,277	U
156	0605861N	RDT&E Science and Technology Management	06	72,161	73,917		73,917	U
157	0605863N	RDT&E Ship and Aircraft Support	06	100,759	136,531		136,531	U
158	0605864N	Test and Evaluation Support	06	376,563	335,357		335,357	U
159	0605865N	Operational Test and Evaluation Capability	06	15,592	16,634		16,634	U
160	0605866N	Navy Space and Electronic Warfare (SEW) Support	06	9,140	4,223		4,223	U
161	0605867N	SEW Surveillance/Reconnaissance Support	06	19,600	7,642		7,642	U
162	0605873M	Marine Corps Program Wide Support	06	17,225	25,538		25,538	U

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143	0304503N	SSN-688 and Trident Modernization - MIP	05				U
144	0304785N	Tactical Cryptologic Systems	05	23,255		23,255	U
145	0305124N	Special Applications Program	05				U
		System Development & Demonstration		5,747,232	2,173	5,749,405	
146	0604256N	Threat Simulator Development	06	30,790		30,790	U
147	0604258N	Target Systems Development	06	59,221		59,221	U
148	0604759N	Major T&E Investment	06	35,894		35,894	U
149	0605126N	Joint Theater Air and Missile Defense Organization	06	7,573		7,573	U
150	0605152N	Studies and Analysis Support - Navy	06	20,963		20,963	U
151	0605154N	Center for Naval Analyses	06	46,856		46,856	U
152	0605502N	Small Business Innovative Research	06				U
153	0605804N	Technical Information Services	06	796		796	U
154	0605853N	Management, Technical & International Support	06	32,782		32,782	U
155	0605856N	Strategic Technical Support	06	3,306		3,306	U
156	0605861N	RDT&E Science and Technology Management	06	70,302		70,302	U
157	0605863N	RDT&E Ship and Aircraft Support	06	144,033		144,033	U
158	0605864N	Test and Evaluation Support	06	342,298		342,298	U
159	0605865N	Operational Test and Evaluation Capability	06	16,399		16,399	U
160	0605866N	Navy Space and Electronic Warfare (SEW) Support	06	4,579	5,200	9,779	U
161	0605867N	SEW Surveillance/Reconnaissance Support	06	8,000		8,000	U
162	0605873M	Marine Corps Program Wide Support	06	18,490		18,490	U

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163	0305885N	Tactical Cryptologic Activities	06	1,850	2,764		2,764	U
164	0804758N	Service Support to JFCOM, JNTC	06	4,104				U
165	0909999N	Financing for Cancelled Account Adjustments	06	377				U
	RDT&E	Management Support		1,179,998	838,757		838,757	
167	0604402N	Unmanned Combat Air Vehicle (UCAV) Advanced Component and Prototype Development	07	258,069	198,251		198,251	U
168	0604717M	Marine Corps Combat Services Support	07		400		400	U
169	0604766M	Marine Corps Data Systems	07		1,650		1,650	U
170	0101221N	Strategic Sub & Weapons System Support	07	68,575	88,873		88,873	U
171	0101224N	SSBN Security Technology Program	07	33,824	33,519		33,519	U
172	0101226N	Submarine Acoustic Warfare Development	07	6,620	6,360		6,360	U
173	0101402N	Navy Strategic Communications	07	9,492	23,208		23,208	U
174	0203761N	Rapid Technology Transition (RTT)	07	33,948	30,005		30,005	U
175	0204136N	F/A-18 Squadrons	07	143,560	145,091	2,000	147,091	U
176	0204152N	E-2 Squadrons	07	20,774	6,687		6,687	U
177	0204163N	Fleet Telecommunications (Tactical)	07	27,321	1,739		1,739	U
178	0204228N	Surface Support	07		3,377		3,377	U
179	0204229N	Tomahawk and Tomahawk Mission Planning Center (TMPC)	07	10,352	8,819		8,819	U
180	0204311N	Integrated Surveillance System	07	28,161	21,259		21,259	U
181	0204413N	Amphibious Tactical Support Units (Displacement Craft)	07	4,315	5,214		5,214	U
182	0204460M	Ground/Air Task Oriented Radar (G/ATOR)	07					U
183	0204571N	Consolidated Training Systems Development	07	39,792	42,244		42,244	U

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163	0305885N	Tactical Cryptologic Activities	06	2,795		2,795	U
164	0804758N	Service Support to JFCOM, JNTC	06				U
165	0909999N	Financing for Cancelled Account Adjustments	06				U
	RDT&E	Management Support		845,077	5,200	850,277	
167	0604402N	Unmanned Combat Air Vehicle (UCAV) Advanced Component and Prototype Development	07	142,282		142,282	U
168	0604717M	Marine Corps Combat Services Support	07				U
169	0604766M	Marine Corps Data Systems	07				U
170	0101221N	Strategic Sub & Weapons System Support	07	105,892		105,892	U
171	0101224N	SSBN Security Technology Program	07	34,729		34,729	U
172	0101226N	Submarine Acoustic Warfare Development	07	1,434		1,434	U
173	0101402N	Navy Strategic Communications	07	19,208		19,208	U
174	0203761N	Rapid Technology Transition (RTT)	07	25,566		25,566	U
175	0204136N	F/A-18 Squadrons	07	188,299		188,299	U
176	0204152N	E-2 Squadrons	07	8,610		8,610	U
177	0204163N	Fleet Telecommunications (Tactical)	07	15,695		15,695	U
178	0204228N	Surface Support	07	4,171		4,171	U
179	0204229N	Tomahawk and Tomahawk Mission Planning Center (TMPC)	07	11,265		11,265	U
180	0204311N	Integrated Surveillance System	07	45,922		45,922	U
181	0204413N	Amphibious Tactical Support Units (Displacement Craft)	07	8,435		8,435	U
182	0204460M	Ground/Air Task Oriented Radar (G/ATOR)	07	75,088		75,088	U
183	0204571N	Consolidated Training Systems Development	07	20,229		20,229	U

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184	0204574N	Cryptologic Direct Support	07	1,511	1,447		1,447	U
185	0204575N	Electronic Warfare (EW) Readiness Support	07	47,973	18,142		18,142	U
186	0205601N	HARM Improvement	07	73,189	11,147		11,147	U
187	0205604N	Tactical Data Links	07	28,241	69,189		69,189	U
188	0205620N	Surface ASW Combat System Integration	07	29,983	29,472		29,472	U
189	0205632N	MK-48 ADCAP	07	33,912	46,759		46,759	U
190	0205633N	Aviation Improvements	07	90,987	100,415		100,415	U
191	0205658N	Navy Science Assistance Program	07	3,503	1,957		1,957	U
192	0205675N	Operational Nuclear Power Systems	07	73,851	82,705		82,705	U
193	0206313M	Marine Corps Communications Systems	07	227,604	320,123	1,500	321,623	U
194	0206623M	Marine Corps Ground Combat/Supporting Arms Systems	07	77,623	159,396		159,396	U
195	0206624M	Marine Corps Combat Services Support	07	52,480	27,072		27,072	U
196	0206625M	USMC Intelligence/Electronic Warfare Systems (MIP)	07	21,658	14,101	4,050	18,151	U
197	0207161N	Tactical AIM Missiles	07	906	8,765		8,765	U
198	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	2,588	2,913		2,913	U
199	0208058N	Joint High Speed Vessel (JHSV)	07	3,508	4,108		4,108	U
204	0303109N	Satellite Communications (SPACE)	07	410,015	263,439		263,439	U
205	0303138N	Consolidated Afloat Network Enterprise Services (CANES)	07	42,417	24,855		24,855	U
206	0303140N	Information Systems Security Program	07	24,988	37,196		37,196	U
207	0303150M	WWMCCS/Global Command and Control System	07		1,250		1,250	U
208	0303238N	Consolidated Afloat Network Enterprise Services (CANES) - MIP	07	9,334	6,602		6,602	U

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Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
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184	0204574N	Cryptologic Direct Support	07	1,756		1,756	U
185	0204575N	Electronic Warfare (EW) Readiness Support	07	19,843		19,843	U
186	0205601N	HARM Improvement	07	11,477		11,477	U
187	0205604N	Tactical Data Links	07	118,818		118,818	U
188	0205620N	Surface ASW Combat System Integration	07	27,342		27,342	U
189	0205632N	MK-48 ADCAP	07	28,717		28,717	U
190	0205633N	Aviation Improvements	07	89,157		89,157	U
191	0205658N	Navy Science Assistance Program	07	3,450		3,450	U
192	0205675N	Operational Nuclear Power Systems	07	86,435		86,435	U
193	0206313M	Marine Corps Communications Systems	07	219,054		219,054	U
194	0206623M	Marine Corps Ground Combat/Supporting Arms Systems	07	181,693		181,693	U
195	0206624M	Marine Corps Combat Services Support	07	58,393	6,762	65,155	U
196	0206625M	USMC Intelligence/Electronic Warfare Systems (MIP)	07	22,966		22,966	U
197	0207161N	Tactical AIM Missiles	07	21,107		21,107	U
198	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	07	2,857		2,857	U
199	0208058N	Joint High Speed Vessel (JHSV)	07	1,932		1,932	U
204	0303109N	Satellite Communications (SPACE)	07	188,482		188,482	U
205	0303138N	Consolidated Afloat Network Enterprise Services (CANES)	07	16,749		16,749	U
206	0303140N	Information Systems Security Program	07	26,307		26,307	U
207	0303150M	WWMCCS/Global Command and Control System	07	500		500	U
208	0303238N	Consolidated Afloat Network Enterprise Services (CANES) - MIP	07				U

R-1C: FY 2013 President's Budget (Published Version), as of January 18, 2012 at 11:19:58

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Department of the Navy
 FY 2013 President's Budget
 Exhibit R-1 FY 2013 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

18 Jan 2012

Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Se c
210	0305149N	COBRA JUDY	07	36,278	40,605		40,605	U
211	0305160N	Navy Meteorological and Ocean Sensors-Space (METOC)	07	38,795	904		904	U
212	0305192N	Military Intelligence Program (MIP) Activities	07	4,412	4,099		4,099	U
213	0305204N	Tactical Unmanned Aerial Vehicles	07	20,480	9,353		9,353	U
214	0305206N	Airborne Reconnaissance Systems	07	49,945	20,000		20,000	U
215	0305207N	Manned Reconnaissance Systems	07	17,565				U
216	0305208M	Distributed Common Ground/Surface Systems	07	8,334	23,785		23,785	U
217	0305208N	Distributed Common Ground/Surface Systems	07	16,549	25,453		25,453	U
218	0305220N	RQ-4 UAV	07	525,552	548,267		548,267	U
219	0305231N	MQ-8 UAV	07	67,048	108,248		108,248	U
220	0305232M	RQ-11 UAV	07	509	979		979	U
221	0305233N	RQ-7 UAV	07	25,229	872		872	U
222	0305234M	Small (Level 0) Tactical UAS (STUASL0)	07	26,076				U
223	0305234N	Small (Level 0) Tactical UAS (STUASL0)	07	12,645	21,387		21,387	U
224	0305237N	Medium Range Maritime UAS	07		15,000		15,000	U
225	0305239M	RQ-21A	07		24,201		24,201	U
226	0308601N	Modeling and Simulation Support	07	7,963	8,292		8,292	U
227	0702207N	Depot Maintenance (Non-IF)	07	17,750	21,446		21,446	U
228	0702239N	Avionics Component Improvement Program	07	3,177				U
229	0708011N	Industrial Preparedness	07	44,626	54,031		54,031	U

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Department of the Navy
 FY 2013 President's Budget
 Exhibit R-1 FY 2013 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

18 Jan 2012

Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Program Element Number	Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
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210	0305149N	COBRA JUDY	07	17,091		17,091	U
211	0305160N	Navy Meteorological and Ocean Sensors-Space (METOC)	07	810		810	U
212	0305192N	Military Intelligence Program (MIP) Activities	07	8,617		8,617	U
213	0305204N	Tactical Unmanned Aerial Vehicles	07	9,066		9,066	U
214	0305206N	Airborne Reconnaissance Systems	07				U
215	0305207N	Manned Reconnaissance Systems	07	30,654		30,654	U
216	0305208M	Distributed Common Ground/Surface Systems	07	25,917		25,917	U
217	0305208N	Distributed Common Ground/Surface Systems	07	14,676		14,676	U
218	0305220N	RQ-4 UAV	07	657,483		657,483	U
219	0305231N	MQ-8 UAV	07	99,600		99,600	U
220	0305232M	RQ-11 UAV	07	495		495	U
221	0305233N	RQ-7 UAV	07	863	7,600	8,463	U
222	0305234M	Small (Level 0) Tactical UAS (STUASL0)	07				U
223	0305234N	Small (Level 0) Tactical UAS (STUASL0)	07	9,734		9,734	U
224	0305237N	Medium Range Maritime UAS	07				U
225	0305239M	RQ-21A	07	22,343		22,343	U
226	0308601N	Modeling and Simulation Support	07	5,908		5,908	U
227	0702207N	Depot Maintenance (Non-IF)	07	27,391		27,391	U
228	0702239N	Avionics Component Improvement Program	07				U
229	0708011N	Industrial Preparedness	07	54,879		54,879	U

R-1C: FY 2013 President's Budget (Published Version), as of January 18, 2012 at 11:19:58

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Department of the Navy
 FY 2013 President's Budget
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 Total Obligational Authority
 (Dollars in Thousands)

18 Jan 2012

Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Element Number	Program Item	Act	FY 2011 Actuals	FY 2012 Base	FY 2012 OCO	FY 2012 Total	Se
230	0708730N	Maritime Technology (MARITECH)	07		5,000		5,000	U
9999	9999999999	Classified Programs		1,527,746	1,306,945	33,784	1,340,729	U
		Operational Systems Development		4,391,753	4,086,616	41,334	4,127,950	
Total Research, Development, Test & Eval, Navy				17,865,538	17,739,575	53,884	17,793,459	

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Department of the Navy
 FY 2013 President's Budget
 Exhibit R-1 FY 2013 President's Budget
 Total Obligational Authority
 (Dollars in Thousands)

18 Jan 2012

Appropriation: 1319N Research, Development, Test & Eval, Navy

Line No	Element Number	Program Item	Act	FY 2013 Base	FY 2013 OCO	FY 2013 Total	Se
230	0708730N	Maritime Technology (MARITECH)	07	5,000		5,000	U
9999	9999999999	Classified Programs		1,151,159	33,784	1,184,943	U
		Operational Systems Development		3,975,546	48,146	4,023,692	
Total Research, Development, Test & Eval, Navy				16,882,877	60,119	16,942,996	

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Navy • President's Budget Submission FY 2013 • RDT&E Program

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Appropriation 1319: Research, Development, Test & Evaluation, Navy***

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150	06	0605152N	Studies & Analysis Supt - Navy.....	Volume 4 - 33
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154	06	0605853N	Management, Technical & Intl Supt.....	Volume 4 - 99
155	06	0605856N	Strategic Technical Support.....	Volume 4 - 137
156	06	0605861N	RDT&E Science & Tech Mgmt.....	Volume 4 - 143
157	06	0605863N	RDT&E Ship & Aircraft Support.....	Volume 4 - 151
158	06	0605864N	Test & Evaluation Support.....	Volume 4 - 161
159	06	0605865N	Operational Test & Eval Capability.....	Volume 4 - 183
160	06	0605866N	Navy Space & Electr Warfare Supt.....	Volume 4 - 189

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Navy • President's Budget Submission FY 2013 • RDT&E Program

***Budget Activity 06: RDT&E Management Support
Appropriation 1319: Research, Development, Test & Evaluation, Navy***

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162	06	0605873M	Marine Corps Program Wide Supt.....	Volume 4 - 203
163	06	0305885N	Tactical Cryptologic Activities.....	Volume 4 - 217
164	06	0804758N	Service Support To JFCOM, JNTC.....	Volume 4 - 221
165	06	0909999N	Cancelled Account Adjustments.....	Volume 4 - 227

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Navy • President's Budget Submission FY 2013 • RDT&E Program

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Center For Naval Analyses	0605154N	151	06.....Volume 4 - 47	
Major T&E Investment	0604759N	148	06.....Volume 4 - 23	
Management, Technical & Intl Supt	0605853N	154	06.....Volume 4 - 99	
Marine Corps Program Wide Supt	0605873M	162	06.....Volume 4 - 203	
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Small Business Innovative Research	0605502N	152	06.....Volume 4 - 53	
Space & Elec War Surv/Recon	0605867N	161	06.....Volume 4 - 199	
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Navy • President's Budget Submission FY 2013 • RDT&E Program

Program Element Title	Program Element Number	Line Item	Budget Activity	Page
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Test & Evaluation Support	0605864N	158	06.....Volume 4 - 161	
Threat Simulator Development	0604256N	146	06..... Volume 4 - 1	

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>			PE 0604256N: <i>Threat Simulator Development</i>								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	18.353	28.318	30.790	-	30.790	43.893	43.129	40.585	21.705	Continuing	Continuing
0602: <i>Eletronic W/F Env Simulation (ECHO)</i>	7.915	15.108	17.390	-	17.390	30.227	33.179	27.320	7.502	Continuing	Continuing
0672: <i>Effect Nav E/W (ENEWS)</i>	10.438	13.210	13.400	-	13.400	13.666	9.950	13.265	14.203	Continuing	Continuing

A. Mission Description and Budget Item Justification

This is a continuing program that consolidates the design, fabrication and integration of Naval Electronic Warfare (EW) threat simulators for increased managerial emphasis and coordination. These simulator development efforts provide realistic Developmental and Operational Test and Evaluation environments to test EW systems and defensive tactics. These projects develop threat Anti-Air and Anti-Ship weapon system simulators in accordance with the Services' requirements.

The 0602 Project, Electronic Warfare Environment Simulation, directly supports the Test and Evaluation resource requirements for all Naval Air EW development programs to include multi-spectral situational awareness and countermeasures. Programs in development and future programs include: Advanced Anti-Radiation Guided Missile, ALR-67 (v) 3, Integrated Defensive Electronic Countermeasures Suite ALQ-214, the AAR-47 (v) 3, AVR-2, Advanced 6" Expendable, Advanced Strategic Tactical Expendable, ALQ-144A, Joint and Allied Threat Awareness System, Joint Strike Fighter, EA-18G, LR700, Low Band Transmitter, P-8A, and the Next Generation Jammer.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	18.755	28.318	20.928	-	20.928
Current President's Budget	18.353	28.318	30.790	-	30.790
Total Adjustments	-0.402	-	9.862	-	9.862
• Congressional General Reductions	-	-	-	-	-
• Congressional Directed Reductions	-	-	-	-	-
• Congressional Rescissions	-	-	-	-	-
• Congressional Adds	-	-	-	-	-
• Congressional Directed Transfers	-	-	-	-	-
• Reprogrammings	-	-	-	-	-
• SBIR/STTR Transfer	-0.307	-	-	-	-
• Program Adjustments	-	-	9.959	-	9.959
• Rate/Misc Adjustments	-	-	-0.097	-	-0.097
• Congressional General Reductions Adjustments	-0.095	-	-	-	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0604256N: <i>Threat Simulator Development</i>

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>				PROJECT 0602: <i>Eletronics W/F Env Simulation (ECHO)</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0602: <i>Eletronics W/F Env Simulation (ECHO)</i>	7.915	15.108	17.390	-	17.390	30.227	33.179	27.320	7.502	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The objective of this project is development of necessary simulation facilities and approaches to allow determination of the effectiveness of Electronic Warfare (EW) in real world engagement situations and to support the introduction of modern, effective systems into Naval Aviation. The heavy use of test resources by all Services demonstrates the importance of these assets. The Navy has been very successful in executing all of its major programs, and to date has had no major technical problems.

The Electronic Warfare Environment Simulation project is unique because it is the only program within the Department of Defense which develops and provides Naval anti-air warfare threat assets for Test and Evaluation (T&E).

This project directly supports the T&E resource requirements for all Naval Air EW development programs, to include multi-spectral situational awareness and countermeasures. Programs in development and future programs include: Advanced Anti-Radiation Guided Missile, ALR-67 (v) 3, Integrated Defensive Electronic Countermeasures Suite ALQ-214, the AAR-47 (v) 3, AVR-2, Advanced 6" Expendable, Advanced Strategic Tactical Expendable, ALQ-144A, Joint and Allied Threat Awareness System, Joint Strike Fighter, EA-18G, LR700, Low Band Transmitter, P-8A, and the Next Generation Jammer.

This project provides for the development of an Integrated Air Defense T&E capability to be fielded at each of the three sites comprising the Navy's Tri-Center complex: Naval Air Warfare Center Weapons Division, China Lake and Point Mugu in CA, and Naval Air Warfare Center Aircraft Division, Patuxent River, MD.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: RADIO FREQUENCY (RF) THREAT CAPABILITIES	6.936	14.129	16.411
Articles:	0	0	0
Description: Provide the test community with the modern threat systems necessary for T&E of airborne RF alert, Situation Awareness, targeting systems and airborne RF response systems.			
Funding increases from FY 2011 to FY 2012 due to the need to address additional double digit threat systems at the Electronic Combat Range (ECR) by initiating the development of the Long Range Threat Systems simulator (LRTS) at ECR. Funding increases from FY 2012 to FY 2013 due to the need for additional test capability for the Next Generation Jammer and the Joint Strike Fighter programs.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0602: <i>Eletronics W/F Env Simulation (ECHO)</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p><i>FY 2011 Accomplishments:</i></p> <ul style="list-style-type: none"> - Continued the development of the LRTS in laboratories. - Continued the upgrade to the J-32B Advanced Threat System (ATS) at Eletronic Combat Range (ECR). - Continued the development of an advanced Early Warning and Acquisition radar hybrid laboratory simulator. <p><i>FY 2012 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts from FY 2011. - Complete the upgrade of an ATS at ECR. - Initiate and complete the upgrade of advanced manpad system simulators. - Initiate the development of the Long Range Threat Systems Simulator (LRTS) at ECR. - Initiate the update to existing laboratory simulators of foreign radars. - Initiate the development of a Digital Radio Frequency Memory jammer simulator. <p><i>FY 2013 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts from FY 2012 except those listed as complete above. - Complete the development of the LRTS in laboratories. - Complete the development of a Digital Radio Frequency Memory jammer simulator. - Initiate the upgrade and integration of missile simulation models. - Initiate the upgrade of open-loop threat simulators at ECR. - Initiate the development of an open air radio frequency beam measurement capability. - Initiate the development of a closed-loop threat surface to air missile system simulator. - Initiate the conversion of a threat system. 				
<p><i>Title:</i> REQUIREMENTS AND VALIDATION</p> <p align="right"><i>Articles:</i></p>		0.979 0	0.979 0	0.979 0
<p><i>Description:</i> Validate and track intel updates of the threat systems necessary for the operation and continuous improvement of Navy laboratories and ranges which provide engineering support, testing and analysis to the developers, integrators, testers and users of systems and technologies that counter or penetrate air defenses.</p> <p><i>FY 2011 Accomplishments:</i></p> <ul style="list-style-type: none"> - Continued to provide program management, systems engineering, and requirements identification for the development of simulators and foreign material acquisition. - Continued to validate simulators and stimulators at the Navy tri-lab centers. <p><i>FY 2012 Plans:</i></p>				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0602: <i>Eletronics W/F Env Simulation (ECHO)</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
- Continue all efforts of FY 2011.				
FY 2013 Plans:				
- Continue all efforts of FY 2012.				
Accomplishments/Planned Programs Subtotals		7.915	15.108	17.390
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
Not Applicable.				
E. Performance Metrics				
Successfully achieve Initial Operational Capability of Navy Threat Simulation projects within 60 days of approved schedule and have test capabilities scheduled in support of Navy test programs within 180 days.				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0672: <i>Effect Nav E/W (ENEWS)</i>	10.438	13.210	13.400	-	13.400	13.666	9.950	13.265	14.203	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The objective of the Effectiveness of Navy Electronic Warfare (EW) Systems (ENEWS) Project is the development and application of necessary simulation assets to determine the effectiveness of EW for Navy ships in simulated real-world engagement situations. The project primarily supports the introduction of modern, effective shipboard and offboard EW systems, and tactics for the Surface Navy. The heavy use of ENEWS resources by Naval Sea Systems Command, Operational Test and Evaluation (OT&E) Force, Special Operations, and other EW Research, Development, Test and Evaluation (T&E) agencies speaks to the overall importance of this project. The project provides support for EW system design Engineering Test (ET), Development Test (DT), Operational Test (OT), and the development of utilization tactics. Its quick reaction capabilities have had great impact on crisis situations such as the Lebanon and Libyan crises, Iran Harpoon threat, Persian Gulf crisis, and Operation Desert Shield/Storm. Simulation Display is another ENEWS modeling tool that was developed to support T&E. The display has been adopted by most Department of Defense (DoD) T&E and training ranges to provide visualization of T&E and training scenarios. The primary threat to surface ships is Anti-Ship Capable Missile systems. The ENEWS Project is unique in that it is the only project within DoD dedicated to developing and providing realistic Anti-Ship Capable Missile assets to test and evaluate the effectiveness of shipboard EW systems and tactics against these type threats. The ENEWS Project is a critical part of the Office of the Secretary of Defense Test Resource Master Plan. This plan employs many of the ENEWS assets for planning, analysis, testing, and verification of shipboard and offboard EW systems techniques and tactics. As part of its normal activities, ENEWS provides Development Test and Evaluation (DT&E), OT&E, and Follow-on Operational Test and Evaluation (FOT&E) support to the surface Navy for all ship classes. DT, OT and FOT&E support includes AN/SLQ-32 Surface Electronic Warfare Improvement Program (SEWIP), R17.OX NULKA, Rapid Anti-ship Integrated Defense System, all MK245 Giant tests, advanced InfraRed (IR) decoys, decoy placement, ship IR signature and radar cross section measurement of DDG-51, LPD-17, DD-21 and PC class ships, High Power Microwave program, and other ship self-defense initiatives, including T&E of Future Naval Capability process. In addition, ENEWS assets are regularly employed to test the effectiveness of North Atlantic Treaty Organization ships' EW systems in joint allied exercises. ENEWS assets also support Joint EW exercises that are conducted with Rim of the Pacific (RIMPAC) nations.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: CLASSIFIED PROGRAM	5.510	8.418	8.462
Articles:	0	0	0
Description: Details about this program are classified.			
Details about this program and any changes are classified.			
FY 2011 Accomplishments:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p>- Details are of a higher classification.</p> <p>FY 2012 Plans: - Details are of a higher classification.</p> <p>FY 2013 Plans: - Details are of a higher classification.</p>				
<p>Title: HARDWARE SIMULATION SYSTEMS</p> <p>Articles:</p>		1.680	1.695	1.919
<p>Description: Maintain and perform Hardware and Software Upgrades to the inventory of ENEWS flyable and shore based Anti-Ship Capable Missile (ASCM) Electro-Optic/Infrared, Visible and Radio Frequency (RF) Simulators. Perform characterization of IR and RF simulators as part of periodic evaluation of simulation performance and collect performance data for comparison with previously recorded data. Development and maintenance of all simulator control panels.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Continued annual maintenance on ENEWS simulators to support flight/shore based tests. - Continued intelligence upgrades to SUMMIT simulators and VICTOR 1 Standard Instrumentation Pods (SIP). - Continued software intelligence upgrades to VICTOR 1 SIP and SUMMIT simulators. - Completed intelligence upgrades to MEIR 2-2, MEIR 3 simulators the MIKE 2 & 3 SIPs. - Completed transition of the TANGO simulator into the NRL Learjet Electronics Pod (LEP). - Initiated software intelligence upgrades to the towed FOXTROT 3 simulator. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue annual maintenance on ENEWS simulators to support flight/shore based tests. - Continue software intelligence upgrades to the towed FOXTROT 3 simulator. - Complete software intelligence upgrades to the VICTOR 1 SIP and SUMMIT simulators. - Complete intelligence upgrades to the VICTOR 1 SIP and SUMMIT simulators. - Initiate characterization of NOVEMBER Va/Vb simulators. - Initiate and complete characterization of GAMMA simulator. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue annual maintenance of ENEWS simulators to support flight/shore based tests. - Complete software intelligence upgrades to the FOXTROT 3 towed simulator (TOWSIM). - Complete characterization of NOVEMBER Va/Vb simulator. - Initiate software intelligence upgrades to the MEIR 3 and MIKE 3. 		0	0	0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
- Initiate and complete characterization of the OMEGA simulator.				
Title: SIMULATION VALIDATION AND REQUIREMENTS		0.952	0.987	0.940
Description: Provides for the validation of hardware simulators and digital models. Develops reports that contain detailed descriptions and parametric data of the threat simulators or digital models and compares the simulator's parametric data to the actual threats parametric data. Provide technical management functions in support of the ENEWS project; engineering and technical support requirements for the overall efforts of ASCM simulator and digital model development to meet DT/OT testing requirements, development of detailed test resource requirements and provides an interface between N-912, N-433, Office of Naval Research and other ENEWS oversight activities.		Articles: 0	0	0
FY 2011 Accomplishments: - Continued management of the Simulator Validation Working Group SVWG. - Completed INDIA I, PAPA, and KILO hardware validation reports. - Initiated QUESTION and UNIFORM hardware validation reports. - Initiated and completed update of FY 2011 Program Management Plan. - Initiated and completed FY 2011 quarterly reports, earned value management analysis, progress tracking and analysis.				
FY 2012 Plans: - Continued management of the Simulator Validation Working Group SVWG. - Continue QUESTION and UNIFORM hardware validation reports. - Initiate and complete update of the FY 2012 Program Management Plan. - Initiate and complete FY 2012 quarterly reports, earned value management analysis, progress tracking and analysis. - Initiate FOXTROT 3 TOWSIM, OMEGA and GAMMA hardware validation reports.				
FY 2013 Plans: - Continue management of the Simulator Validation Working Group SVWG. - Complete QUESTION and UNIFORM hardware validation reports. - Complete FOXTROT 3 TOWSIM, OMEGA and GAMMA hardware validation reports - Initiate and complete update of the FY 2013 Program Management Plan. - Initiate and complete FY 2013 quarterly reports, earned value management analysis, progress tracking and analysis. - Initiate SIGMA hardware validation report.				
Title: SUPPORT AND COMPUTERS SIMULATION SYSTEMS		2.296	2.110	2.079
		Articles: 0	0	0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p>Description: Perform maintenance and intelligence upgrades to EO/IR, Digital, and RF Laboratory Simulation testing facilities and flight support equipment based on existing and emerging complex threat systems. Development of T&E scenarios and environmental modeling to support electronic support (ES) and electronic attack (EA) testing; modify ASCM Digital Models based on the latest intelligence data obtained from threat databases.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Continued maintenance and upgrades to shore-based test facilities and mobile test vans as required to conduct tests in support of SEWIP, NULKA and multi function EW programs. - Continued transitioning environmental, threat and platform simulations to the subversion software configuration management program. Upgraded subversion software library as new releases became available. - Continued to develop new digital models of Anti-ship Cruise Missile (ASCM) threats as they became available. - Continued upgrades and maintenance of flight support systems as necessary to support the IR/RF ENEWS simulators. - Continued improvements and intelligence upgrades to ALPHA I, INDIA I, II, III, LIMA, NOVEMBER III, QUEBEC, TANGO, and TANGO II. In all, a total of 9 digital models. - Continued improvements and intelligence upgrades to the COHERENT and foreign anti-ship missile (FASM) digital models. - Continued intelligence updates and simulation user friendly enhancements for the Long Range High Altitude (LRHA) digital model. - Initiated improvements and intelligence upgrades to the Millimeter Wave (mmW) digital models. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY2011, less those noted as complete below. - Complete improvements and intelligence upgrades to the COHERENT and FASM digital models. - Complete the simulation user friendly enhancements for the LRHA digital model. - Initiate simulation user friendly enhancements for the TANGO and TANGO II digital models. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of 2012, less those noted as completed below. - Continue improvements and upgrades to mmW digital models - Complete the simulator user friendly enhancements for the TANGO and TANGO II digital models - Initiate the simulator user friendly enhancements for the NOVEMBER IV digital model. 			
Accomplishments/Planned Programs Subtotals	10.438	13.210	13.400

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

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604256N: <i>Threat Simulator Development</i>	PROJECT 0672: <i>Effect Nav E/W (ENEWS)</i>

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Performance metrics are discussed within each project (R2a).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>			PE 0604258N: <i>Target Systems Development</i>								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	68.293	44.700	59.221	-	59.221	32.999	33.509	35.907	36.596	Continuing	Continuing
0609: <i>Aerial Target System Dev</i>	57.429	33.252	36.223	-	36.223	12.759	13.033	13.225	13.468	Continuing	Continuing
0610: <i>Wpn Sys T&E Trng Dev/Proc</i>	9.451	10.067	21.608	-	21.608	18.836	19.072	21.257	21.668	Continuing	Continuing
0612: <i>Surface Targets Development</i>	1.413	1.381	1.390	-	1.390	1.404	1.404	1.425	1.460	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element funds the development and procurement of aerial targets, sea surface targets, control systems, and associated Target Augmentation and Auxiliary Systems needed to represent real world threat systems. These capabilities are key enablers to the successful execution of the developmental and operational test and evaluation of naval combat weapons systems and to the satisfaction of advanced fleet training requirements.

B. Program Change Summary (\$ in Millions)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	66.066	44.700	41.374	-	41.374
Current President's Budget	68.293	44.700	59.221	-	59.221
Total Adjustments	2.227	-	17.847	-	17.847
• Congressional General Reductions	-	-	-	-	-
• Congressional Directed Reductions	-	-	-	-	-
• Congressional Rescissions	-	-	-	-	-
• Congressional Adds	-	-	-	-	-
• Congressional Directed Transfers	-	-	-	-	-
• Reprogrammings	4.000	-	-	-	-
• SBIR/STTR Transfer	-1.437	-	-	-	-
• Program Adjustments	-	-	17.501	-	17.501
• Rate/Misc Adjustments	-	-	0.346	-	0.346
• Congressional General Reductions Adjustments	-0.336	-	-	-	-

Change Summary Explanation

The Multi-Stage Supersonic Target (MSST) program increased in design/development costs, requiring additional funding in FY 2013 to align to Contractor's Estimate to Complete (EAC) and prevent delays in the initial production schedule.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0604258N: <i>Target Systems Development</i>

The Subsonic Aerial Target (SSAT) program required additional funding in FY 2013 to meet revised program cost estimates for the addition of (Classified) requirements for an Increment 2.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0609: <i>Aerial Target System Dev</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0609: <i>Aerial Target System Dev</i>	57.429	33.252	36.223	-	36.223	12.759	13.033	13.225	13.468	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Aerial target systems, Target Control (TC), and associated Target Augmentation and Auxiliary Systems (TA/AS) are developed to support test & evaluation and advanced fleet training for Joint Strike and Littoral Warfare Systems required to defend fleet surface and air units in a hostile environment. In addition to hardware, software and operational concept development, studies will be performed by an University Affiliated Research Center (UARC) to specify and verify needed target performance for future target development. For the design and validation of targets under development, the UARC will provide engineering studies in areas such as structures, controls, guidance, and propulsion. For those hardware and software items presently under development by commercial vendors, the UARC will provide oversight and validation of vendor design and development approach.

As to specific hardware development, this project includes:

- Subsonic Targets. Subsonic Aerial Target (SSAT) development. The SSAT primarily represents subsonic anti-ship cruise missile threats in direct support of the test & evaluation (T&E) of major combat weapons systems programs and of fleet training.
- Supersonic Targets. Supersonic Sea Skimming Target (SSST), Multi-Stage Supersonic Target (designated the ZGQM-173A), and supersonic high-diver capability development. The family of supersonic target capabilities represents supersonic anti-ship cruise missile threats in direct support of Developmental Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E) and Live Fire Test and Evaluation of major combat weapons systems programs in development.
- TC and TA/AS development. TC provides command and control of targets to enable the execution of threat-representative mission profiles. TA/AS enables each target to be uniquely configured for specific mission profiles. TA/AS-configured targets are used for radar acquisition test, electronic countermeasures (jamming) evaluation, infrared measurement and testing, radar cross section evaluation, decoy-effectiveness testing, maneuver analysis, electronic warfare evaluation, warhead-effectiveness testing and evaluation of fleet tactics. TA/AS scoring capabilities include both surface and airborne scalar and vector scoring systems.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Supersonic Targets	32.516	16.387	15.400
Articles:	0	0	0
Description: The ZGQM-173A target emulates a two-stage anti-ship cruise missile. The ZGQM-173A will have a subsonic bus stage vehicle which will tumble and fall into the sea, and a supersonic sprint stage vehicle which continues flight to impact. The fielded system will provide threat representation in support of DT&E and OT&E and will identify deficiencies in shipboard air defense systems. Funding will also continue GQM-163 SSST upgrades/evolutionary development to keep pace with evolving threat characteristics. Efforts include continuing to establish operational capability at Pacific Missile Range Facility, developing performance envelope characteristics to include flight termination performance, and continuing development of high-diver capability.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0609: <i>Aerial Target System Dev</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p><i>FY 2011 Accomplishments:</i> Tested the Engineering Evaluation Unit of the ZGQM-173A and held the program's Critical Design Review (CDR). Began Test and Evaluation (T&E) training, conducted the program's Integrated Readiness Review, held quarterly Program Management Reviews (PMRs), and held quarterly Schedule Risk Assessments (SRAs).</p> <p><i>FY 2012 Plans:</i> Conduct Flight Readiness Review of the ZGQM-173A and conduct Engineering Development Model Test Flights One through Three. Conduct Integrated Logistics Assessment and conduct rocket motor qualifications. Conduct quarterly PMRs, hold quarterly SRAs, and conduct the program's Test Readiness Review (TRR). Develop Low Rate Initial Production (LRIP) Request For Proposals package.</p> <p><i>FY 2013 Plans:</i> Plan Software Verification Review and Production Readiness Review for LRIP of the ZGQM-173A. Also, conduct Technology Readiness Assessment, final flight tests of Engineering and Manufacturing Development (EMD) missiles 4, 5, and 6, and the End-To-End Flight Test. Prepare for Milestone C, make award of LRIP contract, and complete EMD vendor effort by 28 Feb 2013. Conduct quarterly PMRs and hold quarterly SRAs.</p>				
<p><i>Title:</i> Subsonic Targets</p> <p align="right"><i>Articles:</i></p> <p><i>Description:</i> The SSAT represents subsonic anti-ship cruise missile threat in direct support of the T&E of major combat weapons systems programs and fleet training. It is the follow-on to the BQM-74 and BQM-34 targets, featuring longer range, lower cruise altitudes and greater maneuverability.</p> <p><i>FY 2011 Accomplishments:</i> Completed Source Selection and successfully passed Milestone B Review; Development contract awarded January 2011. Conducted the System Requirement Review, SRAs, and the Integrated Baseline Review. Incorporated configuration control into EMD and the System Engineering Plan. Managed the execution of the EMD phase and conducted and supported required reviews and development decisions.</p> <p><i>FY 2012 Plans:</i> Conduct EMD. Complete TRR and conduct the Preliminary Design Review . Commence effort on Developmental Test I.</p> <p><i>FY 2013 Plans:</i> Conduct EMD. Conduct CDR.</p>		19.284 0	11.316 0	15.217 0
<p><i>Title:</i> Target Control and Target Augmentation and Auxiliary Systems</p> <p align="right"><i>Articles:</i></p>		5.629 0	5.549 0	5.606 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0609: <i>Aerial Target System Dev</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p>Description: Continue to support TC and TA/AS capable of supporting T&E and fleet training activities. TC involves the improved command and control systems capable of controlling multiple targets simultaneously while delivering adequate fidelity of T&E telemetry data. Augmentation and Auxiliary systems must be capable of augmenting targets in support of radar acquisition test, electronic countermeasures (jamming) evaluation, infrared measurement/test, radar cross section evaluation, decoy effectiveness, maneuver analysis, electronic warfare, warhead effectiveness and evaluation of fleet tactics, readiness and training.</p> <p>FY 2011 Accomplishments: Filthy Badger Digital Radio Frequency Modulator (DRFM)- continued incremental upgrade efforts. Millimeter Wave (MMW) Threat Emitter/Signal Simulator - development of two prototypes. MMW Offboard - Completion of two prototypes. MMW Antennas - development of two prototypes for each of the six different types required. Ongoing intelligence gathering and exploitation has been accomplished.</p> <p>FY 2012 Plans: Filthy Badger DRFM - continue incremental upgrade efforts. Continue MMW Threat Emitter development. Ongoing intelligence gathering and exploitation will be accomplished.</p> <p>FY 2013 Plans: Filthy Buzzard DRFM - continue incremental upgrade efforts. E-F Band Radio Frequency Deck - development of two prototypes planned. Dual Band System - development of two prototypes planned. QF-16 Active Electronically Scanned Array, with Tracking - development of 1 prototype Ongoing intelligence gathering and exploitation will be accomplished.</p>			
Accomplishments/Planned Programs Subtotals	57.429	33.252	36.223

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• WPN 22800: <i>Aerial Targets</i>	41.769	46.359	61.518	0.000	61.518	70.979	72.390	73.620	74.932	Continuing	Continuing
• WPN 612020: <i>Initial Spares</i>	1.060	1.072	1.756	0.000	1.756	1.682	1.708	1.950	1.781	Continuing	Continuing

D. Acquisition Strategy
Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0609: <i>Aerial Target System Dev</i>
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E. Performance Metrics

EFFORT	PERFORMANCE REQUIREMENT	OBJECTIVE	THRESHOLD	TEST RESULT
SSAT EMD program	Maximum Speed at Low Altitude [Mach (M) at feet (ft) above wave crest at WMO Sea State conditions]	0.95 M @ 6.6 ft @ Sea State 5	0.90 M @10.0 ft @ Sea State 3	TBD
ZGQM-173A EMD	Speed of separated sprint vehicle	Mach 2.2 to Mach 3.5	Threshold=Objective	TBD
TC-TA/AS Target Threat Simulation Program	Microwave power module - Second Source	100 Watts output power	Threshold=Objective	TBD

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0610: <i>Wpn Sys T&E Trng Dev/Proc</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0610: <i>Wpn Sys T&E Trng Dev/Proc</i>	9.451	10.067	21.608	-	21.608	18.836	19.072	21.257	21.668	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides for the development and procurement of aerial targets and associated systems used exclusively for test and evaluation of naval weapons systems which closely represent current and projected threats to fleet units in the Joint Strike and the Littoral Warfare environments. These representations must include characteristics related to size, performance envelope, and electromagnetic and infrared signatures. As threats change, changes must be made to keep the targets threat representative in response to changes in the test requirements of the developers of naval weapons systems.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: Air Superiority Target (AST)</p> <p style="text-align: right;">Articles:</p> <p>Description: The AST is being developed as the follow-on to the current Full Scale Aerial Target (FSAT) and is an Air Force-managed program. The AST is a converted F-16 aircraft and provides a supersonic, high altitude, remote-controlled aerial target. This target will have full command and control capability through normal flight maneuvers. The AST target presentations support aircraft and weapons systems testing and development, including that of the Joint Strike Fighter (JSF), AIM-9X Sidewinder missile, Advanced Medium Range Air-to-Air Missile (AMRAAM), and Standard Missile 6.</p> <p>FY 2011 Accomplishments: Continued conduct of Engineering, Manufacturing and Development (EMD).</p> <p>FY 2012 Plans: Continue conduct of EMD.</p> <p>FY 2013 Plans: Commence procurement of AST assets with RDT&E,N funding.</p>	<p>4.400</p> <p>0</p>	<p>7.442</p> <p>0</p>	<p>18.395</p> <p>0</p>
<p>Title: QF-4 FSAT</p> <p style="text-align: right;">Articles:</p> <p>Description: The FSAT is a supersonic, high altitude, remote-controlled aerial target. This target has full command and control capability through normal flight maneuvers. The program will include engineering and logistics support for the FSAT, including Aviation Depot Level Repairables and procurement of kit material. The QF-4 target presentations support aircraft and weapons systems testing and development, including that of the JSF, AIM-9X Sidewinder missile, AMRAAM and Standard Missile 6.</p>	<p>4.840</p> <p>0</p>	<p>2.625</p> <p>0</p>	<p>3.213</p> <p>0</p>

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0610: <i>Wpn Sys T&E Trng Dev/Proc</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p><i>FY 2011 Accomplishments:</i> Maintained and operated the fielded inventory earmarked for the Navy.</p> <p><i>FY 2012 Plans:</i> Plan to maintain and operate the fielded inventory earmarked for the Navy.</p> <p><i>FY 2013 Plans:</i> Plan to maintain and operate the fielded inventory earmarked for the Navy.</p>			
<p><i>Title:</i> Target Augmentation and Auxiliary System (TA/AS) and Scoring Systems</p> <p style="text-align: right;"><i>Articles:</i></p> <p><i>Description:</i> Continue to support TC and TA/AS capable of supporting T&E activities. TC development includes improved command and control systems capable of controlling multiple targets simultaneously while delivering adequate fidelity of T&E telemetry data. TA/AS must be capable of augmenting targets in support of radar acquisition testing, infrared measurement and test, decoy effectiveness testing, maneuver analysis, warhead effectiveness testing, and evaluation of fleet tactics. Scoring systems include both surface and airborne scalar and vector scoring.</p> <p><i>FY 2011 Accomplishments:</i> Continued pursuing alternative test set purchase sources.</p>	0.211 0	-	-
Accomplishments/Planned Programs Subtotals	9.451	10.067	21.608

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

EFFORT	PERFORMANCE REQUIREMENT	OBJECTIVE	THRESHOLD	TEST RESULT
QF-4 Full Scale Target	Flight Termination Sys.- Reliable & effective auto & manual failsafe fast destruct, orbit destruct, & destruct receiver capability	Achieve requirement	Threshold=objective	Satisfactory

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>		PROJECT 0610: <i>Wpn Sys T&E Trng Dev/Proc</i>
AST - Air Superiority Target (QF-16)	Capable of carrying, operating and monitoring required payloads	Achieve requirement	Threshold=objective	TBD

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0612: <i>Surface Targets Development</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0612: <i>Surface Targets Development</i>	1.413	1.381	1.390	-	1.390	1.404	1.404	1.425	1.460	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project develops seaborne targets and their related target augmentation systems in support of air-to-surface and surface-to-surface weapons test and evaluation and fleet training.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Surface Targets Development	1.413	1.381	1.390
Articles:	0	0	0
FY 2011 Accomplishments:			
Monitored developments in Command and Control (C2)			
Completed portable C2 Unit Portable Command and Control Unit (PCCU) software baseline update and testing			
Reviewed capabilities of inventory with regard to threat, weapons test schedule and fleet training requirements			
Rebaselined Radar Cross-Section (RCS) for various powered and towed targets with augmentation			
Developed packages to tailor RCS			
Completed realistic human target, including infrared signature and vulnerability testing			
Completed small baseline HARPOON target development and testing			
Completed real-time target sea state measurement and operator feedback			
Completed SeaCAN printed circuit boards obsolete replacement			
Completed polyethylene tow target testing			
Completed deployable tow target testing and offset tow target testing			
FY 2012 Plans:			
Monitor developments in C2			
PCCU software baseline update and testing			
Review capabilities of inventory with regard to threat, weapons test schedules and fleet training requirements			
Re-baseline RCS for various powered and towed targets with augmentation			
Develop packages to tailor RCS			
Develop signature management techniques to address evolving threats			
Complete polyethylene tow target development			
Complete deployable tow target development			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604258N: <i>Target Systems Development</i>	PROJECT 0612: <i>Surface Targets Development</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Integrate PCCU into System for Naval Target Control Integrate realistic human target (Humannequin) onto powered seaborne targets Complete real-time target sea state measurement and operator feedback FY 2013 Plans: Monitor developments in Command and Control Portable Command and Control Unit (PCCU) software baseline update and testing Review capabilities of inventory with regard to threat, weapons test schedules and fleet training requirements Re-baseline Radar Cross-Section (RCS) for various powered and towed targets with augmentation Develop packages to tailor RCS Develop signature management techniques to address evolving threats Integrate PCCU into System for Naval Target Control			
Accomplishments/Planned Programs Subtotals	1.413	1.381	1.390

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• OPN/5455: <i>ASW Range SE</i>	7.082	7.842	47.930	0.000	47.930	27.342	16.902	17.024	17.189	0.000	148.545

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Review capability of inventory with respect to threat, weapons test schedules and fleet training requirements. OBJECTIVE: Available inventory of seaborne targets to meet fleet requirements.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>			PE 0604759N: <i>Major T&E Investment</i>								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	37.331	37.957	35.894	-	35.894	36.089	37.082	37.670	37.898	Continuing	Continuing
2195: <i>T & E Investment</i>	37.331	37.957	35.894	-	35.894	36.089	37.082	37.670	37.898	Continuing	Continuing

A. Mission Description and Budget Item Justification

This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Division Newport Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility located at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD and the test and evaluation capabilities located at the Pacific Missile Range Facility, Kauai, HI.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	37.522	37.957	34.675	-	34.675
Current President's Budget	37.331	37.957	35.894	-	35.894
Total Adjustments	-0.191	-	1.219	-	1.219
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	1.060	-	1.060
• Rate/Misc Adjustments	-	-	0.159	-	0.159
• Congressional General Reductions Adjustments	-0.191	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>	PROJECT 2195: <i>T & E Investment</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2195: <i>T & E Investment</i>	37.331	37.957	35.894	-	35.894	36.089	37.082	37.670	37.898	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project improves visibility and commonality of Test and Evaluation (T&E) resources across the Service for Major T&E investment funding. These funds correct major deficiencies, improve T&E capabilities, and increase T&E support effectiveness. The T&E Investment project provides improved test capabilities at the following test facilities: the Naval Undersea Warfare Center Division Newport Atlantic Undersea Test and Evaluation Center (AUTEC), Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA; the Sea Range, Land Range, Electronic Combat Range, Targets, Ordnance T&E Facility, Test Wing Pacific, and the Air Vehicle Modification and Instrumentation facility located at the Naval Air Warfare Center Weapons Division, Point Mugu, CA and China Lake, CA; and the Atlantic Test Range, Air Combat Environment T&E Facility, Electromagnetic Environmental Effects, Air Vehicle Modification and Instrumentation facility, Test Wing Atlantic, Targets, and the Propulsion Systems Evaluation Facility located at the Naval Air Warfare Center Aircraft Division, Patuxent River, MD and the test and evaluation capabilities located at the Pacific Missile Range Facility, Kauai, HI.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: UNDERSEA RANGE INVESTMENTS	13.416	10.894	8.700
Articles:	0	0	0
Description: This effort funds the modernization, upgrades, and new test and evaluation capabilities required at the Navy's Major Range Test Facility Base undersea ranges, to include AUTEC, Andros Island, Bahamas; the Nanoose and Dabob ranges of the Naval Undersea Warfare Center Division Keyport, Keyport, WA.			
FY 2011 Accomplishments:			
<ul style="list-style-type: none"> - Continued the refurbishment and service life extension of a range vessel at AUTEC. This effort includes costs incurred during the dry dock period with the majority of that cost in FY 2011. - Continued the modernization and upgrade of acoustic acquisition, tracking and processing systems and hydrophone arrays at Nanoose & Dabob. - Continued the development and installation of broadband capable bottom mounted targets at Nanoose and Dabob. - Continued the modernization and upgrade of the optical tracking and surveillance system at Nanoose and Dabob. - Continued the minor upgrade and modernization of test capabilities at AUTEC, Nanoose and Dabob. - Completed the modernization and upgrade of the aircraft sonobuoy simulation and stimulation capability at AUTEC. - Completed the modernization and upgrade of the electronic warfare simulator capability at AUTEC. - Initiated the overhaul of a range craft. This effort includes cost for the craft to be in dry dock in FY11. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>	PROJECT 2195: <i>T & E Investment</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Initiated the acquisition of a new range recovery system at Nanoose and Dabob. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2011, less those noted as complete above. - Complete the refurbishment and service life extension of a range vessel at Atlantic Undersea Test and Evaluation Center (AUTEC). - Complete the development and installation of broadband capable bottom mounted targets at Nanoose and Dabob. - Complete the modernization and upgrade of the optical tracking and surveillance system at Nanoose and Dabob. - Complete the acquisition of a new range recovery system at Nanoose and Dabob. - Initiate the upgrade to the Test and Evaluation (T&E) target at Nanoose and Dabob. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2012, less those noted as complete above. - Initiate and complete the development and installation of broadband capable T&E targets at Nanoose and Dabob. - Initiate the refurbishment and service life extension of a range vessel at AUTEC. - Initiate the development of Information Operations T&E capability at AUTEC. 				
Title: OPEN AIR RANGE INVESTMENTS		18.541	22.463	20.069
		Articles: 0	0	0
<p>Description: This effort funds the modernization and upgrades of existing capabilities and the development of new T&E capabilities required at the Navy's Major Range Test Facility Base open air ranges at the Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD, Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA and China Lake, CA and Pacific Missile Range Facility (PMRF), Kauai, HI.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Continued the minor upgrade and modernization of test capabilities at NAWCAD, NAWCWD and PMRF. - Continued the clean up of expended depleted uranium at NAWCWD. - Continued the modernization of the Kineto Tracking Mounts at NAWCWD. - Continued the modernization and upgrade of crypto equipment at NAWCAD, NAWCWD and PMRF. - Continued the modernization of optical and radar tracking equipment and telemetry systems at PMRF. - Completed the modernization and upgrade of the range timing and sensor interface system at NAWCWD. - Completed the modernization and upgrade of communication and fiber infrastructure at NAWCWD. - Completed the modernization and upgrade of the Multiple Target Instrumented Radar at NAWCAD. - Completed the development of an automated aircraft maintenance tracking system at NAWCAD. - Completed the modernization and upgrade of the mobile radio communications system at NAWCWD. 				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>	PROJECT 2195: <i>T & E Investment</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Completed the modernization and upgrade of communications and data fiber and equipment at locations around the bay at Naval Air Warfare Center Aircraft Division (NAWCAD). - Completed an automated test tracking system at NAWCAD. - Initiate the development and installation of a remote telemetry system for San Nicolas Island at Naval Air Warfare Center Weapons Division (NAWCWD). <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2011, less those noted as complete above. - Initiate cultural resource surveys at NAWCWD. - Initiate aircraft prototyping secure network installation at NAWCAD. - Initiate radar service life extension project at NAWCAD. - Initiate telemetry re-radiation pod modernization at NAWCAD. - Initiate video instrumentation modernization at NAWCAD. - Initiate the Mobile Aerial Target Support System modernization at Pacific Missile Range Facility (PMRF). <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue all efforts of FY 2012, less those noted as complete above. - Complete the modernization and upgrade of crypto equipment at NAWCAD, NAWCWD and PMRF. - Complete the development and installation of a remote telemetry system for San Nicolas Island at NAWCWD. - Complete the modernization of the Kineto Tracking Mounts at NAWCWD. - Complete telemetry re-radiation pod modernization at NAWCAD. - Continue cultural resources surveys at NAWCWD. - Initiate development of the Aircraft Prototype Facility secure network at NAWCAD. 				
Title: TEST FACILITIES INVESTMENTS		5.374	4.600	7.125
		0	0	0
<p>Articles:</p> <p>Description: This effort funds the modernization and upgrades of existing capabilities and the development of new test and evaluation capabilities required at the Navy's Major Range Test Facility Base test facilities at the NAWCAD, Patuxent River, MD, and NAWCWD, Point Mugu, CA and China Lake, CA.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Continued the minor upgrade and modernization of test capabilities at NAWCAD and NAWCWD. - Completed the modernization and upgrade of the warhead insensitive munitions and safety test site at NAWCWD. - Completed the development of a Common Data Link test capability at Naval Air Warfare Center Aircraft Division (NAWCAD). <p>FY 2012 Plans:</p>				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0604759N: <i>Major T&E Investment</i>	PROJECT 2195: <i>T & E Investment</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Continue all efforts of FY 2011, less those noted as completed above. - Initiate the helicopter drive system test facility sustainment program at NAWCAD. - Initiate the bio-fuel blending and evaluation facility development at NAWCAD. - Initiate and complete the drop tower facility upgrade at Naval Air Warfare Center Weapons Division (NAWCWD). - Initiate and complete the propulsion control room upgrade at NAWCWD. - Initiate and complete upgrade of the CT-1 facility at NAWCWD. <p><i>FY 2013 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2012, less those noted as complete above. - Complete the bio-fuel blending and evaluation facility development at NAWCAD. - Initiate and complete the development of a Joint Precision Approach and Landing System capability at NAWCAD. 			
Accomplishments/Planned Programs Subtotals	37.331	37.957	35.894

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

N/A

D. Acquisition Strategy

Not Applicable.

E. Performance Metrics

Successfully achieve Initial Operational Capability of 8-15 Improvement and Modernization projects per year and have 90% of test capabilities scheduled in support of Navy acquisition test programs within 180 days.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605126N: <i>(U)Joint Theater Air and Missile Defense Org</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	-	2.970	7.573	-	7.573	1.773	0.574	-	-	0.000	12.890
3307: <i>Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)</i>	-	2.970	7.573	-	7.573	1.773	0.574	-	-	0.000	12.890

A. Mission Description and Budget Item Justification

Maritime Integrated Air and Missile Defense (IAMD) Planning System (MIPS) is an automated air and missile defense planning tool that supports the Joint Force Maritime Component Commander at the operational level of war by automatically and optimally allocating and stationing ships in support of Ballistic Missile Defense (BMD) or Anti-Air Warfare (AAW). MIPS contains United States Army Patriot and Terminal High Altitude Air Defense (THAAD) models to ensure synergistic allocation and positioning of maritime units in relation to other joint units, providing optimized mutual defense for selected defended assets against selected BMD and AAW threats.

MIPS requires additional algorithms that include Bottom Contours, Long Range Surveillance & Track (LRS&T), Launch on Tactical Digital Information Link (TADIL), Cued Engagement and Cooperative Engagement Capability (CEC) stationing capabilities to improve model performance and meet the expanding requirements for optimized IAMD.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	2.970	6.873	-	6.873
Current President's Budget	-	2.970	7.573	-	7.573
Total Adjustments	-	-	0.700	-	0.700
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	0.700	-	0.700

Change Summary Explanation

Technical: Not applicable.
Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605126N: <i>(U)Joint Theater Air and Missile Defense Org</i>	PROJECT 3307: <i>Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3307: <i>Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)</i>	-	2.970	7.573	-	7.573	1.773	0.574	-	-	0.000	12.890
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Maritime Integrated Air and Missile Defense (IAMD) Planning System (MIPS) is an automated air and missile defense planning tool that supports the Joint Force Maritime Component Commander at the operational level of war by automatically and optimally allocating and stationing ships in support of Ballistic Missile Defense (BMD) or Anti-Air Warfare (AAW). MIPS contains United States Army Patriot and Terminal High Altitude Air Defense (THAAD) models to ensure synergistic allocation and positioning of maritime units in relation to other joint units, providing optimized mutual defense of selected defended assets against selected BMD and AAW threats.

MIPS requires additional algorithms that include Bottom Contours, Long Range Surveillance & Track (LRS&T), Launch on Tactical Digital Information Link (TADIL), Cued Engagement and Cooperative Engagement Capability (CEC) stationing capabilities to improve model performance and meet the expanding requirements for optimized IAMD.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Systems Engineering	-	2.970	7.573
Articles:		0	0
FY 2012 Plans: Complete programmatic documentation to successfully complete Milestone B for the program. Provide system update that includes incorporation of the model updates for Bottom Contours, LRS&T, Launch on TADIL, Cued Engagement and CEC stationing.			
FY 2013 Plans: Provide system update that includes incorporation of the model updates for Bottom Contours, LRS&T, Launch on TADIL, Cued Engagement and CEC stationing.			
Accomplishments/Planned Programs Subtotals	-	2.970	7.573

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605126N: <i>(U)Joint Theater Air and Missile Defense Org</i>	PROJECT 3307: <i>Maritime Integrated Air and Missile Defense (IAMD) Processing Sys (MIPS)</i>
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C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• OPN/5265: <i>MIPS</i>	0.000	4.823	4.965	0.000	4.965	2.830	0.001	0.001	0.001	0.000	12.621

D. Acquisition Strategy

ACAT 3 designation granted February 2011.

Contracts:
MIPS RDT&E FY12-FY15

E. Performance Metrics

- FY12:
- Successfully complete Milestone B decision.
 - Successfully complete competitive contract award.
 - Conduct quarterly working groups to identify and manage model update priorities, resolve programmatic/technical issues, and support technical development requirement events that support Milestone B.
 - Conduct Technical Interchange Meetings as needed to explore and resolve emergent design and requirement issues.

- FY13:
- Conduct quarterly working groups to identify and manage model update priorities and resolve programmatic/technical issues.
 - Conduct Technical Interchange Meetings as needed to explore and resolve emergent design and requirement issues.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605152N: <i>Studies & Analysis Supt - Navy</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	9.451	17.435	20.963	-	20.963	26.507	27.885	28.210	28.682	Continuing	Continuing
0133: <i>National Acad Sci/Stud Board</i>	1.161	1.546	1.460	-	1.460	1.403	1.440	1.448	1.474	Continuing	Continuing
2092.: <i>Naval Warfare Studies</i>	7.657	8.154	9.965	-	9.965	17.457	19.613	19.733	20.073	Continuing	Continuing
2097: <i>Manpower Personnel & Training</i>	0.633	0.825	0.800	-	0.800	0.754	0.760	0.773	0.786	Continuing	Continuing
3310: <i>Naval Aviation Developmental Planning</i>	-	6.910	5.232	-	5.232	4.415	4.588	4.772	4.863	Continuing	Continuing
3339: <i>Carrier Onboard Deliver Recapitalization</i>	-	-	3.506	-	3.506	2.478	1.484	1.484	1.486	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program provides analytical support to the Secretary of the Navy and the Chief of Naval Operations as a basis for major policy, planning and acquisition program execution decisions. It supports research and development strategy development and planning. It supports studies in the areas of manpower, personnel, training, and aviation. It also develops analytical tools for evaluating effectiveness of U.S. weapons against potential foreign threat ships and submarines.

B. Program Change Summary (\$ in Millions)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	8.149	23.454	23.582	-	23.582
Current President's Budget	9.451	17.435	20.963	-	20.963
Total Adjustments	1.302	-6.019	-2.619	-	-2.619
• Congressional General Reductions	-	-0.019			
• Congressional Directed Reductions	-	-6.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.575	-			
• SBIR/STTR Transfer	-0.195	-			
• Program Adjustments	-	-	-2.629	-	-2.629
• Rate/Misc Adjustments	-	-	0.010	-	0.010
• Congressional General Reductions Adjustments	-0.078	-	-	-	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0605152N: <i>Studies & Analysis Supt - Navy</i>

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 0133: <i>National Acad Sci/Stud Board</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0133: <i>National Acad Sci/Stud Board</i>	1.161	1.546	1.460	-	1.460	1.403	1.440	1.448	1.474	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project supports the core program for the Naval Studies Board. As agreed upon between the Chief of Naval Operations (CNO) and the President of the National Academy of Sciences and with appropriate attention to the influence of the domestic economy, national objectives, social imperatives and anticipated military requirements, the Naval Studies Board will conduct and report upon surveys, investigations, and analyses in the field of scientific research and development applicable to the operation and function of the Navy. Reports consist of a briefing to the Assistant Secretary of the Navy (Research Development and Acquisition) and the CNO and staff, and written technical reports.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: National Acad Sci/Stud Board	1.161	1.546	1.460
Articles:	0	0	0
FY 2011 Accomplishments: - Continue research efforts and investigations in areas of interest to the Navy. - Complete studies initiated in FY10. - Initiate new studies to be selected by the CNO during FY11.			
FY 2012 Plans: - Continue research efforts and investigations in areas of interest to the Navy. - Complete studies initiated in FY11. - Initiate new studies to be selected by the CNO during FY12.			
FY 2013 Plans: - Continue research efforts and investigations in areas of interest to the Navy. - Complete studies initiated in FY12. - Initiate new study to be selected by the CNO during FY13.			
Accomplishments/Planned Programs Subtotals	1.161	1.546	1.460

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 0133: <i>National Acad Sci/Stud Board</i>

D. Acquisition Strategy

N/A

E. Performance Metrics

Conduct and report upon surveys, investigations, and analyses in the field of scientific research and development applicable to the operations and function of the Navy in a timely manner.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2092.: <i>Naval Warfare Studies</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2092.: <i>Naval Warfare Studies</i>	7.657	8.154	9.965	-	9.965	17.457	19.613	19.733	20.073	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project supports detailed mission, capability, and technical analysis of future naval warfighting requirements. This work provides the analytical basis for integration and prioritization of overall military capability requirements and acquisition programs in support of executing the Naval Capability Development Process and development/delivery of Mission Capability Packages, Naval Capability Packages, and Integrated Strategic Capability Plans for Chief of Naval Operations. This project supports detailed mission, capability, and technical analysis of future naval war fighting requirements. This work provides the analytical basis for integration and prioritization of overall military capability requirements and acquisition programs in support of executing the Naval Capability Development Process and development and delivery of Mission Capability Packages, Naval Capability Packages, and Integrated Strategic Capability Plans for the Chief of Naval Operations. Concept formulation for ships, boats and unmanned maritime vehicles must be continuously exercised to remain viable. It takes years to train competent practitioners, and knowledge currency is quickly lost without practice. Evolving threats and technologies drive concepts (and the tools, processes, and skills needed to produce them) towards obsolescence without constant attention. Capability Based Assessments (CBAs) and Analysis of Alternatives (AoA) timelines are insufficient for establishing potential material solution cost versus capability relationships without significant concept formulation work beforehand. Active collaboration between OPNAV requirement sponsors, Program Offices, and the various System Command (NAVSEA, NAVAIR, and SPAWAR) engineers is critical for fully exploring the trade space by conducting analysis for affordability, effectiveness and risk.

The majority of Total Ownership Cost (TOC) is locked into a design before it is even a program. In the later stages of a program it becomes much more costly to make changes that will significantly impact TOC. Investment up front in concept design can have a high payoff in TOC reduction over the life of a platform class. This project funds concept development engineering, mission effectiveness analysis, and other analyses for formulation of future surface ship and associated platform force structure along with development of the tools to accomplish these efforts. Advanced platform concept studies and systems technology assessments will be conducted as will the development and upgrade of concept design and engineering tools, methods, and criteria. Outputs include concept costing and performance parameterization for comparative assessment against capability objectives and synthesis to quantify overall (Fleet) capabilities. These products (expressions of cost vs. capability) will serve as the basis of requirements and Joint Capabilities Integration and Development System (JCIDS) analysis, define the trade space for Analysis of Alternatives (AoA) efforts, and underpin discussion of force architecture/structure during Quadrennial Defense Review (QDR), Long Range Shipbuilding Strategy (LRSS) builds, and JROC reviews.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Naval Warfighting Assessments	6.710	6.520	6.722
Articles:	0	0	0
FY 2011 Accomplishments:			
Performed future warfighting capability assessments, including cost-to-capability assessments, mission level modeling and simulation including world class modeling initiatives, and analysis integration across all joint capability areas and Sea Power			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>		R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>		PROJECT 2092.: <i>Naval Warfare Studies</i>	
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)				FY 2011	
<p>21 warfare areas. Assessed capability sponsors' products for Navy senior leadership decision forums. Performed collaborative assessment with capability sponsors. Proactively participated in capability sponsors' integrated processing teams. Presented opposing analytically based points of view to the CNO and Navy senior leadership. Provided analytically based decision recommendations to CNO for both warfighting and support areas. Developed CNO investment strategy recommendations and performed assessments for program review and Program Objective Memorandum (POM). Conducted Overseas Contingency Operation (OCO) capabilities-based assessment (CBA) that provided a rapid and scalable process to utilize a concept of operation and developed investment strategy and a capability roadmap. Conducted tactical aircraft recapitalization alternatives and theater ballistic missile defense cost capability tradeoff assessments. Conducted independent assessment of anti-submarine warfare. Conducted weapons safety and sea basing capabilities assessments. Conducted intelligence-surveillance-reconnaissance (ISR) and meteorological and oceanographic (METOC) assessment to determine the optimal mix of Naval ISR and METOC sensors, platforms, and processing, and analysis and fusion disposition to support major combat operations (MCOs), the OCO, and intelligence preparation of the environment for both MCOs and OCO. Performed CBAs to meet the requirements of current and future scenarios, and make strategic decisions within a constrained economic framework. Performed rigorous, time-critical Naval and joint campaign and mission-level analyses, usually based on modeling and simulation that illuminated complex warfare issues that supported decision-making in the planning, programming, budgeting, and execution process. Performed analyses and provided technical and engineering support, including joint campaign analysis that examined the capability to counter a range of coordinate threat capabilities, high-level tradeoffs between service capabilities, or impact of large-scale architecture, mission-level effectiveness analyses that determined system capabilities; and conducted analyses of alternative force structures that determined the capability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations. Conducted cost analyses, cost-effectiveness analyses, and analyses of new technologies in support of Sponsor Program Proposal, Navy POM, and Warfare Capability Plan. Developed innovative analysis techniques that evaluated the effectiveness of operations on the long war focus on irregular warfare and sea shaping (influence) activities such as theater security cooperation. Provided rigorous business case assessments of complex issues relating to the warfighting support processes, manpower and personnel, training and education, infrastructure, both afloat and ashore readiness, Naval medical program, and provider enterprise operations. Used estimate cost and performance of performance-based modeled programs such as the flying hour program, ship operations, ship and aircraft maintenance, spares, facilities, and base operation support. Coordinated and led OSD/Navy's Analytic Agenda in Defense Planning Scenario, Multi-Service Force Deployment, Enhanced Planning Process, and Strategic Planning Guidance. Coordinated and led Navy's role in Defense Planning Guidance, Program Decision Memoranda, Quadrennial Defense Review, and Defense Science Board studies. Participated in OSD and Joint Staff analysis assessment and provided structure for coordination across the Navy. Developed new analytic techniques for informing resource allocation decision, and conducted all campaign and warfare mission-level analyses and developed investment</p>				FY 2012	FY 2013

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2092.: <i>Naval Warfare Studies</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
strategy. Conducted detailed analysis of country's Riverine Force Structure, focusing on selected Navies in the AFRICACOM area of responsibility. FY 2012 Plans: Continue FY11 plan. FY 2013 Plans: Continue FY12 plan.				
Title: Portfolio Management Decision Support System Description: Portfolio Management Decision Support System: An analytic portfolio management methodology to aid Navy leadership with investment programming decision support. FY 2011 Accomplishments: Established the Resource Allocation Model/Portfolio Management Decision Support System to provide an analytic portfolio management methodology to aid Navy leadership with investment decision support. Provided an assessment process that fostered informed, understandable, repeatable, investment decisions with consistent, pedigreed, and retrievable information. Assessed programs of record and their proposed modifications on their capability to contribute to future warfighting requirements. FY 2012 Plans: Continue FY11 plan. FY 2013 Plans: Continue all efforts of FY12.		Articles: 0.947 0	1.634 0	1.243 0
Title: CONFORM 1.0 - Ship Concept Formulation Description: (U) Conduct ship, boat and unmanned marine vehicle concept studies in support of the Long Range Shipbuilding Schedule (LRSS) in preparation for Capabilities Based Assessments (CBAs) and Analysis of Alternatives (AoAs). Studies will be performed in a continuous manner to support future recapitalization of Surface Combatants, Amphibious Ships, Carriers, Auxiliary Ships and other emerging program requirements. FY 2013 Plans:		-	-	1.000 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2092.: <i>Naval Warfare Studies</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Conduct concept studies in support of anticipated CBAs, AoAs, and other future requirement studies; including for Landing Ship (Dock) [LSD(X)], hospital ship replacement, submarine tender replacement, medium surface combatant, arctic mission platform, ocean surveillance ship replacement, and unmanned marine vehicle.			
<p>Title: CONFORM 6.0 - Concept Formulation Process Improvement</p> <p align="right">Articles:</p>	-	-	1.000 0
<p>Description: ((U) Enhance analysis tool integration through continued development of the Leading Edge Architecture Prototype Ships (LEAPS) which allows for transparent data flow between ship synthesis and analysis models. Enhance the Advanced Ship and Submarine Evaluation Tool (ASSET) to incorporate new technology, allow rapid design and incorporation of modern systems engineering methods. Early stage ship design tools in the areas of hydrodynamic analysis, human systems integration and survivability will be updated and enhanced.</p> <p>FY 2013 Plans: Perform necessary upgrades to Leading Edge Architecture Prototype Ships (LEAPS) and Advanced Ship and Submarine Evaluation Tool (ASSET) including hardware and software to support concept development for anticipated surface combatant, amphibious ship, and auxiliary ship Capabilities Based Assessments (CBAs) and Analysis of Alternatives (AoAs); including updates to hydrodynamic analysis, human systems integration, and survivability analysis. Further develop interoperability capabilities with emerging early stage ship design tools.</p>			
Accomplishments/Planned Programs Subtotals	7.657	8.154	9.965

C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
• 0204202N: <i>DDG-1000</i>	348.763	257.580	106.905	0.000	106.905	168.139	163.760	99.975	101.862	0.000	1,754.726
• 0603563N: <i>Ship Concept Advanced Design</i>	17.835	14.308	24.614	0.000	24.614	20.841	16.125	15.953	8.070	0.000	223.436
• 0603564N: <i>Ship Preliminary Design & Feasibility Studies</i>	10.087	22.210	13.713	0.000	13.713	14.116	6.721	0.000	12.450	0.000	110.225

D. Acquisition Strategy
Not applicable.
Not applicable

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2092.: <i>Naval Warfare Studies</i>

E. Performance Metrics

Naval Warfighting Assessment - Review 40 tasks for Integrated Analytic Agenda in support of technical executability, deconflict internally, and eliminate redundancy with work previously done. Complete 37 tasks for decision superiority, 21 tasks for global maritime security, 13 tasks for sea control, and 5 tasks for power projection. Produce and deliver Analytical Agenda briefings and assessments.

Portfolio Management Decision Support System (PMDSS) is an analytic Portfolio Management Methodology used to aid Navy leadership with both investment and divestment programming decisions. This methodology provides an assessment process that fosters informed, understandable, repeatable investment decisions with consistent, pedigreed, and retrievable information. The focus of this effort is to refine the system to identify programs as potential candidates for divestment. It provides leadership and resource sponsors with a starting point for their offset decision process as well as an issue ranking capability. PMDSS will include linkage of programs to N3/N5 strategic imperatives, programs mapped to warfare areas, program interdependencies annotated, and balance factors that can be adjusted to reflect Navy Leadership Priorities. The effort expands on PMDSS by capturing and mapping issues/funding adjustments, and providing a system capable of identifying fiscal interdependencies and consideration to risk in order to increase accuracy in calculating programmatic risk.

CONFORM - Complete one technical study annually in support of emerging or planned capabilities.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>				PROJECT 2097: <i>Manpower Personnel & Training</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2097: <i>Manpower Personnel & Training</i>	0.633	0.825	0.800	-	0.800	0.754	0.760	0.773	0.786	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Chief of Naval Personnel has a continuing need for studies and analysis of Manpower and Personnel (M&P) policies and programs and critical M&P issues that have Navy-wide implications. This project provides an essential management tool to: (a) assess the effectiveness of existing M&P policies and programs; (b) identify needs for new policies and programs; (c) determine the required manpower and training mix relative to changing demographic, societal and legislative/regulatory actions, and to evolving strategic and geopolitical factors; (d) study the impact of M&P programs on Navy accession, attrition, retention, and performance; and, (e) to develop, validate and/or refine a broad range of M&P forecasting models. The program permits Navy to more effectively utilize Research and Development expertise to respond to emergent M&P issues on a continuing basis. This program is funded under RDT&E operational systems development because it encompasses engineering and development of new end-items prior to production approval decision.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Manpower Personnel & Training	0.633	0.825	0.800
Articles:	6	9	9
FY 2011 Accomplishments:			
- Assessed Econometric Modeling System and updating elasticities.			
- Assessed and updated elasticities used in the Recruiting PRO Model.			
- Assessed SRB Policies.			
- Assessed Special and Incentive Pay policies.			
- Assessed and evaluated retention, accession and training trade-offs.			
- Assessed economic factors and relationships to MPTE business lines ISO forecasting and responses.			
FY 2012 Plans:			
- Continue assessing Econometric Modeling System and updating elasticities			
- Continue assessing and updating elasticities used in the Recruiting PRO Model			
- Continue assessing SRB Policies			
- Continue assessing Special and Incentive Pay policies			
- Continue assessing and evaluating retention, accession and training trade-offs.			
- Continue assessing economic factors and relationships to MPTE business lines ISO forecasting and responses.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 2097: <i>Manpower Personnel & Training</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
- Continue assessing factors, thresholds and mitigation strategies to avoid a Hollow Force. <i>FY 2013 Plans:</i> - Continue assessing Econometric Modeling System and updating elasticities - Continue assessing and updating elasticities used in the Recruiting PRO Model - Continue assessing SRB Policies - Continue assessing Special and Incentive Pay policies - Continue assessing and evaluating retention, accession and training trade-offs. - Continue assessing economic factors and relationships to MPTE business lines ISO forecasting and responses. - Continue assessing factors, thresholds and mitigation strategies to avoid a Hollow Force.			
Accomplishments/Planned Programs Subtotals	0.633	0.825	0.800

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

This PE provides funding to support continuing need for studies and analysis of issues critical to decisions required by the Chief of Naval Personnel and his staff regarding manpower, personnel, training and education policies, and programs that have far-reaching implications to service members and the Navy budget. This PE supports research of both Naval Postgraduate School faculty and students, and in FY10 began the formulation of focused economic research, to include behavioral economics. This focus will provide continuing analysis and research to facilitate the data gathering and synthesis to provide consistent and timely update to economic indicators to use in the numerous models that support management decisions within the MPTE arena that have significant impact on the efficient use of the nearly \$27B Manpower & Personnel, Navy budget. The economic research will consolidate the data necessary to perform elasticity estimations and maintain this data for subsequent estimations. To gather the data necessary to perform such estimations, would conservatively cost more than \$300K on each such occasion. The MPTE enterprise uses dozens of models, most of which require elasticity updates. Consolidating the data repository to support this analysis will result in a cost avoidance of more than \$1M and this does not include any of the actual model revisions.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 3310: <i>Naval Aviation Developmental Planning</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3310: <i>Naval Aviation Developmental Planning</i>	-	6.910	5.232	-	5.232	4.415	4.588	4.772	4.863	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Funding supports Naval aviation pre-Milestone B developmental activities to include the conduct and integration of systems engineering activities. This project unit provides information, automated tools, and decision aids necessary to perform acquisition planning in support of warfighter capability requirements. This project unit also supports research, development, and analysis efforts to include various studies, joint requirements analysis and cost analysis requirements in support of systems engineering activities, analysis-of-alternatives, and development of the 30-Year Aviation Plan (Congressionally mandated product). Due to high turnover and the end of service life of several Naval aircraft, DOD 5000 series mandates studies to identify capabilities lost and means to replace the capability. This project unit allows Naval aviation the means to properly identify capability gaps and potential solutions required to maintain maximum warfighting capability with minimal breaks in service and reduced and fiscal technical risk.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Naval Aviation Developmental Planning	-	6.910	5.232
Articles:		0	0
FY 2012 Plans: Conduct various studies for F/A-18, C-2 replacement solution, Jet Trainer replacement, Aggressor Squadron follow-on, and MH-53 replacement.			
FY 2013 Plans: Conduct various studies for F/A-18, carrier onboard delivery recapitalization, Jet Trainer replacement, Aggressor Squadron follow-on, and MH-53 replacement.			
Accomplishments/Planned Programs Subtotals	-	6.910	5.232

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

N/A

D. Acquisition Strategy

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 3310: <i>Naval Aviation Developmental Planning</i>

E. Performance Metrics

Produce and deliver 30-Year Aviation Plan (Congressionally mandated product). Studies performed will be used to identify known warfighter capability gaps and support acquisition planning requirements associated with potential solutions. Studies provide coherent and integrated cost and capability data to support long-term planning for Naval Aviation consistent with DOD 5000 series instructions.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605152N: <i>Studies & Analysis Supt - Navy</i>	PROJECT 3339: <i>Carrier Onboard Deliver Recapitalization</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3339: <i>Carrier Onboard Deliver Recapitalization</i>	-	-	3.506	-	3.506	2.478	1.484	1.484	1.486	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

New Start

A. Mission Description and Budget Item Justification

Funding supports the material solution analysis, risk reduction, and programmatic activities to recapitalize the Carrier Onboard Delivery (COD) Capability. This medium-lift/long-range logistics aircraft will provide critical air connector capability for time-critical logistics within the Navy seabasing logistics enabling concept in support of the Carrier Strike Groups. This capability is currently provided by the C-2A Greyhounds, which are projected to begin retiring in large numbers as they reach their fatigue service life limits and the force falls below primary aircraft allocation in 2028.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Carrier Onboard Delivery Recapitalization	-	-	3.506
Articles:			0
FY 2013 Plans: Perform material solution analysis, risk reduction, and programmatic activities to recapitalize the carrier onboard delivery capability.			
Accomplishments/Planned Programs Subtotals	-	-	3.506

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Produce and deliver material solution, risk reduction, and cost analysis to address medium-lift/long-range logistics aircraft requirements to recapitalize the COD capability. Support development of analysis-based requirements in preparation of the Capability Development Document. Develop the statutory and regulatory program documentation and schedules required to enter Milestone A.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605154N: <i>Center For Naval Analyses</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	45.582	42.751	46.856	-	46.856	47.655	48.816	48.894	49.822	Continuing	Continuing
0031: <i>MCOAG</i>	7.005	7.172	6.105	-	6.105	6.221	6.338	6.458	6.579	Continuing	Continuing
0148: <i>Center For Naval Analyses (CNA)</i>	38.577	35.579	40.751	-	40.751	41.434	42.478	42.436	43.243	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Center for Naval Analyses (CNA) is the Department of the Navy's (DoN) only Federally Funded Research and Development Center (FFRDC). CNA provides independent, objective, and expert analyses based on its unique access to sensitive data and hands-on exposure to fleet operations gained through its world-wide field program. CNA's research program is centrally funded by this program element and is primarily concentrated along one Marine Corps category and thirteen Navy categories of study called product areas. These product areas are structured to enhance CNA's focus of research and analysis upon the major present and future needs and issues of the Navy and the Marine Corps. Because of rapid advances in technology, changes in the fleet, the increasing complexity of weapon systems, and reductions in manpower, force structure, budgets, the current security environment, and Department of Defense (DoD) transformation, the Navy and Marine Corps have a greater need for analyses that are sophisticated, relevant, and timely. CNA is highly qualified to meet that need.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	49.165	47.127	49.364	-	49.364
Current President's Budget	45.582	42.751	46.856	-	46.856
Total Adjustments	-3.583	-4.376	-2.508	-	-2.508
• Congressional General Reductions	-	-4.376			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-0.032	-			
• SBIR/STTR Transfer	-0.202	-			
• Program Adjustments	-	-	-2.508	-	-2.508
• Congressional General Reductions Adjustments	-3.349	-	-	-	-

Change Summary Explanation

Technical: N/A

Schedule: N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0031: <i>MCOAG</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0031: <i>MCOAG</i>	7.005	7.172	6.105	-	6.105	6.221	6.338	6.458	6.579	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project supports the Marine Corps portion of the DoN CNA Research Program, and is managed as an element of the Marine Corps Studies System. This program provides the Marine Corps with independent and objective research and analysis of specific issues/topics appropriately performed by a FFRDC. As a result of the findings and recommendations of the Fiscal Year 1997 Defense Science Board, the Marine Corps refocused the type of support CNA provides. The CNA maintains a varied number of field representatives for the Operational Forces Commanders and eight (8) program areas for CNA to establish and maintain. The program areas are linked to the Marine Corps Advocacy (prepotency), which are: (1) Policy and Operations; (2) Systems and Tactics; (3) Research, Development and Acquisition; (4) Infrastructure and Readiness; (5) Manpower, Medical and Training; (6) Resources, Planning and Assessments; (7) Capabilities, Force Structure and Systems and (8) Intelligence, Surveillance and Reconnaissance. Scientific Analyst support provides six scientific analysts for the following six focus areas: Deputy Commandant (DC), Plans, Policies and Operations; DC Aviation; DC Installation and Logistics; DC Programs and Resources; DC Manpower Reserve Affairs; and Director, Manpower Plans (MP) - Manpower and Reserve Affairs (M&RA). The program continues analytical support for field exercises, Ad Hoc and Quick Response study requirements.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: MARINE CORPS OPERATIONS AND ANALYSIS GROUP	7.005	7.172	6.105
Articles:	1	1	1
Description: FY13 funding decrease is due to programmatic realignments to other Navy priorities.			
FY 2011 Accomplishments:			
<ul style="list-style-type: none"> - Continued the following efforts from the FY10 Marine Corps Studies System Master Plan (MCSSMP): Setting and Building a Balanced Force; Marine Air Ground Task Force (MAGTF) Combat Airspace Management and Training; Ground Force Training Utilizing M&S; Amphibious Warfare Capability; MCTAG Development Analysis; Combat Airspace and Integration in Support of the MAGTF; Operationalizing Measures of Time to Train. - Provided formal study and analysis support to the operating forces and headquarters elements included in the annual MCSSMP. - Scientific analysts for direct analytical support to Marine Corps Headquarters staff elements: ACMC; DCMC Plans, Policies, and Operations; DCMC Installations and Logistics; DCMC Manpower and Reserve Affairs (x2); DCMC Aviation; and DCMC Programs and Resources, CD&I, TECOM, MARFORRES, AND RA. - Field Representatives for direct analytical support to the Commander Marine Forces Pacific (COMMARFORPAC), Commander Marine Forces Atlantic (COMMARFORLANT), Commanding General I Marine Expeditionary Force (CG I MEF), Commanding General II Marine Corps Expeditionary Force (CG II MEF), Commanding General III Marine Expeditionary Force (CG III MEF), and Commanding General, Marine Air Weapons Training Squadron (MAWTS). 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0031: <i>MCOAG</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p>- Analysis support to operating forces exercises, ad hoc support for immediate analytical requirements, and other support functions which include: general concept development, quick response studies, CNA self-initiated analysis efforts, administrative support, liaison, travel, and contract award fee.</p> <p>- Initiated high priority study and analysis projects approved in FY11 MCSSMP.</p> <p>FY 2012 Plans:</p> <p>- Continue all efforts of FY11.</p> <p>- Initiate high priority study and analysis projects approved in FY12 MCSSMP.</p> <p>FY 2013 Plans:</p> <p>- Continue all efforts of FY12.</p> <p>- Initiate high priority study and analysis projects approved in FY13 MCSSMP.</p>			
Accomplishments/Planned Programs Subtotals	7.005	7.172	6.105

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

The Marine Corps' portion of the CNA program is executed via the Marine Corps Studies System (MCSS) Annual Plan which is reviewed and updated on a quarterly basis. The MCSS maintains a comprehensive listing of all CNA studies performed for the Marine Corps. The MCSS ensures there are no duplicate analytical efforts within the Marine Corps. Additionally, the Operations Analysis Division of Marine Corps Combat Development Command (MCCDC) provides analytical review of all CNA products for the Marine Corps and integrates the results and recommendations into a quarterly newsletter for research and analysis. Other evaluation processes are as follows:

A) Contract Status Meetings: The Marine Corps participates in the DoN Contract Status Meetings. As part of the CNA oversight process, the Contracting Officer chairs a monthly meeting with the COTR, the Marine Corps, and members of the CNA Business Support Group to provide guidance regarding contract management. Issues range from reviewing the Defense Technical Information Center (DTIC) database requirements to emphasize the contractual requirement that all ongoing research be submitted to DTIC to ensure against duplication to reviewing CNA's cost effectiveness and efficiency.

B) Award Fee Evaluation Process: As required by CNA's contract with DoN, the Marine Corps participates in the CNA evaluation on a semi-annual basis throughout the entire five year performance period of Contract N00014-05-D-0500. Over 28 Marine Corps sponsors of CNA deliverables provide input regarding CNA's value to their respective organizations. Evaluations cover CNA's support to Marine Corps leadership and management, timeliness and quality of research, as well as cost effectiveness and efficiency. The Marine Corps' evaluation contributes to CNA's overall performance rating that is the primary basis for determining the amount, if any, of the available award fee earned by CNA.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0031: <i>MCOAG</i>
<p>C) Marine Corps Three-Star Flag Officer Review: The Commanding General, Marine Corps Combat Development Command (MCCDC) and the Director, Operations Analysis Division meet several times per month to review the current fiscal year's research program and provide guidance to CNA regarding their future research requirements for the Marine Corps. These high level meetings are essential to provide CNA with Marine Corps' guidance to ensure that the research conducted is of the greatest value to the Marine Corps. The meetings also serve as the roadmap for research during the upcoming fiscal year. The Marine Corps' research plan is consolidated with the DoN's Annual Plan that is submitted to the Deputy Chief of Naval Operations for Integration of Capabilities and Resources (N8) for final review and acceptance.</p> <p>D) CNA Comprehensive Review: Prior to contract renewal, CNA, as a FFRDC, must be evaluated to ensure that the DoN wants to renew their contract for an additional five years. The Marine Corps conducts a comprehensive review of sponsors' technical needs and mission requirements, consideration of alternative sources, efficiency and effectiveness, and management and cost effectiveness that contributes to DoN's establishment of criteria and sponsorship agreement.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0148: <i>Center For Naval Analyses (CNA)</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0148: <i>Center For Naval Analyses (CNA)</i>	38.577	35.579	40.751	-	40.751	41.434	42.478	42.436	43.243	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program supports the Navy's portion of the CNA Research Program, which is primarily concentrated along eleven Navy categories of study called product areas. These product areas include the following: 1) Manpower/Personnel, Medical and Training; 2) Intelligence, Information and Networks; 3) Plans, Policy, and Operations; 4) Infrastructure and Readiness; 5) Resources, Programs, and Assessments; 6) Capability Integration; 7) Research, Development and Acquisition; 8) Navy Field Program; 9) Scientific Analyst Program; 10) Navy Quick Response Projects; and 11) CNA Initiated Projects. CNA's analyses have resulted in substantial improvements in force structure, fleet effectiveness, and significant cost avoidance.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: CENTER FOR NAVAL ANALYSES, NAVY	38.577	35.579	40.751
Articles:	0	0	0
Description: FY13 funding reflects increase in Navy Priorities.			
FY 2011 Accomplishments: CNA continued to provide the Navy with exemplary, high caliber research during the reporting period. Issues of major importance to Navy leadership were addressed during the Annual Plan process which is reviewed annually to ensure CNA's research is addressing the Navy's most critical topics. Research of highest priority included: Analysis of Guam total force employment; developing a network (Cyber) common operational picture; countering anti-access strategies; reducing shore infrastructure cost; rotorcraft mission roles and responsibilities in 2030 and beyond; mine clearance in support of Homeland Security; and Navy installation energy strategy. In addition, CNA's field program, providing analysts to Navy commands around the world, as well as their Washington-based scientific analyst program, provided Navy leadership with on-site, cutting edge analyses.			
FY 2012 Plans: - Continue all efforts of FY11.			
FY 2013 Plans: - Continue all efforts of FY12.			
Accomplishments/Planned Programs Subtotals	38.577	35.579	40.751

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605154N: <i>Center For Naval Analyses</i>	PROJECT 0148: <i>Center For Naval Analyses (CNA)</i>

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

D. Acquisition Strategy
N/A

E. Performance Metrics
CNA is reviewed throughout the research year on several different levels to ensure that research produced is not duplicated elsewhere. The primary (and most effective) method of review for duplication is the Contracting Officer's Technical Representative (COTR) review and approval of each and every project proposal submitted by CNA. This method is highly effective in providing the necessary oversight to ensure that duplication of effort does not occur. The Marine Corps Studies System (MCSS) maintains a comprehensive listing of all CNA studies performed for the USMC. The MCSS ensures that there are no duplicate analytical efforts within the USMC. Additionally, the Studies and Analysis Division of the Marine Corps Combat Development Command (MCCDC) provides analytical review of all CNA products for the USMC and integrates the results and recommendations into a quarterly newsletter and an annual plan for research and analysis. Other evaluation processes: A) DoN Contract Status Meetings: As part of the CNA oversight process, the ONR Contracting Officer chairs a monthly meeting with the COTR, the USMC, and the CNA Business Support Group to provide guidance regarding contract management. B) Two-Star Flag Officers and VCNO Corporate Board Meetings: DoN Two-Star and their equivalent civilian counterparts meet several times a year to review the current fiscal year's research and provide guidance to CNA regarding their future research for DoN. These high level meetings are essential to provide CNA with DoN's guidance to ensure that the research conducted is of the greatest value to DoN. The meetings also serve as the catalyst for the formation of the CNA Annual Plan, CNA's roadmap for research during the upcoming fiscal year. The CNA Annual Plan is then submitted to VCNO/N8 for final review and acceptance. C) CNA Comprehensive Review: Prior to contract renewal, CNA, as an FFRDC, must be evaluated to ensure that the DoN wants to renew CNA's contract for an additional five year period. DoN completes an exhaustive review of sponsors' technical needs and mission requirements; DoN's consideration of other sources; CNA's efficiency and effectiveness; CNA's management and cost effectiveness; as well as the FFRDC establishment criteria and sponsorship agreement. The CNA Comprehensive Review is approved by ASN (RDA) and accepted by OSD (AT&L).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605502N: <i>Small Business Innovative Research</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	320.547	0.010	-	-	-	-	-	-	-	0.000	320.557
0000: <i>UNDIST</i>	1.881	-	-	-	-	-	-	-	-	0.000	1.881
1812: <i>NAVAIR SBIR Program</i>	89.500	-	-	-	-	-	-	-	-	0.000	89.500
1813: <i>SPAWAR SBIR Program</i>	33.134	-	-	-	-	-	-	-	-	0.000	33.134
1814: <i>NAVSEA SBIR Program</i>	55.067	-	-	-	-	-	-	-	-	0.000	55.067
1824: <i>CMC SBIR Program</i>	13.733	-	-	-	-	-	-	-	-	0.000	13.733
1862: <i>SSPO SBIR Program</i>	1.879	-	-	-	-	-	-	-	-	0.000	1.879
1863: <i>NAVSUP SBIR Program</i>	1.200	-	-	-	-	-	-	-	-	0.000	1.200
1864: <i>CNR SBIR Program</i>	61.934	-	-	-	-	-	-	-	-	0.000	61.934
1865: <i>SBIR Administration</i>	4.440	-	-	-	-	-	-	-	-	0.000	4.440
2016: <i>NAVFAC SBIR Program</i>	0.800	-	-	-	-	-	-	-	-	0.000	0.800
2204: <i>Small Business Tech Transfer Program</i>	19.004	-	-	-	-	-	-	-	-	0.000	19.004
2240: <i>Navy Dual Use Technology Program</i>	0.857	-	-	-	-	-	-	-	-	0.000	0.857
2241: <i>SBIR ADMIN - SPAWAR</i>	2.067	-	-	-	-	-	-	-	-	0.000	2.067
2242: <i>SBIR ADMIN - NAVSEA</i>	4.942	0.010	-	-	-	-	-	-	-	0.000	4.952
2243: <i>SBIR ADMIN - NAVAIR</i>	6.211	-	-	-	-	-	-	-	-	0.000	6.211
2244: <i>SBIR ADMIN - NAVFAC</i>	0.040	-	-	-	-	-	-	-	-	0.000	0.040
2245: <i>SBIR ADMIN - NAVSUP</i>	0.050	-	-	-	-	-	-	-	-	0.000	0.050
2248: <i>SBIR ADMIN - SSPO</i>	0.117	-	-	-	-	-	-	-	-	0.000	0.117
2813: <i>SBIR - NSMA</i>	7.230	-	-	-	-	-	-	-	-	0.000	7.230
2814: <i>SBIR ADMIN - NSMA</i>	0.470	-	-	-	-	-	-	-	-	0.000	0.470
3201: <i>SBIR CPP - NAVAIR</i>	0.991	-	-	-	-	-	-	-	-	0.000	0.991
3202: <i>SBIR CPP - SPAWAR</i>	0.329	-	-	-	-	-	-	-	-	0.000	0.329
3203: <i>SBIR CPP - NAVSEA</i>	0.592	-	-	-	-	-	-	-	-	0.000	0.592

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy										DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>							
3204: <i>SBIR CPP - MARINE CORPS</i>	0.137	-	-	-	-	-	-	-	-	0.000	0.137
3205: <i>SBIR CPP - ONR</i>	0.622	-	-	-	-	-	-	-	-	0.000	0.622
3213: <i>NAVAIR STTR Program</i>	11.804	-	-	-	-	-	-	-	-	0.000	11.804
3231: <i>SBIR Counterdrug</i>	0.266	-	-	-	-	-	-	-	-	0.000	0.266
3233: <i>SPAWAR STTR Program</i>	1.250	-	-	-	-	-	-	-	-	0.000	1.250

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Program Change Summary (\$ in Millions)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	0.010	0.015	-	0.015
Current President's Budget	320.547	0.010	-	-	-
Total Adjustments	320.547	-	-0.015	-	-0.015
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	320.546	-			
• Program Adjustments	-	-	-0.015	-	-0.015
• Rate/Misc Adjustments	0.001	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 0000: <i>UNDIST</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0000: <i>UNDIST</i>	1.881	-	-	-	-	-	-	-	-	0.000	1.881
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program. ONR program funds research which address the needs and mission of our command and has the potential to transition into follow on FNC, RDT&E and procurement activities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: <i>UNDIST</i>	1.881	-	-
Articles:	0		
FY 2011 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	1.881	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

NONE

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1812: <i>NAVAIR SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1812: <i>NAVAIR SBIR Program</i>	89.500	-	-	-	-	-	-	-	-	0.000	89.500
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: Phase I Feasibility</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p>	12.300 0	-	-
<p>Title: Phase II Technology Development</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p>	77.200 0	-	-
Accomplishments/Planned Programs Subtotals	89.500	-	-

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

N/A

D. Acquisition Strategy

N/A

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1812: <i>NAVAIR SBIR Program</i>

E. Performance Metrics

NONE

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1813: <i>SPAWAR SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1813: <i>SPAWAR SBIR Program</i>	33.134	-	-	-	-	-	-	-	-	0.000	33.134
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires that each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and 0.3% under the Small Business Technology Transfer (STTR) program. The SPAWAR SBIR program funds research that addresses the needs and mission of our command and has the potential to transition into follow-on RDT&E and procurement activities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SPAWAR SBIR Program	33.134	-	-
Articles:	0		
FY 2011 Accomplishments: Phase I Feasibility The purpose of Phase I is to determine the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC). SPAWAR made 36 Phase I awards and 19 Phase I Option awards in FY 2011 valued at \$3,143,017. Phase II Technology Development Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further develop the technology, maturing the TRL and providing prototypes or other sources validating the technology. SPAWAR made 31 Phase II, 28 Phase II Option, and 14 Phase II.5 SBIR awards in FY 2011 valued at \$35,657,421 Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.			
Accomplishments/Planned Programs Subtotals	33.134	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1813: <i>SPAWAR SBIR Program</i>

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1814: <i>NAVSEA SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1814: <i>NAVSEA SBIR Program</i>	55.067	-	-	-	-	-	-	-	-	0.000	55.067
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: NAVSEA SBIR Program</p> <p align="right">Articles:</p>	55.067 0	-	-
<p>FY 2011 Accomplishments:</p> <p>Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p> <p>Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p> <p>Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.</p>			
Accomplishments/Planned Programs Subtotals	55.067	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1814: <i>NAVSEA SBIR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1824: <i>CMC SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1824: <i>CMC SBIR Program</i>	13.733	-	-	-	-	-	-	-	-	0.000	13.733
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: CMC SBIR Program	13.733	-	-
Articles:	0		
FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC). Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology. Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.			
Accomplishments/Planned Programs Subtotals	13.733	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1824: <i>CMC SBIR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1862: <i>SSPO SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1862: <i>SSPO SBIR Program</i>	1.879	-	-	-	-	-	-	-	-	0.000	1.879
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR Program	1.879	-	-
Articles:	0		
FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC). Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology. Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.			
Accomplishments/Planned Programs Subtotals	1.879	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1862: <i>SSPO SBIR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1863: <i>NAVSUP SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1863: <i>NAVSUP SBIR Program</i>	1.200	-	-	-	-	-	-	-	-	0.000	1.200
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires that each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: SBIR PROGRAM</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p> <p>Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p> <p>Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.</p>	<p>1.200</p> <p>0</p>	<p>-</p>	<p>-</p>
Accomplishments/Planned Programs Subtotals	1.200	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1863: <i>NAVSUP SBIR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1864: <i>CNR SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1864: <i>CNR SBIR Program</i>	61.934	-	-	-	-	-	-	-	-	0.000	61.934
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: CNR SBIR Program</p> <p align="right">Articles:</p>	61.934 0	-	-
<p>FY 2011 Accomplishments:</p> <p>Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p> <p>Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p> <p>Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.</p>			
Accomplishments/Planned Programs Subtotals	61.934	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1864: <i>CNR SBIR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 1865: <i>SBIR Administration</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1865: <i>SBIR Administration</i>	4.440	-	-	-	-	-	-	-	-	0.000	4.440
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR Administration	4.440	-	-
Articles:	0		
FY 2011 Accomplishments: SBIR Administration			
Accomplishments/Planned Programs Subtotals	4.440	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2016: <i>NAVFAC SBIR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2016: <i>NAVFAC SBIR Program</i>	0.800	-	-	-	-	-	-	-	-	0.000	0.800
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: NAVFAC SBIR Program</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p> <p>Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p> <p>Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.</p>	<p>0.800</p> <p>0</p>	<p>-</p>	<p>-</p>
Accomplishments/Planned Programs Subtotals	0.800	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2016: <i>NAVFAC SBIR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2204: <i>Small Business Tech Transfer Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2204: <i>Small Business Tech Transfer Program</i>	19.004	-	-	-	-	-	-	-	-	0.000	19.004
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Small Business Tech Transfer Program	19.004	-	-
Articles:	0		
FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC). Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology. Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.			
Accomplishments/Planned Programs Subtotals	19.004	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2204: <i>Small Business Tech Transfer Program</i>

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2240: <i>Navy Dual Use Technology Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2240: <i>Navy Dual Use Technology Program</i>	0.857	-	-	-	-	-	-	-	-	0.000	0.857
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR ADMIN	0.857	-	-
Articles:	0		
FY 2011 Accomplishments: SBIR Administration			
Accomplishments/Planned Programs Subtotals	0.857	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2241: <i>SBIR ADMIN - SPAWAR</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2241: <i>SBIR ADMIN - SPAWAR</i>	2.067	-	-	-	-	-	-	-	-	0.000	2.067
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The SBIR legislation prohibits any of the SBIR or STTR funds from being used to manage or administer the program. Additional funds are pulled to manage the program, technical efforts and award contracts related to SBIR.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR ADMIN - SPAWAR			
Articles:	2.067 0	-	-
FY 2011 Accomplishments: Administrative support of the Navy Small Business Program. FY 2011 Accomplishments: SPAWAR awarded 36 Phase I, 19 Phase I options, 31 Phase II, 28 Phase II option, 14 Phase II.5, and 2 Phase III SBIR awards in FY11. 100 percent of SPAWAR SBIR budget as mandated by law was obligated. SPAWAR continues to develop more efficient processes while increasing the rate and percent of transition to Phase III.			
Accomplishments/Planned Programs Subtotals	2.067	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2242: <i>SBIR ADMIN - NAVSEA</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2242: <i>SBIR ADMIN - NAVSEA</i>	4.942	0.010	-	-	-	-	-	-	-	0.000	4.952
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR Admin Support	4.942	0.010	-
Articles:	0	0	
FY 2011 Accomplishments: SBIR Administration			
FY 2012 Plans: SBIR Administration			
Accomplishments/Planned Programs Subtotals	4.942	0.010	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2243: <i>SBIR ADMIN - NAVAIR</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2243: <i>SBIR ADMIN - NAVAIR</i>	6.211	-	-	-	-	-	-	-	-	0.000	6.211
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR ADMIN - NAVAIR	6.211	-	-
Articles:	0		
FY 2011 Accomplishments: SBIR Administration			
Accomplishments/Planned Programs Subtotals	6.211	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2244: <i>SBIR ADMIN - NAVFAC</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2244: <i>SBIR ADMIN - NAVFAC</i>	0.040	-	-	-	-	-	-	-	-	0.000	0.040
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR ADMIN - NAVFAC			
Articles:	0.040 0	-	-
FY 2011 Accomplishments: SBIR Administration.			
Accomplishments/Planned Programs Subtotals	0.040	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2245: <i>SBIR ADMIN - NAVSUP</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2245: <i>SBIR ADMIN - NAVSUP</i>	0.050	-	-	-	-	-	-	-	-	0.000	0.050
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR Administration			
Articles:	0.050 0	-	-
FY 2011 Accomplishments: SBIR Administration			
Accomplishments/Planned Programs Subtotals	0.050	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2248: <i>SBIR ADMIN - SSPO</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2248: <i>SBIR ADMIN - SSPO</i>	0.117	-	-	-	-	-	-	-	-	0.000	0.117
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR Administration	0.117	-	-
Articles:	0		
FY 2011 Accomplishments: SBIR Administration			
Accomplishments/Planned Programs Subtotals	0.117	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2813: <i>SBIR - NSMA</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2813: <i>SBIR - NSMA</i>	7.230	-	-	-	-	-	-	-	-	0.000	7.230
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: SBIR - NSMA</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p> <p>Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p> <p>Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.</p>	<p>7.230</p> <p>0</p>	<p>-</p>	<p>-</p>
Accomplishments/Planned Programs Subtotals	7.230	-	-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2813: <i>SBIR - NSMA</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 2814: <i>SBIR ADMIN - NSMA</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2814: <i>SBIR ADMIN - NSMA</i>	0.470	-	-	-	-	-	-	-	-	0.000	0.470
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SBIR Administration

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR ADMIN - NSMA	0.470	-	-
Articles:	0		
FY 2011 Accomplishments: SBIR Administration			
Accomplishments/Planned Programs Subtotals	0.470	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3201: <i>SBIR CPP - NAVAIR</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3201: <i>SBIR CPP - NAVAIR</i>	0.991	-	-	-	-	-	-	-	-	0.000	0.991
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Section 252 of the 2006 NDAA Public Law No. 109-163 allowed up to 1% of the SBIR be used to fund the administrative costs of the Commercialization Pilot Program (CPP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR CPP - NAVAIR	0.991	-	-
Articles:	0		
FY 2011 Accomplishments: CPP Administration			
Accomplishments/Planned Programs Subtotals	0.991	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

CPP Administration

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3202: <i>SBIR CPP - SPAWAR</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3202: <i>SBIR CPP - SPAWAR</i>	0.329	-	-	-	-	-	-	-	-	0.000	0.329
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Section 252 of the 2006 NDAA Public Law No. 109-163 up to 1% of the SBIR be used to fund the administrative costs of the Commercialization Pilot Program (CPP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

Title: SBIR CPP - SPAWAR	FY 2011	FY 2012	FY 2013
Articles:	0.329	-	-
Articles:	0		
Accomplishments/Planned Programs Subtotals	0.329	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3203: <i>SBIR CPP - NAVSEA</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3203: <i>SBIR CPP - NAVSEA</i>	0.592	-	-	-	-	-	-	-	-	0.000	0.592
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Section 252 of the 2006 NDAA Public Law No. 109-163 allowed up to 1% of the SBIR be used to fund the administrative costs of the Commercialization Pilot Program (CPP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR CPP - NAVSEA	0.592	-	-
Articles:	0		
FY 2011 Accomplishments: CPP Administration			
Accomplishments/Planned Programs Subtotals	0.592	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

NONE

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3204: <i>SBIR CPP - MARINE CORPS</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3204: <i>SBIR CPP - MARINE CORPS</i>	0.137	-	-	-	-	-	-	-	-	0.000	0.137
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Section 252 of the 2006 NDAA Public Law No. 109-163 allowed up to 1% of the SBIR be used to fund the administrative costs of the Commercialization Pilot Program (CPP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR CPP - MARINE CORPS			
Articles:	0.137 0	-	-
FY 2011 Accomplishments: CPP Administration			
Accomplishments/Planned Programs Subtotals	0.137	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3205: <i>SBIR CPP - ONR</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3205: <i>SBIR CPP - ONR</i>	0.622	-	-	-	-	-	-	-	-	0.000	0.622
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Section 252 of the 2006 NDAA Public Law No. 109-163 allowed up to 1% of the SBIR be used to fund the administrative costs of the Commercialization Pilot Program (CPP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR CPP - ONR	0.622	-	-
Articles:	0		
FY 2011 Accomplishments: CPP Administration			
Accomplishments/Planned Programs Subtotals	0.622	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3213: <i>NAVAIR STTR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3213: <i>NAVAIR STTR Program</i>	11.804	-	-	-	-	-	-	-	-	0.000	11.804
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires the each Federal agency that has an extramural budget for R/R&D in excess of \$100,000,000 must participate, shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and .3% under the Small Business Technology Transfer (STTR) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: NAVAIR STTR Program</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Phase I Feasibility: Phase I awards determined the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC).</p> <p>Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further developed the technology, maturing the Technology Readiness Level(TRL) and providing prototypes or other sources validating the technology.</p> <p>Phase III - Since the DOD started tracking DOD Phase III contract awards in 2000, the Navy continues annually to award more in Phase III contracts than the rest of the DOD combined and continues to be called out in studies and Congressional language as the premier Department of Defense(DoD)SBIR program. Although no government SBIR funds are involved, phase III funding can come from the government and/or private sector. The target is to transition a company's SBIR effort into products, tools or services that benefit the Navy acquisition community. One important strength of the SBIR program is that once a company has received a Phase I award the follow-on Phase II and III awards can be awarded in a non competitive process since the competitive process took place under phase I.</p>	<p>11.804</p> <p>0</p>	<p>-</p>	<p>-</p>
Accomplishments/Planned Programs Subtotals	11.804	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3213: <i>NAVAIR STTR Program</i>
C. Other Program Funding Summary (\$ in Millions) N/A		
D. Acquisition Strategy N/A		
E. Performance Metrics Not Applicable		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3231: <i>SBIR Counterdrug</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3231: <i>SBIR Counterdrug</i>	0.266	-	-	-	-	-	-	-	-	0.000	0.266
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The DoD Counter NarcoTerrorism Program Office (CNTPO) primary focus is on the development and acquisition of technology or interagency and multinational operations to disrupt, deter, and deny narcoterrorist activities in an effort to reduce trafficking in illegal narcotics and materials that support global terrorist activities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SBIR Counterdrug	0.266	-	-
Articles:	0		
FY 2011 Accomplishments:			
Phase II Technology Development: Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Counter NarcoTerrorism Program Office needs. These awards further developed the technology, maturing the Technology Readiness Level (TRL) and providing prototypes or other sources validating the technology.			
Accomplishments/Planned Programs Subtotals	0.266	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not Applicable

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605502N: <i>Small Business Innovative Research</i>	PROJECT 3233: <i>SPAWAR STTR Program</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3233: <i>SPAWAR STTR Program</i>	1.250	-	-	-	-	-	-	-	-	0.000	1.250
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Small Business Research and Development Enhancement Act of 1992 as amended (15 U.S.C. 638) requires that each Federal agency that has an extramural budget for Research & Development in excess of \$100,000,000 shall expend with small business concerns (SBC) not less than 2.5% for specific small business research initiatives awarded through a Small Business Innovation Research (SBIR) solicitation and 0.3% under the Small Business Technology Transfer (STTR) program. The SPAWAR SBIR program funds research that addresses the needs and mission of our command and has the potential to transition into follow-on RDT&E and procurement activities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SPAWAR STTR Program	1.250	-	-
Articles:	0		
FY 2011 Accomplishments: Phase I Feasibility The purpose of Phase I is to determine the scientific and technical merit and feasibility of the proposed effort and quality of performance by the small business concerns (SBC). Phase II Technology Development Phase II awards are based on the SBC's Phase I results and potential of the Phase II proposal to address the Navy's needs. These awards further develop the technology, maturing the TRL and providing prototypes or other sources validating the technology. SPAWAR made 4 Phase II and 1 Phase II option STTR awards in FY 2011 valued at \$2,246,337.			
Accomplishments/Planned Programs Subtotals	1.250	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

NONE

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	1.147	0.571	0.796	-	0.796	0.903	1.010	1.071	1.083	Continuing	Continuing
0835: <i>Tech Info System</i>	0.640	0.571	0.796	-	0.796	0.903	1.010	1.071	1.083	Continuing	Continuing
2296: <i>Federal Lab Consortium</i>	0.507	-	-	-	-	-	-	-	-	0.000	0.507

A. Mission Description and Budget Item Justification

The Technical Information Services program provides support to achieve affordability in the development of Navy systems by reducing life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. Warfighting effectiveness is enhanced through strategic relationships with industry to commercialize the science and technology developed by the Naval Research Enterprise and to gain: strategic understanding of industry Research and Development Programs and plans; access concepts and technologies; and access to business practices within the civil sector.

B. Program Change Summary (\$ in Millions)

	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	0.662	0.571	0.556	-	0.556
Current President's Budget	1.147	0.571	0.796	-	0.796
Total Adjustments	0.485	-	0.240	-	0.240
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	0.488	-			
• Program Adjustments	-	-	0.241	-	0.241
• Rate/Misc Adjustments	-	-	-0.001	-	-0.001
• Congressional General Reductions Adjustments	-0.003	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>	PROJECT 0835: <i>Tech Info System</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0835: <i>Tech Info System</i>	0.640	0.571	0.796	-	0.796	0.903	1.010	1.071	1.083	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The goal for this project is to enhance warfighter effectiveness by: leveraging industry independent Research and Development science and technology base; developing strategic partnerships with industry to transition private sector technology; and transferring appropriate Navy-developed innovative concepts and inventions to the private sector for purposes of commercialization. (Public Law 96-480, Federal Technology Transfer Act of 1986)

This project also provides the Department of the Navy (DoN) interface to the Office of the Deputy Under Secretary of Defense for Science and Technology, Office of Technology Transition, and to the Assistant Secretary of Commerce for Technology Policy for matters relating to policy and reporting requirements for technology transfer.

The increase from FY 2012 to FY 2013 is due to the return on investment of T2 pilot projects to the Naval Research Enterprise by Chief of Naval Research.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: TECHNICAL INFORMATION SERVICES	0.640	0.571	0.796
Articles:	0	0	0
Description: Technical Information Services supports the spin-in and spin-out of research and development performed by Navy laboratories and industry. This program develops the tools and provides management oversight of the DoN Domestic Technology Transfer (T2) Program.			
FY 2011 Accomplishments:			
- Completed two pilot programs supporting T2 efforts at Navy Office of Research and Technology Applications (ORTA) across Navy laboratories.			
- Initiated development of a database to capture value of technology transfer to the Navy and, if possible, platform insertion information.			
- Initiated effort to raise visibility of Navy technologies through a more widely defined publications program.			
- Initiated study to analyze trends of Cooperative Research and Development Agreements (CRADAs) in the Navy Defense Technology Transfer Information System (NDTTIS).			
FY 2012 Plans:			
- Continued all efforts of FY 2011.			
- Initiated effort to implement Navy participation in support of new DoD T2 Strategic Plan.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>	PROJECT 0835: <i>Tech Info System</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Initiated effort to advance the Navy engagement in the DOD 1401 T2 Program. - Initiated effort to increase intellectual property mining activities at Navy laboratories. <p><i>FY 2013 Plans:</i></p> <ul style="list-style-type: none"> - Continue all efforts of FY 2012. - Initiate two new pilot programs to support Technology Transfer(T2) efforts at Navy Office of Research and Technology Application (ORTA) activities across laboratories. - Initiate effort to develop guidelines to implement the use of CRADAs in the Navy Acquisition Program. - Initiate effort for Phase III of Navy Defense Technology Transfer Information System (NDTTIS) database to include value/impact of CRADAs including T2 and First Responder results of commercialization and benefits to the Warfighter. - Initiate effort to implement two standardized T2 agreements. - Develop new T2 training course. 				
Accomplishments/Planned Programs Subtotals		0.640	0.571	0.796
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
Not Applicable.				
E. Performance Metrics				
Demonstrate support for technological transitions from the Naval Research Enterprise into industrial and commercial enterprises supporting Navy programs of record and warfighter needs, by being responsive to Offices of Research and Technology Applications focal points for technology transfer in their development of Cooperative Research and Development Agreements (CRADA), and reducing transaction/information exchange timeframes by 25%.				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605804N: <i>Technical Information Services</i>	PROJECT 2296: <i>Federal Lab Consortium</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2296: <i>Federal Lab Consortium</i>	0.507	-	-	-	-	-	-	-	-	0.000	0.507
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Federal Laboratory Consortium for Technology Transfer (FLC) was established by Congress under the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended). The FLC, in cooperation with federal laboratories and the private sector, provides services to enhance the transfer of federally-developed technology to include activities such as: developing and administering technology transfer training courses and materials; assisting Federal agencies and laboratories in their technology transfer programs; and providing a clearinghouse for technology transfer requests.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Federal Lab Consortium	0.507	-	-
Articles:	0		
FY 2011 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.507	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

In accordance with the Federal Technology Transfer Act of 1986 (P.L. 99-502, 20 October 1986, as amended), disseminated funding judiciously.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	58.588	58.162	32.782	-	32.782	56.516	55.264	62.208	63.385	Continuing	Continuing
0149: <i>International Coop RDT&E</i>	6.515	3.506	3.031	-	3.031	4.332	4.153	3.823	3.900	Continuing	Continuing
1767: <i>Naval War Col Strategic Studies Supt</i>	4.648	3.927	3.473	-	3.473	5.314	5.182	4.828	4.910	Continuing	Continuing
2221.: <i>JT Mission Assessment Studies</i>	27.370	30.881	10.484	-	10.484	24.860	24.225	19.606	19.927	Continuing	Continuing
3025: <i>Mid-Range Financial Improvement Plans</i>	1.389	1.244	0.647	-	0.647	0.888	0.895	0.845	0.875	Continuing	Continuing
3039: <i>CHENG</i>	18.666	16.486	12.725	-	12.725	18.697	18.411	17.357	17.713	Continuing	Continuing
3330: <i>Naval Research Laboratory (NRL) Facilities Modernization</i>	-	2.118	2.422	-	2.422	2.425	2.398	15.749	16.060	Continuing	Continuing

A. Mission Description and Budget Item Justification

International Cooperative RDT&E: provide program management, execution, and support to implement a broad range of cooperative Naval Research and Development, Test and Evaluation initiatives to improve coalition interoperability, harmonize US Navy requirements with allied and friendly nations, and identify cooperative international opportunities, and improve coalition interoperability. In addition, it develops coherent approaches, coordinating with partner nations, to sea-based missile defense, command, control, communications, computers and intelligence (C4I), and cooperative acquisition programs while also identifying technology to support the Global Maritime Partnership initiative.

Naval War College Strategic Studies Support: Provides research, analysis and gaming activities which serve as a focal point, stimulus, and major source of strategic and operational thought within the Navy, joint and interagency communities. These efforts generate strategic and operational alternatives, quantitative analysis, war gaming and political military assessments, and provide recommendations regarding the formulation and execution of maritime options. The War Gaming Department plans, designs, executes, analyzes and reports on the Navy's Title 10 war games. These war games provide analytical input to the Navy's Strategic Plan, assessments of future concepts, and recommendations to the Navy's Quadrennial Defense Review, force design, and strategy process. The War Gaming Department also designs, executes and analyzes war games for theater security cooperation plans and operational war fighting issues.

Assessment Program: The Navy Assessment Program provides capability-based planning assessment for Joint Capabilities Integration and Development System (JCIDS), conducts analysis to affect war fighting capability trades and enterprise resources, identifies needs, gaps, and overlaps, and assesses alternative solutions to Joint needs. The program supports both the development and use of modeling, simulation and analytically-based warfare and provides business analyses and analytic tools that provide the basis for decision making with respect to concepts of operations (CONOPS), Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Systems (Information Dominance); warfare systems (Sea Strike, Sea Shield, and Sea Basing) and analytical underpinnings/

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>
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basis for programmatic decisions of the Navy's top leadership regarding their architectures, force structure, and the Navy's core "organize, train, and equip mission" (the warfare and provider Enterprises). The program provides overarching Planning, Programming, Budgeting and Execution System (PPBES) analyses and guidance for PPBES which provides gap analysis and investment strategy and total obligation authority allocation. It provides independent capability analysis and assists in structuring follow-on Navy analyses. The program coordinates Navy's position for the enhanced planning process and conducts net assessments. It serves as the lead campaign analysis to approve Navy warfare and support requirements. The program supports "A Cooperative Strategy for 21st Century Seapower 21" as modified by the Maritime Strategy which charts a course for the Navy, Coast Guard and Marine Corps to work collectively with each other and international partners to prevent crises from occurring or reacting quickly should one occur to avoid negative impact to the United States. It serves as an independent assessor providing a broad-view perspective across the Navy staff apart from resource sponsors, with an integrated look at both war fighting and war fighting support programs. The program supports the world class modeling efforts to attain a level of Modeling and Simulation (M&S) capability that is world class and establishes the Navy as a leader in the Department of Defense (DoD) M&S community. It provides Navy alternatives in assessing the implications embedded within resource decisions in a quantified context of costs versus capability versus risk. The program provides independent analytic support to Navy leadership in conjunction with various executive level decision forums. It develops tools and analytical methodologies that assist in evaluating Navy programs and provides technical leadership for the analysis functional area of Naval Modeling and Simulation.

Mid-Range Financial Improvement Plans: This project supports the Research Development Test & Evaluation, Navy (RD TEN) portion of the larger DoD and Navy-wide effort to implement the financial improvement plan. Funding is for the sustainment of clean and auditable statements for RD TEN.

Operations Integration Group: Classified

CHENG: Develops and implements architecture-based systems engineering processes, methods and tools that assure integrated and interoperable systems are delivered to the fleet. This project provides the mission-oriented technical basis for implementing capability-based acquisition management within the Navy to engineer and field Navy and Marine Corps combat systems, weapon systems, and command, control, communications, computers and intelligence (C4I) programs that must operate as family-of-systems (FoS) or system-of-systems (SoS). The focus of this project is on identifying the functions, relationships, and connections between systems at both the force and unit level and across warfare mission areas, and encompasses three key elements: Systems Engineering to provide the framework for making engineering decisions by war fighting capability at the FoS/SoS level and supports consistent engineering and investment decision-making across Navy and Marine Corps programs within capability-based acquisition portfolios. Naval Collaborative Engineering Environment development and implementation as a DON enterprise resource for Naval integration and interoperability information to enable collaboration and decision support among Fleet organizations, Program Executive Offices, Program Managers, Systems Commands, prime contractors, Resource/Warfare Sponsors and Comptroller organizations. Standards, Policies and Guidelines engineering and technical staff to implement DoN, Office of the Secretary of Defense (OSD) and Joint integration and interoperability and Anti-Tamper initiatives.

Naval Research Laboratory (NRL)Facilities Modernization: This program has been established to provide a systematic and planned approach to improve vital in-house science and technology (S&T) laboratory facilities which are reaching or have reached critical stages of deterioration. The program includes restoration and modernization (R&M) initiatives for about 350,000 net square feet, where the average age of the buildings is 67 years old.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>
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B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	58.329	68.301	57.606	-	57.606
Current President's Budget	58.588	58.162	32.782	-	32.782
Total Adjustments	0.259	-10.139	-24.824	-	-24.824
• Congressional General Reductions	-	-0.139			
• Congressional Directed Reductions	-	-10.000			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.721	-			
• SBIR/STTR Transfer	-0.983	-			
• Program Adjustments	-	-	-24.756	-	-24.756
• Rate/Misc Adjustments	-	-	-0.068	-	-0.068
• Congressional General Reductions Adjustments	-0.479	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 0149: <i>International Coop RDT&E</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0149: <i>International Coop RDT&E</i>	6.515	3.506	3.031	-	3.031	4.332	4.153	3.823	3.900	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Provides program management, execution, and support to implement a broad range of cooperative naval Research and Development, Test and Evaluation (RDT&E) initiatives to improve coalition interoperability, harmonize US Navy requirements with allied and friendly nations, identify cooperative international opportunities, and improve coalition interoperability. In addition, it develops coherent approaches in coordination with combatant commanders (COCOMs), and appropriate partner nations, to sea-based missile defense, command, control, communications, computers and intelligence (C4I), and cooperative acquisition programs while also identifying technology to support the Global Maritime Partnership Initiative.

The project scope was expanded from primarily North Atlantic Treaty Organization (NATO)-centric to include Overseas Contingency Operations (OCO), and Maritime Domain Awareness (MDA) emphasis. Relationships have been, and are being initiated with a greatly expanded and diverse group of maritime countries, particularly those with nascent and littoral navies, located in new regions critical to U.S. security. The project was restructured internally to both maintain ongoing international relationships and projects, while preparing to facilitate support for a global network of maritime nations under MDA and increase OCO-related support requirements.

Ongoing cooperative RDT&E programs, projects and exchanges are pursued to identify cooperative acquisition programs, enhance OCO efforts and MDA development, fill capability gaps, improve US/coalition interoperability, and set standardization with international partners. Such efforts have resulted in:

1. Negotiating and developing approximately 57 international RDT&E Agreements annually with allied and friendly nations;
2. Executing approximately 300 Information Exchange Annexes (IEAs) with foreign partners;
3. Improving IEA information dissemination with allied and friendly countries and within Department of the Navy (DoN);
4. Coordinating Navy inputs to the Office of the Under Secretary of Defense (OUSD) Acquisition, Technology, and Logistics (AT&L) Foreign Comparative Test (FCT) Program, and Coalition Warfare Program (CWT) as well as the DoN Technology Transfer Security Assistance Review Boards (TTSARB).
5. Represent the US Navy in Office of the Secretary of Defense (OSD) directed Armaments Cooperation Forums, including the Conference of NATO Armaments Directors' groups {NATO Naval Armaments Group (NNAG)}, and Senior National Representative-Maritime (SNR-M);
6. Funding of various international RDT&E support databases including Technical Project Officer (TPO), International Agreement Generators, Information/Data Exchange Agreements, and Project Agreements/Memorandums of Understanding;
7. Leading the Engineering and Scientist Exchange Program (ESEP).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: International Coop RDT&E	6.515	3.506	3.031
Articles:	0	0	0
Description: FY13 funding decrease is due to programmatic realignments to other Navy priorities.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 0149: <i>International Coop RDT&E</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p><i>FY 2011 Accomplishments:</i> Maintained internal DoN international databases to support international cooperative activities and projects with allies. Assessed functional ability to integrate DoN international databases across OPNAV departments to improve leveraging of program dollars, fielding of better products and speeding delivery.</p> <ul style="list-style-type: none"> - Continued to support Maritime Theater Missile Defense Forum that obtained \$8.1M in R&D monies from Partner Nation contributions. The multi-lateral forum (9 Maritime Partner countries and the US Navy) entered into four international agreements (Battle Management Command, Control, Communications, Computers and Intelligence (BMC4I); Distributed Engineering Plant; Open Architecture; and Modeling and Simulation (M&S)). The Maritime Theater Missile Defense Forum has a goal of an at-sea capability demonstration in 2015. - Continued to coordinate US Navy's participation in OUSD AT&L's Foreign Comparative Test (FCT) Program and the Coalition Warfare Program (CWP) selection processes to meet emerging military Capability requirements. - Continued execution of approximately 300 Information Exchange Agreements/Data Exchange Agreements (IEA/DEA) with more than 30 countries. - Continued execution and support in placement of US Navy and partner nation engineers and scientists under OSD's Engineer and Scientist Exchange Program (ESEP). Funded various evolving potential cooperative exchanges and projects contributing to Maritime Domain Awareness (MDA) and irregular warfare including Multi-Mission Aircraft (MMA), Broad Area Maritime Surveillance (BAMS), Submarine Littoral Weapons System, and Swimmer Engagement. Coordinated US Navy support to OUSD (AT&L) International Cooperation office. Supported new CNO-Initiated Strategy Dialogue with Australia, including Air and Expeditionary Warfare Working Groups for mutual development of requirements and projects. Supported NATO Naval Armaments Group (NNAG) and Five Power Groups on cooperative programs including harbor protection, electronic warfare, and Defense Against Terrorism (DAT) trials. - Completed US Navy International Bench, a new internet-based connector and composeable tool to enhance collaboration between US military and agency personnel engaged in international work. <p><i>FY 2012 Plans:</i> - Continue all efforts of FY11.</p> <p><i>FY 2013 Plans:</i> - Continue all efforts of FY12.</p>			
Accomplishments/Planned Programs Subtotals	6.515	3.506	3.031

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 0149: <i>International Coop RDT&E</i>

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

D. Acquisition Strategy
N/A

E. Performance Metrics
The Navy International Cooperative RDT&E project supports the implementation of many international cooperative program activities throughout the Department of the Navy (DoN) RDT&E communities. The project funds DoN participation in NATO and OSD lead Armaments Cooperation as well as DoN lead international cooperation that promotes coalition interoperability and set standards with international partners. The focused activities under this project maximize the DoN's efforts by leveraging international technologies and funding to fill capabilities gaps, gain access to foreign research and testing data, and avoid duplication of research and development efforts. The performance goals and metrics are, in cooperation with Maritime Partner nations, to set and harmonize requirements, utilize respective technologies, encourage financial contributions and facilities use, and support forums and work that reduce DoN funding requirements.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1767: <i>Naval War Col Strategic Studies Supt</i>	4.648	3.927	3.473	-	3.473	5.314	5.182	4.828	4.910	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Naval War College (NWC) research, analysis and gaming activities serve as a focal point, stimulus, and major source of strategic and operational thought within the Navy, Joint and Interagency communities. These efforts generate strategic and operational alternatives, tactical imperatives, quantitative analysis, war gaming, political-military assessments, and provide recommendations to the Chief of Naval Operations (CNO), Fleet Commanders and numbered Fleet Commanders regarding the formulation and execution of maritime options for the President of the United States.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: Strategic Studies</p> <p style="text-align: right;">Articles:</p> <p>Description: Naval War College (NWC) conducts research in strategic studies in response to tasking from the Secretary of the Navy (SECNAV), Chief of Naval Operation (CNO), Fleet Commanders, numbered Fleet Commanders, and Combatant Commanders. NWC also hosts the activities of the CNO's Strategic Studies Group (SSG). The CNO SSG is a select group of senior officers from the Navy, Marine Corps, Coast Guard and Air Force handpicked by the CNO or appropriate Chief of Service, who report directly to the CNO in the generation of revolutionary warfighting and operational concepts for the future Navy, such as Sea Strike and FORCEnet.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Conducted research and analysis projects and provided supporting events for the Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Navy Component Commanders, and the Combatant Commanders. - Conducted support of the OPNAV Staff on operational and strategic level of war tasked research projects. - CNO SSG tasking from the CNO to SSG XXX to generate revolutionary operating and warfighting concepts for the Navy's future computing and information environment. Followed up on CNO and OPNAV actions resulting from SSG XXVIII Final Report "The Unmanned Imperative" and SSG XXIX Final Report "Maritime Freedom of Action 2020" addressing warfare in the age of hypersonic and directed energy weapons. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue to conduct research and analysis projects and provide supporting events for OPNAV, the numbered Fleets, Navy Component Commanders, and the Combatant Commanders. - Continue to support the OPNAV Staff on tasked research projects. 	<p>1.336</p> <p>0</p>	<p>1.453</p> <p>0</p>	<p>1.431</p> <p>0</p>

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p>- Continue CNO SSG tasking from the CNO to SSG XXXI to generate revolutionary operating and warfighting concepts for future Navy and maritime operations. Following up on CNO and OPNAV actions resulting from SSG XXIX and SSG XXX Final Reports.</p> <p>FY 2013 Plans:</p> <p>- Continue to conduct research and analysis projects and provide supporting events for OPNAV, the numbered Fleets, Navy Component Commanders, and the Combatant Commanders.</p> <p>- Continue to support the OPNAV Staff on tasked research projects.</p> <p>- Continue CNO SSG tasking from the CNO to SSG XXXII to generate revolutionary operating and warfighting concepts for future Navy and maritime operations. Following up on CNO and OPNAV actions resulting from SSG XXX and SSG XXXI Final Reports.</p> <p>- Conduct research into the Chinese Maritime capabilities and affairs in order to enhance understanding of global developments and provide studies and advice for the CNO and the fleet.</p>				
<p>Title: Naval War Gaming Support</p> <p>Articles:</p>		2.304 0	1.488 0	1.600 0
<p>Description: Naval War College (NWC) conducts strategic and operational war gaming and research for the Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Each year, 50-60 major war games and associated events provide support to efforts that explore and analyze military, political, informational and economic aspects of differing strategic and operational scenarios and tactical imperatives.</p> <p>FY 2011 Accomplishments:</p> <p>- Continued to conduct over 55 major war games and related events in support of OPNAV, the numbered Fleets, and the Combatant Commands.</p> <p>- Continued to support CNO and OPNAV with Navy Title X war games, research, and analysis. Continued to provide war gaming expertise to other services' Title 10 war games.</p> <p>- Continued to provide research, analysis, and war gaming support to senior Navy leadership in areas as directed, such as MDA, Irregular Warfare, cyber, and C4ISR.</p> <p>- Continued to foster and sustain cooperative relationships with international partners through the use of war gaming, research, and analysis.</p> <p>- Continued to conduct research supporting war games co-sponsored with Naval Warfare Development Command (NWDC) and US Joint Forces Command.</p> <p>- Continued to conduct analytic research on maritime security cooperation planning for forward based fleets.</p> <p>- Supported Fleet Commanders and advance concepts in war fighting areas of interest, such as critical infrastructure</p>				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
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<p>protection.</p> <ul style="list-style-type: none"> - Continued to conduct advanced research and analysis for OPNAV on determining measures of effectiveness for the implementation of Cooperative Strategy for 21st Century Seapower. - Continued to conduct high level policy analytic research and gaming addressing Proliferation Security Initiatives for the Office of the Secretary of Defense (OSD). - Continued war gaming, research and analytical support for Navy core capabilities, such as deterrence, maritime security, and sea control. - Continued International War Gaming in support of Maritime Security Cooperation and implementation of Cooperative Strategy for 21st Century Seapower. Planned a Joint Operational Planning war game with the Kuznetsov Naval Academy to further international understanding of maritime security operations. - Continued to conduct research and developed advanced gaming for Joint/Combined Force Maritime Component Commander Flag Officer Course and Maritime Staff Officers Course. - Continued to develop educational materials for the Maritime Advanced Warfighting School. - Continued to conduct research and analysis on key operational challenges such as theater anti-submarine Warfare, maritime missile defense, global maritime security, maritime homeland defense, maritime domain awareness, and sea basing. - Continued to develop advanced war gaming analytical methods and tools. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue to conduct 55-60 major war games and related events in support of OPNAV, the numbered Fleets, and the Combatant Commands. - Continue to support CNO and OPNAV with Navy Title X war games, research, and analysis. Continue to provide war gaming expertise to other services' Title 10 war games. - Continue to provide research, analysis, and war gaming support to senior Navy leadership in areas as directed, such as MDA, Irregular Warfare, cyber, and C4ISR. - Continue to foster and sustain cooperative relationships with international partners through the use of war gaming, research, and analysis. - Continue to conduct research supporting war games co-sponsored with Naval Warfare Development Command (NWDC) and US Joint Staff Command. - Continue to conduct analytic research on maritime security cooperation planning for forward based fleets. - Support Fleet Commanders and advance concepts in war fighting areas of interest, such as critical infrastructure protection. - Continue to conduct advanced research and analysis for OPNAV on determining measures of effectiveness for the 			
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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p>implementation of Cooperative Strategy for 21st Century Seapower.</p> <ul style="list-style-type: none"> - Continue to conduct high level policy analytic research and gaming addressing Proliferation Security Initiatives for the Office of the Secretary of Defense (OSD). - Continue war gaming, research and analytical support for Navy core capabilities, such as deterrence, maritime security, and sea control. - Continue International War Gaming in support of Maritime Security Cooperation and implementation of Cooperative Strategy for 21st Century Seapower. Plan a Joint Operational Planning war game with the Kuznetsov Naval Academy to further international understanding of maritime security operations. - Continue to conduct research and develop advanced gaming for the Joint/Combined Force Maritime Component Commander Flag Officer Course and Maritime Staff Officers Course. - Continue to develop educational materials for the Maritime Advanced Warfighting School. - Continue to conduct research and analysis on key operational challenges such as theater anti-submarine Warfare, maritime missile defense, global maritime security, maritime homeland defense, maritime domain awareness, and sea basing. - Continue to develop advanced war gaming analytical methods and tools. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue to conduct 45-50 major war games and related events in support of OPNAV, the numbered Fleets, and the Combatant Commands. - Continue with limited support to CNO and OPNAV with Navy Title X war games, research, and analysis. Continue to provide war gaming expertise to other services' Title 10 war games. - Continue to provide research, analysis, and war gaming support to senior Navy leadership in areas as directed, such as MDA, Irregular Warfare, cyber, and C4ISR - Continue to foster and sustain cooperative relationships with international partners through the use of war gaming, research, and analysis. - Continue to conduct research supporting war games co-sponsored with Naval Warfare Development Command (NWDC) and US Joint Staff Command. - Support Fleet Commanders and advance concepts in war fighting areas of interest, such as critical infrastructure protection. - Continue to conduct advanced research and analysis for OPNAV on determining measures of effectiveness for implementation of Cooperative Strategy for 21st Century Seapower. - Continue to conduct high level policy analytic research and gaming addressing Proliferation Security Initiatives for Office of the Secretary of Defense (OSD). - Continue war gaming, research and analytical support for Navy core capabilities, such as deterrence, maritime security, and sea control. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Continue to develop educational materials for the Maritime Advanced Warfighting School. - Continue to conduct research and analysis on key operational challenges such as theater anti-submarine Warfare, maritime missile defense, global maritime security, maritime homeland defense, maritime domain awareness, and sea basing. 				
<p>Title: Warfare Analysis and Research</p> <p align="right">Articles:</p>		0.307 0	0.272 0	0.325 0
<p>Description: Naval War College (NWC) supports senior decision-makers from the Department of Defense, Department of the Navy, the numbered Fleets, Fleet Commanders and Combatant Commanders in reaching well-informed, objective decisions on strategic, operational and programmatic issues through collaborative research that integrates traditional research and analysis, ongoing wargaming efforts and advanced decision support tools.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Established and commenced research on a multi-year research project to research, analyze and wargame future warfighting trends through a detailed, scenario based research methodology. This work is in direct support of CNO objectives and OPNAV wholeness reviews. - Continued to conduct major decision events in support of Office of the Chief of Naval Operations (OPNAV), the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Projects were in direct support of warfighting analysis requirements. - Conducted analytical research on key strategic and operational challenges such as maritime ballistic missile defense, proliferation security initiative, global maritime security, maritime situational awareness, maritime operations headquarters, interconnectivity, and multi-service force deployment. - Conducted Command & Control Futures Assessment with OPNAV N2N6. - Conducted Unmanned Undersea Vehicle (UUV) Innovation with Naval Undersea Warfare Center (NUWC). - Conducted Long-Range Air-to-Surface Missile (LRASM) program research in support of Defense Advanced Research Projects Agency (DARPA). - Conducted Integrated Air and Missile Defense (IAMD) Operations research in support of Navy Air and Missile Defense Command (NAMDC). - Conducted Unmanned Undersea Vehicles (UUV) Enabling Concept development in support of Naval Undersea Warfare Center (NUWC), Navy Warfare Development Command (NWDC), and Naval War College (NWC). - Conducted strategic outlook / futures research in support of Space and Naval Warfare Systems Command (SPAWAR). - Conducted Affinity Axis Model for theater engagement assessment research and assessment in support of OPNAV N52. - Continued additional evaluation of concepts and decision events in conjunction with war gaming center. - Conducted research targeted at the strategic and policy level decision making within China. - Continued to provide direct support to NWC student research groups and war gaming. 				

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p>- Conducted 35-45 major decision events in support of their efforts.</p> <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> - Continue research on a multi-year research project to research, analyze and wargame future warfighting trends through a detailed, scenario based research methodology. This work is in direct support of CNO objectives and OPNAV wholeness reviews. - Continue to conduct major decision events in support of OPNAV, the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Projects were in direct support of warfighting analysis requirements for numbered fleet commanders. - Conduct analytical research on key strategic and operational challenges such as maritime ballistic missile defense, proliferation security initiative, global maritime security, maritime situational awareness, maritime operations headquarters, interconnectivity, and multi-service force deployment. - Conduct Command & Control Futures Assessment with OPNAV N2N6. - Conduct Unmanned Undersea Vehicle (UUV) Innovation with Naval Undersea Warfare Center (NUWC). - Conduct Long-Range Air-to-Surface Missile (LRASM) program research in support of Defense Advanced Research Projects Agency (DARPA). - Conduct Integrated Air and Missile Defense (IAMD) Operations research in support of Navy Air and Missile Defense Command (NAMDC). - Conduct Unmanned Undersea Vehicles (UUV) Enabling Concept development in support of Naval Undersea Warfare Center (NUWC), Navy Warfare Development Command (NWDC), and Naval War College (NWC). - Conduct strategic outlook / futures research in support of Space and Naval Warfare Systems Command (SPAWAR). - Conduct Affinity Axis Model for theater engagement assessment research and assessment in support of OPNAV N52. - Continue additional evaluation of concepts and decision events in conjunction with war gaming center. - Conduct research targeted at the strategic and policy level decision making within China. - Continue to provide direct support to NWC student research groups and war gaming. - Conduct 40-50 major decision events in support of their efforts. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> - Continue research on a multi-year research project to research, analyze and wargame future warfighting trends through a detailed, scenario based research methodology. This work is in direct support of CNO objectives and OPNAV wholeness reviews. - Continue to conduct major decision events in support of OPNAV, the numbered Fleets, Fleet Commanders, and the Combatant Commanders. Projects were in direct support of warfighting analysis requirements for numbered fleet commanders and were expanded to include Commander Seventh Fleet (C7F) with particular focus on India and the Indian Ocean. 				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Conduct analytical research on key strategic and operational challenges such as maritime ballistic missile defense, proliferation security initiative, global maritime security, maritime situational awareness, maritime operations headquarters, interconnectivity, and multi-service force deployment. - Conduct Command & Control Futures Assessment with OPNAV N2N6. - Conduct Unmanned Undersea Vehicle (UUV) Innovation with Naval Undersea Warfare Center (NUWC). - Conduct Long-Range Air-to-Surface Missile (LRASM) program research in support of Defense Advanced Research Projects Agency (DARPA). - Conduct Integrated Air and Missile Defense (IAMD) Operations research in support of Navy Air and Missile Defense Command (NAMDC). - Conduct Unmanned Undersea Vehicles (UUV) Enabling Concept development in support of Naval Undersea Warfare Center (NUWC), Navy Warfare Development Command (NWDC), and Naval War College (NWC). - Conduct strategic outlook / futures research in support of Space and Naval Warfare Systems Command (SPAWAR). - Conduct Affinity Axis Model for theater engagement assessment research and assessment in support of OPNAV N52. - Continue additional evaluation of concepts and decision events in conjunction with war gaming center. - Conduct research targeted at the strategic and policy level decision making within China. - Continue to provide direct support to NWC student research groups and war gaming. - Conduct 40-50 major decision events in support of their efforts. 				
Title: NWC Student Research Projects		0.113	0.114	0.117
		Articles: 0	0	0
<p>Description: Selected top performing Naval War College (NWC) students to conduct focused research and analysis of current and future strategic and operational challenges and tactical imperatives. These students are organized under the supervision of the Mahan Scholars Program and the Halsey Group Program.</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> - Conducted focused research, analysis and war gaming of current and future strategic/operational challenges and tactical imperatives by the Halsey Groups and Mahan Scholars programs. - Research groups continued to conduct focused research, analysis and free-play war gaming of current and future operational challenges and tactical imperatives arising from regional threats, homeland defense and access denial efforts at the high end of the conflict spectrum in the Pacific, European Command (EUCOM), Central Command (CENTCOM) and Northern Command (NORTHCOM) area of responsibility (AOR). Research and analysis efforts continued in those areas above, and expanded to include a detailed focus on counter-targeting, operational deception, and countering information denial and missile defense at the theater joint operational level. 				

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 1767: <i>Naval War Col Strategic Studies Supt</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p>- Conducted research for the Deputy Secretary of Defense (DEPSECDEF) on matters tasked to the College.</p> <p>FY 2012 Plans:</p> <p>- Continue to conduct focused research, analysis and war gaming of current and future strategic/operational challenges and tactical imperatives by the Halsey Groups and Mahan Scholars programs.</p> <p>- Research groups will continue to conduct focused research, analysis and free-play war gaming of current and future operational challenges and tactical imperatives arising from regional threats, homeland defense and access denial efforts at the high end of the conflict spectrum in the Pacific, European Command (EUCOM), Central Command (CENTCOM) and Northern Command (NORTHCOM) area of responsibility (AOR). Research and analysis efforts will continue in those areas above, and will be expanded to include a detailed focus on counter-targeting, operational deception, and countering information denial and missile defense at the theater joint operational level.</p> <p>- Continue to conduct research for the Deputy Secretary of Defense (DEPSECDEF) on matters tasked to the College.</p> <p>FY 2013 Plans:</p> <p>- Continue to conduct focused research, analysis and war gaming of current and future strategic/operational challenges and tactical imperatives by the Halsey Groups and Mahan Scholars programs.</p> <p>- Research groups will continue to conduct focused research, analysis and free-play war gaming of current and future operational challenges and tactical imperatives arising from regional threats, homeland defense and access denial efforts at the high end of the conflict spectrum in the Pacific, European Command (EUCOM), Central Command (CENTCOM) and Northern Command (NORTHCOM) area of responsibility (AOR). Research and analysis efforts will continue in those areas above, and will be expanded to include a detailed focus on counter-targeting, operational deception, and countering information denial and missile defense at the theater joint operational level.</p> <p>- Continue to conduct research for the Deputy Secretary of Defense (DEPSECDEF) on matters tasked to the College.</p>				
<p>Title: Maritime Headquarters / Maritime Operations Center (MOC) Analysis</p> <p align="right">Articles:</p> <p>Description: A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Formerly JFMCC/Worldwide Naval Component Commanders (WNCC). Naval War College (NWC) conducts research and analysis at the operational level of war, including direct support for the Maritime Headquarters (MHQ) and Maritime Operations Centers (MOC), as well as Combined/Joint Forces Maritime Component Commander (C/JFMCC) activities. These activities include support for concept and doctrine development of numbered fleet war games, exercises, education, research and analysis. NWC is responsible for development of the Professional Military Education for Naval Component Commanders and Numbered Fleet Staff personnel, and the Numbered Fleet Commander, including education and research initiatives in support of the concept of operations development, training and C/JFMCC advisory and assist team.</p>		0.588 0	0.600 0	-

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p><i>FY 2011 Accomplishments:</i></p> <ul style="list-style-type: none"> - Researched/Developed educational products to enhance the activities and operational capability of the C/JFMCC including conducting US and international-based course materials. - Researched/Developed methods to improve direct support for the Numbered Fleet Commanders, including education, exercise development and execution, planning methods/means, assessment processes, and real-time execution of directed tasks. - Researched/Developed specific MOC-related planning and assessment tools for Commander, FOURTH Fleet in response to Haiti contingency. - Researched/Developed specific MOC-related training for Commander, TENTH Fleet and tailored planning assistance for cyberspace operations and integration of non-kinetic capabilities. - EW Symposium attendance (JUN 2011) to enhance knowledge of Electronic Attack (EA), Electronic Surveillance (ES) and Electronic Protection (EP) and how these evolving tactical capabilities will blend with cyberspace activities at the operational level of war. - Provided assist team visits in support of analysis and definition of maritime operational processes, including execution battle management, tasking subordinates, operational level planning and operational/Fires (effects) assessment. - Supported the Navy Planning Process academics, IO and cyberspace operations discussions with critical planners and deployers at NIOC Norfolk (Little Creek, VA). Knowledge gained by AAT representatives will greatly enhance IO/cyber support to other numbered fleets and C10F/FCC. - Continued research into the required competencies for Maritime Staff Operations Course for officer and enlisted personnel to successfully operate at the operational level of war. - Interviews and discussions with multiple Joint service Fires & Targeting experts greatly enhanced the development of expanded academic knowledge base in Joint FIRES for both kinetic and non-kinetic capabilities. - Researched/Developed educational products on maritime matters at the Operational Level of War (OLW) to better prepare officers and senior enlisted personnel to effectively serve in operational staff assignments in Maritime Operations Centers (MOC) at 3 or 4 star operational headquarters, or represent maritime planning efforts while serving in other service, joint or combined liaison billets. - Developed methods to improve Naval War College's mission to provide a continuum of Joint Professional Military Education and support operational commanders through enhanced education and training. Included improved methods to familiarize students with operational and Navy theory, concepts, doctrine, organizations, capabilities, responsibilities, functions, planning and execution processes techniques and practices. - Provided subject matter expertise for concept and doctrine development of numbered fleet war games, exercises, education, research and analysis. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Supported NWDC critical re-write of Maritime Dynamic Targeting Tacmemo (MDT TM). - Supported critical response to CNO task memo on implementation of Navy Information Dominance with high-demand, low-density expertise on cyberspace analysis and planning activities. - Provided research and analysis of senior mentor and executive leadership development within maritime headquarters. - Conducted research and analysis in competencies and manpower capabilities at the operational level of war, including direct support for objective manpower resource data and decision making tools at operational level maritime headquarters. <p>FY 2012 Plans: All activities</p> <ul style="list-style-type: none"> - Remain credible, relevant and focused through continued development of MOC processes, doctrine and educational products. - Actively participate in creation and review of existing and emerging doctrine, and have active involvement in development of evolving operational level issues. - Continue the ongoing re-write of the Operational Assessment (OA) Tacmemo (TM) in both FY2011/2012 through focused research and analysis of conceptual scenarios and real-world operations, to include Operation Odyssey Dawn (OOD) and the Southern Partnership Station (SPS) deployment to the SOUTHCOM AOR. - Support NWDC transition of Maritime Dynamic Targeting Tacmemo (MDT TM) into more formal NTTP doctrine in both FY2011/2012 through focused research and analysis of current and foreseeable processes, capabilities and requirements facing MOC staffs and subordinate CTFs. - Support NWDC in update revisions to existing doctrine such as MOC TTP (NTTP 3-32.1) and NWP 3-32 through focused research and analysis of MOC best practices, developments in joint components' capabilities and processes of Maritime Staff Operators Course (MSOC). - Expand research into the required competencies for Maritime Staff Operations Course for officer and enlisted personnel to successfully operate at the operational level of war. - Incorporate more interactive technologies for staff collaboration while conducting distributed operations. - Conduct research in advanced adaptive intelligence, information warfare, and other advanced decision-support tools, including adapting Spiral-developed systems into the MOC classroom environment. - Continue research to improve coalition-related MOC education programs for International Officers and senior officers (continued improvements). Includes support for MAWS and alignment with all other operational level education at NWC and other Service educational facilities. - Examine gaps in education at the OLW; develop COI to close same gaps (Information management/knowledge management, et al). <p>Assist and Assess Team (AAT)</p>			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Expand research and analysis into integrating lateral and vertical operations of Commander, TENTH Fleet MOC with operations at existing numbered fleet MOCs, USFFC and US Pacific Fleet, as well as upward to the new USCYBERCOM and downward to subordinate CTFs and commands. - May pursue additional research, analysis, and educational opportunities with organizations such as NIOC Maryland, CWDG (Cyberspace Warfare Development Group - formerly NIOC Suitland), and potentially other C10F subordinate commands. - Conduct research and analysis into potential methods for integration of information operations (to include cyber space operations) with traditional kinetic joint fires operations. Cyberspace operations (offensive and defensive) present unique challenges due to the global nature of the domain, the potential effects on other MOCs and the importance of alignment for effective strategic communication. - Conduct research into how Navy units worldwide can support Commander, TENTH Fleet in the execution of the full spectrum of information and cyberspace operations. - Provide tailored assistance to Commander, TENTH Fleet and Commanders of other MOCs to communicate results of above research and analysis efforts and to strengthen staff knowledge of joint information operations planning, execution, and assessment. - Support development of evolutionary Knowledge Management (KM) processes through research, analysis and authoring of KM articles in critical military and industry journals such as Proceedings, IOSphere, etc. Joint/Combined Forces Maritime Commanders Course (J/CFMCC). - Continue development/research in national and international implications of maritime commander leadership roles, and development of new flag course curriculum accordingly. - Research in the impacts of transition from contract to government employee support for senior mentors with regards to implementation of CNO's priorities on operational level leadership and flag academics. 			
Accomplishments/Planned Programs Subtotals	4.648	3.927	3.473

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

This project provides research, analysis and war gaming to meet the needs of the Secretary of the Navy, the Chief of Naval Operations, and Fleet Commanders. Performance is measured in terms of both the quantity and quality of war games, analysis and the extent to which demand for war games and research products can be accommodated within funding levels. Results of research products and war games are evaluated through customer feedback and the extent to which findings

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0605853N: <i>Management, Technical & Intl Supt</i>	1767: <i>Naval War Col Strategic Studies Supt</i>

are incorporated into follow-on research and practical applications such as Navy doctrine, operational tactics, and programming decisions made during the Planning, Programming, Budgeting & Execution (PPBE) process.

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>				PROJECT 2221.: <i>JT Mission Assessment Studies</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2221.: <i>JT Mission Assessment Studies</i>	27.370	30.881	10.484	-	10.484	24.860	24.225	19.606	19.927	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Navy Assessment Program provides capability-based planning assessment for Joint Capabilities Integration and Development System (JCIDS), conducts analysis to affect war fighting capability trades and enterprise resources, identifies needs, gaps, and overlaps, and assesses alternative solutions to Joint needs. The program supports both the development and use of modeling, simulation and analytically-based warfare and provides business analyses and analytic tools that provide the basis for decision making with respect to concepts of operations, Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance Systems (Information Dominance); warfare systems (Sea Strike, Sea Shield, and Sea Basing) and analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding their architectures, force structure, and the Navy's core "organize, train, and equip mission" (the warfare and provider Enterprises). The program provides overarching Planning, Programming, Budgeting and Execution System (PPBES) analyses and guidance for PPBES which provides gap analysis and investment strategy and total obligation authority allocation. It provides independent capability analysis and assists in structuring follow-on Navy analyses. The program coordinates Navy's position for the enhanced planning process and conducts net assessments. It serves as the lead campaign analysis to approve Navy warfare and support requirements. The program supports "A Cooperative Strategy for 21st Century Seapower 21" as modified by the Maritime Strategy which charts a course for the Navy, Coast Guard and Marine Corps to work collectively with each other and international partners to prevent crises from occurring or reacting quickly should one occur to avoid negative impact to the United States. It serves as an independent assessor providing a broad-view perspective across the Navy staff apart from resource sponsors, with an integrated look at both war fighting and war fighting support programs. The program supports the world class modeling efforts to attain a level of Modeling and Simulation (M&S) capability that is world class and establishes the Navy as a leader in the Department of Defense M&S community. It provides Navy alternatives in assessing the implications embedded within resource decisions in a quantified context of costs versus capability versus risk. The program provides independent analytic support to Navy leadership in conjunction with various executive level decision forums.

Capabilities-Based Assessment (CBA) is the Joint Capabilities Integration and Development System (JCIDS) analysis process that includes three phases: Functional Area Analysis (FAA), Functional Needs Analysis (FNA), and Functional Solution Analysis. The results of the CBA are used to develop a joint capabilities document (based on the FAA and FNA) or initial capabilities document (based on the full analysis). CBA funding provides the resource sponsors the means to develop the analytic underpinning required by Chairman of the Joint Chiefs of Staff Instruction 3170.01G to support the determination of Naval warfighting capabilities and force structure needed to support the Joint Requirements Oversight Council (JROC)/JCIDS requirements validation process and to inform Program Objective Memorandum programming decisions.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Navy Standard Scenarios with Warfare and Warfare Support Analyses	1.582	1.573	0.802
Articles:	0	0	0
FY 2011 Accomplishments:			

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)			FY 2011	FY 2012
<p>-Developed, updated, and maintained detailed level Navy Standard scenarios based on Defense Planning Guidance.</p> <p>-Developed alternative scenarios in support of Defense Review guidance, Joint studies, and Navy resource analyses.</p> <p>-Developed, updated, and maintained analytic baselines for the Major Combat Operations based on Defense Planning Guidance.</p> <p>-Developed a framework and common set of processes to ensure that essential elements of warfare analyses, including scenarios, operational concepts, tactics, capabilities of platforms and systems (for Navy, Joint, coalition and threat forces), key assumptions and input data are defined and traceable to government approved/provided source material.</p> <p>-Developed measures of performance (MOPs) and measures of effectiveness (MOEs) and recommended appropriate modeling/methodology to support analyses.</p> <p>-Developed scenarios and operational concepts based on government inputs that were sufficiently detailed for use in naval and joint campaign analyses.</p> <p>-At the mission level, scripted operational situations (OPSITS) or tactical situations (TACSITS) for use in effectiveness analyses in specific warfare lanes.</p> <p>FY 2012 Plans:</p> <p>-Continue to develop, update, and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance (DPG).</p> <p>-Continue to develop alternative scenarios in support of Defense Review guidance, Joint studies, and Navy resource analyses.</p> <p>-Continue to develop, update, and maintain analytic baselines for the Major Combat Operations (MCO) based on DPG.</p> <p>-Continue to develop a framework and common set of processes to ensure that essential elements of warfare analyses, including scenarios, operational concepts, tactics, capabilities of platforms and systems (for Navy, Joint, coalition and threat forces), key assumptions and input data are defined and traceable to government approved/provided source material.</p> <p>-Continue to develop MOPs and MOEs and recommend appropriate modeling/methodology to support analyses.</p> <p>-Continue to develop scenarios and operational concepts based on government inputs that are sufficiently detailed for use in naval and joint campaign analyses.</p> <p>-At the mission level, continue to script OPSITS or TACSITS for use in effectiveness analyses in specific warfare mission areas.</p> <p>-Develop details required to execute analysis of designated Defense Planning Scenarios and their respective Multi Service Force Deployment Plans.</p> <p>FY 2013 Plans:</p> <p>-Continue to update and maintain detailed level Navy Standard scenarios based on DPG.</p> <p>-Continue to develop alternative scenarios in support of Defense Review guidance, Joint studies, and Navy resource analyses.</p> <p>-Continue to develop details required to execute analysis of designated Defense Planning Scenarios and their respective Multi Service Force Deployment Plans.</p> <p>-Maintain a framework and common set of processes to ensure that essential elements of warfare analyses, including scenarios, operational concepts, tactics, capabilities of platforms and systems (for Navy, Joint, coalition and threat forces), key assumptions and input data are defined and traceable to government approved/provided source material.</p>				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> -Continue to develop scenarios and operational concepts based on government inputs that are sufficiently detailed for use in naval and joint campaign analyses. -Continue to develop MOPs and MOEs and recommend appropriate modeling/methodology to support analyses, and provide input to operational situations or tactical situations for use in effectiveness analyses in specific warfare mission areas. 				
<p>Title: Capability Based Assessments with Campaign Mission Analyses Analytical and Technical Support</p> <p align="right">Articles:</p>		3.105 0	3.183 0	2.406 0
<p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> -Assessed capability sponsors' products for Navy senior leadership decision forums. -Performed collaborative assessment with capability sponsors. -Proactively participated in Capability Sponsors' Integrated Process Teams. -Presented opposing analytically-based points of view to the Chief of Naval Operations (CNO) and Navy senior leadership. -Provided analytically-based decision recommendations to CNO for both warfighting and support areas. -Developed CNO Investment strategy recommendations and performed assessments for Program Review and Program Objective Memorandum. -Assessed capability sponsors' products for senior leadership decision forums. -Conducted Verification, Validation & Accreditation of warfare, performance, and pricing models. -Conducted Overseas Contingency Operation (OCO) Capabilities-Based Assessment (CBA) that provided a rapid and scalable process to utilize a Concept of Operation and developed investment strategy and a capability roadmap. -Conducted Tactical Aircraft Recapitalization alternatives and Theater Ballistic Missile Defense cost capability trade off assessments. -Conducted independent assessment of Anti-Submarine Warfare. -Conducted weapons safety and sea basing capabilities assessments. -Conducted Intelligence, Surveillance, and Reconnaissance (ISR) and Meteorological and Oceanographic (METOC) assessment to determine the optimal mix of Naval ISR and METOC sensors, platforms, and processing, analysis and fusion disposition to support Major Combat Operations (MCOs), the OCO, and intelligence preparation of the environment for both MCOs and OCO. -Performed CBAs to meet the requirements of current and future scenarios, and made strategic decisions within a constrained economic framework. -Performed rigorous, time critical naval and joint campaign and mission-level analyses, usually based on modeling and simulation that illuminated complex warfare issues that supported decision-making in the Planning, Programming, Budgeting Execution process. -Performed analyses and provided technical and engineering support, including joint campaign analysis that examined the ability to counter a range of coordinate threat capabilities, high level tradeoffs between service capabilities, or impact of large-scale architecture, mission-level effectiveness analyses that determined system capabilities; conducted analyses of alternative force 				

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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>structures that determined the ability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations.</p> <ul style="list-style-type: none"> -Conducted cost analyses; cost-effectiveness analyses; and analyses of new technologies in support of Sponsor Program Proposal, Navy Program Objective Memorandum or Warfare Capability Plan. -Developed innovative analysis techniques that evaluated the effectiveness of operations on the Long War focus on Irregular Warfare and Sea Shaping (influence) activities such as Theater Security Cooperation. -Provided rigorous business case assessments of complex issues relating to the warfighting support processes, manpower and personnel, training and education, infrastructure, both afloat and ashore readiness, Naval Medical Program and provider enterprise operations. -Performed analyses for accreditation of models, used estimate cost and performance of performance-based modeled programs such as the Flying Hour Program, ship operations, ship and aircraft maintenance, spares, facilities, and base operation support. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> -Continue to assess capability sponsors' products for Navy senior leadership decision forums. -Continue to perform collaborative assessment with capability sponsors. -Continue to proactively participate in Capability Sponsors' Integrated Process Teams. -Continue to present opposing analytically-based points of view to the Chief of Naval Operations (CNO) and Navy senior leadership. -Continue to provide analytically-based decision recommendations to CNO for both war fighting and support areas. -Continue to develop CNO investment strategy recommendations and assessments for Program Review and Program Objective Memorandum. -Continue to assess capability sponsors' products for senior leadership decision forums. -Continue to conduct Verification, Validation & Accreditation of warfare, performance, and pricing models. -Continue to conduct Overseas Contingency Operation (OCO) Capabilities-Based Assessments (CBAs) that provide a rapid and scalable process to utilize a Concept of Operation, develop investment strategy, and a capability roadmap. -Continue to conduct Tactical Aircraft Recapitalization alternatives and Theater Ballistic Missile Defense cost capability trade off assessments. -Continue to conduct independent assessment of Anti-Submarine Warfare. -Continue to conduct weapons safety and sea basing capability assessments. -Continue to conduct Intelligence, Surveillance, and Reconnaissance (ISR) and Meteorological and Oceanographic (METOC) assessment to determine the optimal mix of Naval ISR and METOC sensors, platforms, and processing, analysis and fusion disposition to support Major Combat Operations (MCOs), the OCO, and intelligence preparation of the environment for both MCOs and OCO. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> -Continue to perform CBAs to meet the requirements of current and future scenarios, and make strategic decisions within a constrained economic framework. -Continue to perform rigorous, time critical naval and joint campaign and mission-level analyses, usually based on modeling and simulation that illuminate complex warfare issues which support decision-making in the Planning, Programming, Budgeting Execution process. -Continue to perform analyses and provide technical and engineering support, including joint campaign analysis that examine the ability to counter a range of coordinate threat capabilities, high level tradeoffs between service capabilities, or impact of large-scale architecture, mission-level effectiveness analyses that determine system capabilities; conduct analyses of alternative force structures that determine the ability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations. -Continue to conduct cost analyses, cost-effectiveness analyses, and analyses of new technologies in support of Sponsor Program Proposal, Navy Program Objective Memorandum or Warfare Capability Plan. -Continue to develop innovative analysis techniques that evaluate the effectiveness of operations on the Long War focus on Irregular Warfare and Sea Shaping (influence) activities such as Theater Security Cooperation. -Continue to provide rigorous business case assessments of complex issues relating to the war fighting support processes, manpower and personnel, training and education, infrastructure, both afloat and ashore readiness, Naval Medical Program and provider enterprise operations. -Continue to perform analyses for accreditation of models, use estimate cost and performance of performance-based modeled programs such as the Flying Hour Program, ship operations, ship and aircraft maintenance, spares, facilities, and base operation support. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> -Continue to assess capability sponsors' products for Navy senior leadership decision forums. -Continue to perform collaborative assessment with capability sponsors. -Continue to proactively participate in Capability Sponsors' Integrated Process Teams. -Continue to present opposing analytically-based points of view to the Chief of Naval Operations (CNO) and Navy senior leadership. -Continue to provide analytically-based decision recommendations to CNO for both war fighting and support areas. -Continue to develop CNO investment strategy recommendations and assessments for Program Review and Program Objective Memorandum. -Continue to assess capability sponsors' products for senior leadership decision forums. -Continue to conduct Verification, Validation & Accreditation of warfare, performance, and pricing models. -Continue to conduct Overseas Contingency Operation (OCO) Capabilities-Based Assessments (CBAs) that provide a rapid and scalable process to utilize a Concept of Operation, develop investment strategy, and a capability roadmap. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
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<ul style="list-style-type: none"> -Continue to conduct Tactical Aircraft Recapitalization alternatives and Theater Ballistic Missile Defense cost capability trade off assessments. -Continue to conduct independent assessment of Anti-Submarine Warfare. -Continue to conduct weapons safety and sea basing capability assessments. -Continue to conduct Intelligence, Surveillance, and Reconnaissance (ISR) and Meteorological and Oceanographic (METOC) assessment to determine the optimal mix of Naval ISR and METOC sensors, platforms, and processing, analysis and fusion disposition to support Major Combat Operations (MCOs), the OCO, and intelligence preparation of the environment for both MCOs and OCO. -Continue to perform CBAs to meet the requirements of current and future scenarios, and make strategic decisions within a constrained economic framework. -Continue to perform rigorous, time critical naval and joint campaign and mission-level analyses, usually based on modeling and simulation that illuminate complex warfare issues which support decision-making in the Planning, Programming, Budgeting Execution process. -Continue to perform analyses including joint campaign analysis that examine the ability to counter a range of coordinate threat capabilities, high level tradeoffs between service capabilities, or impact of large-scale architecture, mission-level effectiveness analyses that determine system capabilities; conduct analyses of alternative force structures that determine the ability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations. -Continue to conduct cost-effectiveness analyses and analyses of new technologies in support of Sponsor Program Proposal, Navy Program Objective Memorandum or Warfare Capability Plan. -Continue to develop innovative analysis techniques that evaluate the effectiveness of operations on the Long War focus on Irregular Warfare and Sea Shaping (influence) activities such as Theater Security Cooperation. -Continue to provide rigorous business case assessments of complex issues relating to the war fighting support processes, manpower and personnel, training and education, infrastructure, both afloat and ashore readiness, Naval Medical Program and provider enterprise operations. -Continue to use estimate cost and performance of performance-based modeled programs such as the Flying Hour Program, ship operations, ship and aircraft maintenance, spares, facilities, and base operation support. 			
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Title: Campaign Analysis-Modeling and Simulation	5.836	4.946	1.951
Articles:	0	0	0

FY 2011 Accomplishments:

- Developed and maintained common baselines from which campaign excursions and mission-level analyses are executed.
- Identified, developed, and improved data and modeling.
- Led Navy's participation in Office of the Secretary of Defense (OSD)/Joint Staff analytic agenda, baseline development, and collection of data.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> -Provided coordination across the Navy. -Brokered agreed upon assumptions, Concept of Operations (CONOPS), scenarios and data. -Led campaign analysis for Office of the Chief of Naval Operations (OPNAV). -Conducted modeling and simulation support for ongoing OPNAV missile defense analysis requirements. <p>FY 2012 Plans:</p> <ul style="list-style-type: none"> -Continue to develop and maintain common baselines from which campaign excursions and mission-level analyses are executed. -Continue to identify, develop, and improve data and modeling. -Continue to lead Navy's participation in the OSD/Joint Staff analytic agenda, baseline development, and collection of data. -Continue to provide coordination across the Navy. -Continue to broker agreements upon assumptions, CONOPS, scenarios, and data. -Continue to lead campaign analysis for OPNAV. -Continue to conduct modeling and simulation support for ongoing OPNAV missile defense analysis requirements. <p>FY 2013 Plans:</p> <ul style="list-style-type: none"> -Continue Navy's participation in Office of the Secretary of Defense (OSD)/Joint Staff analytic agenda, baseline development, and collection of data. -Continue to provide coordination across the Navy. -Continue to broker agreements upon assumptions, Concepts of Operations, scenarios, and data. -Continue to lead campaign analysis of Office of the Chief of Naval Operations (OPNAV). -Maintain common baselines from which campaign excursions and mission-level analyses are executed. 				
<p>Title: OSD/Joint Staff Study Analysis and Assessment with Investment Strategy Development</p> <p align="right">Articles:</p> <p>FY 2011 Accomplishments:</p> <ul style="list-style-type: none"> -Coordinated and led OSD/Navy's Analytic Agenda in Defense Planning Scenario, Multi-Service Force Deployment, Enhanced Planning Process, Strategic Planning Guidance, and participated in Capability Sponsors' Integrated Process Teams. -Provided overarching Planning, Programming, Budgeting and Execution System (PPBES) analyses and guidance. -Provided analytically-based decision recommendations to OPNAV for joint war fighting and support areas. -Conducted net assessments and provided independent analytic support to Navy leadership in conjunction with various executive level decision forums. -Served as the Navy's lead to Joint Requirements Oversight Council, Joint Capabilities Board, and Functional Capabilities Board. -Provided the lead requirements and acquisition for OPNAV. -Coordinated and led Navy's role in Defense Planning Guidance, Program Decision Memoranda, Quadrennial Defense Review, and Defense Science Board studies. 		2.126 0	2.179 0	1.067 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
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<p>-Participated in OSD and Joint Staff analysis assessment and provided structure for coordination across the Navy.</p> <p>-Coordinated and supported Joint Analytical Model Improvement Program.</p> <p>-Developed new analytic techniques for informing resource allocation decisions; conducted all campaign and warfare mission-level analyses and developed investment strategy.</p> <p>FY 2012 Plans:</p> <p>-Continue to coordinate and lead OSD/Navy's Analytic Agenda in Defense Planning Scenario, Multi-Service Force Deployment, Enhance Planning Process, Strategic Planning Guidance, and participate in Capability Sponsors' Integrated Process Teams.</p> <p>-Continue to provide overarching PPBES analyses and guidance.</p> <p>-Continue to provide analytically-based decision recommendations to OPNAV for joint war fighting and support areas.</p> <p>-Continue to conduct net assessments and provide independent analytic support to Navy leadership in conjunction with various executive level decision forums.</p> <p>-Continue to serve as the Navy's lead to Joint Requirements Oversight Council, Joint Capabilities Board, and Functional Capabilities Board.</p> <p>-Continue to provide the lead requirements and acquisition for OPNAV.</p> <p>-Continue to coordinate and lead Navy's role in Defense Planning Guidance, Program Decision Memoranda, Quadrennial Defense Review, and Defense Science Board studies.</p> <p>-Continue to participate in Office of the Secretary of Defense (OSD) and Joint Staff (JS) analysis assessment and provide structure for coordination across the Navy.</p> <p>-Continue to coordinate and support Joint Analytical Model Improvement Program.</p> <p>-Continue to develop new analytic techniques for informing resource allocation decisions; conduct all campaign and warfare mission-level analyses and develop investment strategy.</p> <p>FY 2013 Plans:</p> <p>-Continue to coordinate OSD/Navy's Analytic Agenda in Defense Planning Scenario, Multi-Service Force Deployment, Enhance Planning Process, Strategic Planning Guidance, and participate in Capability Sponsors' Integrated Process Teams.</p> <p>-Continue to provide overarching Planning, Programming, Budgeting and Execution System (PPBES) analyses and guidance.</p> <p>-Continue to provide analytically-based decision recommendations to Office of the Chief of Naval Operations (OPNAV) for joint war fighting and support areas.</p> <p>-Continue to conduct net assessments and provide independent analytic support to Navy leadership in conjunction with various executive level decision forums.</p> <p>-Continue to serve as the Navy's lead to Joint Requirements Oversight Council, Joint Capabilities Board, and Functional Capabilities Board.</p> <p>-Continue to coordinate and lead Navy's role in Defense Planning Guidance, Program Decision Memoranda, Quadrennial Defense Review, and Defense Science Board studies.</p>			
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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
-Continue to develop new analytic techniques for informing resource allocation decisions; conduct all campaign and warfare mission-level analyses and develop investment strategy.				
Title: World Class Modeling, Simulation, and Capability Analysis		8.337	4.780	-
Articles:		0	0	0
FY 2011 Accomplishments: -Developed and improved the Navy's Modeling and Simulation (M&S) capabilities used to develop analyses and assessments to aid in the optimization of Navy programs and investment decisions. Supported validation models (e.g. price performance Planning, Programming, Budgeting and Execution (PPBE) models) as appropriate. Areas of M&S development and improvement span strategic, operational, and resource decision making; price performance models relating investments and manpower to output performance and readiness; Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance interactions; emerging challenges in irregular, unconventional, information and cyber warfare as well as terrorist, disruptive, and catastrophic threats; Sea Strike, Information Dominance, Sea Shield, and Sea Basing mission areas. -Conducted mission-level warfare Modeling and Simulation (M&S) of Joint Capability Areas.				
FY 2012 Plans: -Develop and improve the Navy's analyses and assessment capabilities through innovative, concise, and credible M&S to help optimize Navy programs, investment decisions, and policies across the Office of the Chief of Naval Operations (OPNAV) enterprise. -FY12 plan continues to focus on integrated analysis capabilities that cut across business and program accounts. Specific efforts will include: Field the Cyber Force Structure model that balances operational risks and deployment costs across cyber personnel, network architecture, operational procedures, and cyber security portfolio options. -Develop medical analysis that links to campaign analysis including movement of injured between care facilities, life-saving treatment of injured and recuperation support of injured to support Navy Medical Program decisions. -Integrate the components of ship readiness (operational, maintenance, etc.) into a PPBE Performance-Pricing model with ship scheduling and optimization capability. -Deliver interim version of Synthetic Theater Operations Research Model (STORM) with expanded logistic capabilities critical to United States Navy and United States Marine Corps. -Improve air warfare models to include airborne electronic attack capabilities developed in FY11. -Deliver interim Integrated Air and Missile Defense mission model.				
Title: JT Mission Assessment Studies		6.384	4.720	4.258
Description: CBA - The CBA is the JCIDS analysis process that includes three phases: the FAA, the FNA, and the Functional Solution Analysis. The results of the CBA are used to develop a joint capabilities document (based on the FAA and FNA) or		0	0	0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
initial capabilities document (based on the full analysis). CBA funding provides the resource sponsors the means to develop the analytic underpinning required by Chairman of the Joint Chiefs of Staff Instruction 3170.01G to support the determination of Naval war fighting capabilities and force structure needed to support the JROC/JCIDS requirements validation process and to inform Program Objective Memorandum programming decisions.				
FY 2011 Accomplishments: Continued FY10 CBA efforts. The additional funds in FY11 were required to initiate FY11 CBAs supporting future Naval capability requirements for next-generation shipbuilding, aviation, and weapons systems. Provided analysis support for development of the Integrated Sponsor Program Proposal supporting Guidance to Develop the Force Direction.				
FY 2012 Plans: Continue FY11 CBA efforts.				
FY 2013 Plans: Continue FY12 CBA efforts. Provide analysis support for development of the Integrated Sponsor Program supporting Guidance to Develop the Force Direction.				
Title: AOA for ASUW Capability		-	4.500 0	-
Articles:				
FY 2012 Plans: Conduct analysis of alternatives for offensive anti-surface warfare (OASUW) capabilities, based on analysis plan and kill chain linkages assessment.				
Title: OASUW Pre-Milestone A		-	5.000 0	-
Articles:				
FY 2012 Plans: The additional funds in FY12 are required to initiate OASUW pre-Milestone A requirements to continue material solution analysis to ensure compliance with statutory and regulatory requirements of this pre-Major Defense Acquisition Program effort. Efforts to be performed in support of OASUW requirements include analysis to support development of the Technology Development Document, Capabilities Development Document, and Technical Demonstration documentation.				
Accomplishments/Planned Programs Subtotals		27.370	30.881	10.484
C. Other Program Funding Summary (\$ in Millions)				
N/A				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>
<u>D. Acquisition Strategy</u> N/A		
<u>E. Performance Metrics</u> <p>-The overall goal is to conduct analysis to support the Navy decisions needed to turn strategy and guidance into the Fleet we need within acceptable risk. METRIC: Risks are balanced across capability that delivers the right capabilities within the resources available to Navy. Navy Assessment Program supports the development of platform specific studies and Capability-Based Assessments, an analytical effort resulting in Functional Area Analysis, Functional Needs Analysis , and Functional Solutions Analysis. Efforts provide added analytical rigor relative to program's maturation under the Joint Capabilities, Integration, and Development System and support warfare integration initiatives.</p> <p>-Navy Standard Scenarios with Warfare and Warfare Support Analyses: Goal: To ensure that essential elements of warfare analyses, including scenarios, operational concepts, tactics, capabilities of platforms and systems (for Navy, Joint, coalition and threat forces), key assumptions and input data are defined and traceable to government approved source material. METRIC: Consistency with other ongoing analyses as directed, develop Measures of Performance and Measures of Effectiveness and recommend appropriate modeling/methodology to support analysis. Models/methodology used reflect study objects, level of fidelity required and time constraints.</p> <p>-Capability Based Assessments with Campaign Mission Analyses Analytical and Technical Support: Goal: To provide analyses and technical and engineering support including, but not limited to, joint campaign analysis that examines the ability to counter a range of coordinated threat capabilities, high level tradeoffs between service capabilities, or impact of large-scale architecture, force structure of modernization decision; mission-level effectiveness analyses to determine system capabilities; analyses of alternative force structures to determine ability to meet peacetime deployment or steady-state requirements and respond to transition to war and contingency operations; cost-effectiveness and analyses; Acquisition Category Program Office and Systems Command assessments; and analyses of new technologies. METRIC: Develop analysis plans; determine proposed alternatives for analysis; and research performance data on current and future threats, coalition and own force systems; perform technology investigations and forecasts; develop or obtain cost data for current or planned systems; develop and use Cost Estimating Relationships to determine cost for conceptual or future systems for which no cost data is available; identify analysis assumptions, limitations and uncertainties; use established models or develop new models or methodologies to perform analyses; and interpret and analyze results.</p> <p>-Campaign Analysis-Modeling and Simulation: Goal: Develop and maintain a standard set of models for use in warfare analyses and analyses performed to support Planning Strategy that work at the campaign, mission, and engagement levels. METRIC: A combination of model design statements, model study reports, system specifications, updated model reports, model/database documents, model verification and validation plans, code, and Plan of Action and Milestones reports developed or updated that encompass all aspects of Sea Power 21 to include at a minimum air, land, sea, and Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance.</p> <p>-Joint Assessments and Integration and Investment Strategy Development: Goal: Conduct assessments to determine shortfalls and redundancies in existing or planned operational or support capabilities; identify key issues including deficiencies in war fighting capability; determine priorities for needed capabilities; assesses affordability of high payoff systems and technologies; assess effectiveness and affordability of alternative force structures; and formulate investment strategies. Continue development and refinement of Navy program planning to determine the war fighting wholeness and cost effectiveness of alternative Navy strategies. METRIC: Identify shortfalls and redundancies in existing or planned capabilities. Determine the impact of variations in warfare systems and architectures in threat, U.S. and combined forces and strategies. Provide engineering and analytic support for the assessment and transition of technology for use in the Investment Strategy.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 2221.: <i>JT Mission Assessment Studies</i>
<p>-World Class Modeling, Simulation, and Capability Analysis: Goal: Development of new models or model upgrades to meet requirements identified by the WCM requirements process that support the Program Objective Memorandum decision-making process, with the goal of creating a state-of-the art set of models for use in warfare and warfare support analyses. METRIC: Develop model design documents, model study reports, system specifications, updated model reports, model documentation, model verification and validation plans, code, Plan of Action and Milestones reports, and technical reports.</p> <p>The May 2007 revision of the Joint Chiefs of Staff's Joint Capabilities Integration and Development System (JCIDS) instruction (CJCSI 3170.01F) requires a Capabilities-Based Assessment (CBA) to assess new requirements. A CBA instruction has been developed by the CNO's warfare integration office that prescribes a procedure and structure to this warfighting requirements generation process (JCIDS). A CBA is required to address and validate capability shortfalls or gaps as defined by combatant commanders. It is an analytical process that includes three phases: the Functional Area Analysis, the Functional Needs Analysis, and the Functional Solution Analysis. This process is designed to address future warfighting requirements and analysis needs and improve the quality of Analysis of Alternatives. CBA supports Navy programming decisions and provides the means to develop the analytic underpinning to support the determination of Naval capabilities and force structure recapitalization investments required to fulfill the Maritime Strategy.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3025: <i>Mid-Range Financial Improvement Plans</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3025: <i>Mid-Range Financial Improvement Plans</i>	1.389	1.244	0.647	-	0.647	0.888	0.895	0.845	0.875	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

One of DoD's and Navy's priority goals is to gain a clean and auditable financial statement. The Office of the Secretary of Defense (OSD) Comptroller, in his 8 August 2003 memorandum, directed the Military Departments and Defense Agencies, in coordination with the Defense Finance and Accounting Service (DFAS), to prepare a comprehensive mid-range financial improvement plan to identify measurable steps to ensure each material line is auditable, and ensure all major deficiencies are resolved.

This project supports the Research, Development, Test and Evaluation, Navy (RDT&E,N) portion of the larger DoD and Navy-wide effort to implement the Financial Improvement Plan (FIP). Corrective actions required to resolve known deficiencies and determine resource requirements (people and systems) are being identified.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Mid-Range Financial Improvement Plans	1.389	1.244	0.647
Articles:	0	0	0
Description: Decrease from FY11 to FY12 due to sustainment phase of FIP. Decrease from FY12 to FY13 due to reduced level of effort for audit readiness and sustainment phase of FIP.			
FY 2011 Accomplishments:			
<ul style="list-style-type: none"> - Continued performing obligation validations ensuring accuracy. - Continued eliminating problem disbursements older than 120 days, narrowing to 60 days, and potentially narrowing even further. - Continued to be proactive in executing the first and second phases (discovery and correction) of the Office of Management and Budget Circular No. A-123 process which requires Federal agencies to take responsibility for conducting a rigorous assessment of internal controls over financial reporting. - Continued to participate in the Navy Financial Management Office (FMO) segment testing which includes Reimbursable Work Order (RWO) Grantor, RWO-Performer, and Funds Distribution and Reporting. - Supported the Statement of Budgetary Resources (SBR) assertion with Naval Audit Service 			
FY 2012 Plans: Continue all efforts of FY11.			
FY 2013 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3025: <i>Mid-Range Financial Improvement Plans</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Continue all efforts of FY12.			
Accomplishments/Planned Programs Subtotals	1.389	1.244	0.647

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Financial records are compliant in accordance with the Chief Financial Officers Act.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3039: <i>CHENG</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3039: <i>CHENG</i>	18.666	16.486	12.725	-	12.725	18.697	18.411	17.357	17.713	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Develops and implements architecture-based systems engineering processes, methods and tools that assure integrated and interoperable systems are delivered to the fleet. This project provides the mission-oriented technical basis for implementing capability-based acquisition management within the Navy to engineer and field Navy and Marine Corps combat systems, weapon systems, and command, control, communications, computers and intelligence (C4I) programs that must operate as family-of-systems (FoS) or system-of-systems (SoS). The focus of this project is on identifying the functions, relationships, and connections between systems at both the force and unit level and across warfare mission areas, and encompasses three key elements: Systems Engineering to provide the framework for making engineering decisions by war fighting capability at the FoS/SoS level and supports consistent engineering and investment decision-making across Navy and Marine Corps programs within capability-based acquisition portfolios. Naval Collaborative Engineering Environment development and implementation as a DON enterprise resource for Naval integration and interoperability information to enable collaboration and decision support among Fleet organizations, Program Executive Offices, Program Managers, Systems Commands, prime contractors, Resource/Warfare Sponsors and Comptroller organizations. Standards, Policies and Guidelines engineering and technical staff to implement DoN, Office of the Secretary of Defense (OSD) and Joint integration and interoperability and Anti-Tamper initiatives.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Standards, Policy, and Guidelines	5.040	4.407	3.436
Articles:	0	0	0
FY 2011 Accomplishments:			
<ul style="list-style-type: none"> - Continued alignment of standards, policy, and guidelines across the Naval Enterprise and with OSD and Joint Service organizations - added alignment with law. - Investigated Aggregation of Systems and the application of Systems Engineering Processes and Practices to them across the Naval Enterprise, particularly those involved in Information Assurance (IA) and Integration and Interoperability. - Continued ISP and NR-KPP Implementation Plans in support of Integration and Interoperability Management. - Established Net Ready Key Performance Parameter (NR-KPP) processes and practices to support the implementation of net-centric requirements. - Continued representing ASN RD&A in Systems Engineering and related forums, such as OSD CIO Interoperability, Information Technology, Architecture, and policy sessions such as joint staff and OSD AT&L. - Continued roadmap for acquisition programs on how policies and programs fit together and added investigation and resolution of policy issues, particularly for NR-KPP, ISP, and Information Assurance. - Completed Best Practices for End to End Information Assurance Engineering Survey Report. 			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3039: <i>CHENG</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
- Assisted in the revision to CJCSI 6212.01 by providing DON NR-KPP Guidebook Analysis process.				
FY 2012 Plans: Continue all efforts of FY11				
FY 2013 Plans: Continue all efforts of FY12				
Title: Naval System Engineering Resource Center (NSERC)		2.800	2.482	1.909
Articles:		0	0	0
FY 2011 Accomplishments: - Successfully transitioned Naval Collaborative Engineering Environment (NCEE) to NSERC, a collaborative system engineering environment that provides support across SYSCOMs and their associated program offices. Leadership of NSERC was transitioned to System Engineering Stakeholders Group. - Established collaborative and intergrated system engineering capabilities and training for: Surface Electronic Warfare Improvement Program , Next Generation Interface Test Set, Littoral and Mine Warfare, USMC Emergency Response System, USAF Mission Planning Enterprise, USCG National Security Cutter and Offshore Patrol. - Coordinated closely with DON CIO and SYSCOM CIO to support capabilities alignment policies including portal, infrastructure, and applications reduction. - Successfully deployed the Probability of Program Success version two tool on ASN RDA Dashboard.				
FY 2012 Plans: Continue all efforts of FY11				
FY 2013 Plans: Continue all efforts of FY12				
Title: Systems Engineering		10.826	9.597	7.380
Articles:		0	0	0
FY 2011 Accomplishments: - Delivered Database Naval Architecture Repository System (NARS) with integrated dictionary. - ASN (RD&A) released the Software Supplement to the Guidebook for Acquisition of Naval Software Intense Systems. - Coordinated with six SYSCOMs to deliver the Naval SYSCOM System Engineering Technical Review (SETR) Handbook; Naval System Engineering Policy - Successfully got acquisition responsibilities for HSI included in OPNAVINST 5310.23 and SECNAVINST 5000.2E				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3039: <i>CHENG</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<ul style="list-style-type: none"> - Convinced the SYSCOMs to include ONR as a member of the System Engineering Educational Continuum to encourage improved coordination of the STEM efforts across the DON - Continued SOS SE Integrated Product Team (IPTs) for Battlespace, Mine Warfare and Missile Defense Agency to support CNO priority capability needs. - Brought together an end to end mission thread which included Surface, Undersea, Land and Air unmanned systems by influencing the Unmanned System Cross Fuctional (UxS) Team to include LCS and the MOC. - Continued acquisition milestone review documentation to assess Integration and Interoperability in Information Support Plans, Systems Engineering Plans and Risk Assessments. <p>FY 2012 Plans: Continue all efforts of FY11</p> <p>FY 2013 Plans: Continue all efforts of FY12</p>				
Accomplishments/Planned Programs Subtotals		18.666	16.486	12.725
C. Other Program Funding Summary (\$ in Millions) N/A				
D. Acquisition Strategy N/A				
E. Performance Metrics Standards, Policy, and Guidelines: - Alignment of SPGs across the Naval Enterprise and with OSD and Joint organizations will support standard acquisition implementation and improve compatibility and interoperability thereby lowering development and maintenance costs across programs - Aggregating systems for the purpose of conducting certification and accreditation and consolidating mandatory documentation for aggregations versus individual systems will optimize (cost tradeoffs and focus on high priority issues) certifications, reduce paperwork and associated costs, and put attention on systems engineering, IA, and ISPs for systems in their aggregated operational state vice just the individual system development state. Document costs for major programs are \$1 to \$3.5 Million per system. An aggregation may include 15 or more systems with four or more being major systems. Aggregation presents a high potential for Return on Investment. - NR-KPP processes will clarify requirements and capabilities (including their metrics) that acquisition programs need to develop systems. This clarification will eliminate guesses in terms of operational needs, thereby reducing the risk of program failure and reducing program and life-cycle costs. Naval Collaborative Engineering Environment (NCEE): Number of customers/ users. Percentage of time the tool is available. Number of tools integrated into the system.				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3039: <i>CHENG</i>
<p>Systems Engineering: Reviews and comment on all ACAT I system engineering plans presented to ASN (RDA) within 30 days of receipt to provide system engineering and system of system system engineering guidance to the Acquisition Program Manager. Review 80% of the MDAP Gate reviews held in FY10 to provide software acquisition process improvement guidance, system of systems engineering guidance and integration and interoperability management guidance to the Acquisition Program Managers.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3330: <i>Naval Research Laboratory (NRL) Facilities Modernization</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3330: <i>Naval Research Laboratory (NRL) Facilities Modernization</i>	-	2.118	2.422	-	2.422	2.425	2.398	15.749	16.060	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

Note

This is a new project starting FY12.

A. Mission Description and Budget Item Justification

This program has been established to provide a systematic and planned approach to improve vital in-house science and technology (S&T) laboratory facilities which are reaching or have reached critical stages of deterioration. The program includes restoration and modernization (R&M) initiatives for about 350,000 net square feet, where the average age of the buildings is 67 years old.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: NRL Facilities Modernization	-	2.118	2.422
Articles:		0	0
Description: Critical Science and Technology research cannot be sustained or succeed in deteriorated facilities. World class research can only be accomplished in facilities that are at a minimum "adequate", but preferably "state-of-the-art." Due to their advanced age and deterioration, funds are planned to restore/modernize various laboratory facilities at the Naval Research Laboratory.			
FY 2012 Plans: Initial year of a concerted effort to modernize electronics science and technology laboratories, equipment, and specialized facilities. Existing NRL buildings will be renovated in order to relocate critical electronics S&T equipment and specialized laboratories from space that has reached a significant level of maintenance and operational disruption and failure due to advanced age (45 year old building) and inability to sustain and modernize with scientists and researchers in place.			
FY 2013 Plans: Continue all efforts of FY12.			
Accomplishments/Planned Programs Subtotals	-	2.118	2.422

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605853N: <i>Management, Technical & Intl Supt</i>	PROJECT 3330: <i>Naval Research Laboratory (NRL) Facilities Modernization</i>

D. Acquisition Strategy

None

E. Performance Metrics

Restoration and modernization of the laboratory facilities will begin in a phased approach until completion.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605856N: <i>Strategic Technical Support</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.335	3.277	3.306	-	3.306	3.378	3.397	3.445	3.515	Continuing	Continuing
0128: <i>Mgmt/Tech Supt Strategic</i>	1.249	1.242	1.280	-	1.280	1.302	1.317	1.341	1.369	Continuing	Continuing
1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>	2.086	2.035	2.026	-	2.026	2.076	2.080	2.104	2.146	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element supports technical studies and analyses as directed by the Director for Submarine Warfare to support major policy and procurement decisions. This program is divided into two elements to support decision making in the areas of submarine and antisubmarine warfare and undersea surveillance.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	3.451	3.277	3.316	-	3.316
Current President's Budget	3.335	3.277	3.306	-	3.306
Total Adjustments	-0.116	-	-0.010	-	-0.010
• Congressional General Reductions	-	-	-	-	-
• Congressional Directed Reductions	-	-	-	-	-
• Congressional Rescissions	-	-	-	-	-
• Congressional Adds	-	-	-	-	-
• Congressional Directed Transfers	-	-	-	-	-
• Reprogrammings	-	-	-	-	-
• SBIR/STTR Transfer	-0.098	-	-	-	-
• Program Adjustments	-	-	-0.008	-	-0.008
• Rate/Misc Adjustments	-	-	-0.002	-	-0.002
• Congressional General Reductions Adjustments	-0.018	-	-	-	-

Change Summary Explanation

Technical: N/A

Schedule: N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>	PROJECT 0128: <i>Mgmt/Tech Supt Strategic</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0128: <i>Mgmt/Tech Supt Strategic</i>	1.249	1.242	1.280	-	1.280	1.302	1.317	1.341	1.369	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides analytical support to the Director, Submarine Warfare Division as a basis for major policy, planning and acquisition program decisions. It supports the development of the Submarine Force strategic vision to guide research and development investment strategy and future planning. Additionally, this line supports studies in the area of submarine and undersea surveillance missions, force structure, payloads and sensors and force employment.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: MANAGEMENT AND TECHNICAL SUPPORT, STRATEGIC	1.249	1.242	1.280
Articles:	0	0	0
FY 2011 Accomplishments: - Continued to examine specific applications for submarine mine countermeasures and develop a strategy for ensuring submarine access to contested areas of the world. - Continued to assess the strategic deterrence (conventional and nuclear) force structure, security, and capability in the Navy. - Continued to perform an in-depth review of undersea warfare research and development requirements, past and present, and propose an investment strategy to maximize future capabilities. - Continued to assess implications of current and developing technologies on undersea warfare in both near and far term systems and develop strategic concepts to guide future acquisitions through partnership with the Naval Postgraduate School. - Continued to assess the submarine forces capabilities in view of emerging technologies and changes in joint and naval strategies. This will be used to develop capability based ideas and concepts to guide research and development and science and technology efforts.			
FY 2012 Plans: - Continue all efforts of FY11.			
FY 2013 Plans: - Continue all efforts of FY12.			
Accomplishments/Planned Programs Subtotals	1.249	1.242	1.280

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>	PROJECT 0128: <i>Mgmt/Tech Supt Strategic</i>

D. Acquisition Strategy

N/A

E. Performance Metrics

This project supports studies in the area of undersea surveillance missions, sensor system, payloads, force employment, communications, acoustic performance prediction systems, environmental and medical effects of acoustics systems including installations/removals, operational security and future threat analysis. Project success is measured through analytical results and constant interaction with the contractors that enable the Director for Submarine Warfare to make decisions effectively.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>	PROJECT 1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>	2.086	2.035	2.026	-	2.026	2.076	2.080	2.104	2.146	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides analytical support to the Director, Submarine Warfare Division and the Integrated Undersea Surveillance System (IUSS) Branch Head as a basis for major policy, planning, and acquisition program decisions. It supports studies in the area of undersea surveillance missions, sensor system, communications, acoustic performance prediction systems, environmental and medical effects of acoustic systems including installations/removals, operational security, and future threat analysis. Supports synthetic mission lay down simulations for IUSS strategic planning and resource allocation. Continues development/documentation of architecture for future undersea surveillance capabilities. Supports studies to determine long-term impact of IUSS active sensors on marine animals and development of Surveillance Towed Array Sonar Systems (SURTASS), Low Frequency Active (LFA), and the Supplemental Environmental Impact Statement (EIS).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: ACOUSTIC AND NON-ACOUSTIC ANALYSIS SUPPORT	2.086	2.035	2.026
Articles:	0	0	0
FY 2011 Accomplishments: - Continued environmental compliance requirements and actions pertinent to Compact Low Frequency Active (CLFA) at-sea testing, training and operations. - Continued the SURTASS Engineering Measurements Program (SURTASS EMP) to provide for post-mission engineering analysis of SURTASS acoustic data. - Continued environmental compliance support for issuance of annual Letters of Authorization (LOA) under the Marine Mammal Protection Act (MMPA) and required quarterly reporting for SURTASS LFA vessels. - Continued analyses to estimate the long-term effects of SURTASS LFA on marine mammals. - Continued monitoring of undersea technology for application for future undersea surveillance capabilities.			
FY 2012 Plans: - Continue all efforts of FY11.			
FY 2013 Plans: - Continue all efforts of FY12.			
Accomplishments/Planned Programs Subtotals	2.086	2.035	2.026

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605856N: <i>Strategic Technical Support</i>	PROJECT 1038: <i>Acoustic & Non-Acoustic Analysis Supt</i>

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

This project supports studies in the area of undersea surveillance missions, sensor systems, acoustic performance prediction systems, environmental and medical effects of acoustics systems, and future threat analysis. In addition, it provides research and reports necessary to support SURTASS LFA sonar compliance with Federal, State and Local environmental laws required for continued SURTASS LFA operations, analysis of undersea technology for application for future undersea surveillance capabilities, and assessment of current and future IUSS warfare areas and potential allied Navy contributions. To this goal, research is conducted by educational and research institutions renown for their expertise in the area, and by marine mammal biologists with extensive background in specific areas of underwater acoustics. This approach is deemed the most cost effective and efficient course of action for the Navy.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	72.161	73.917	70.302	-	70.302	69.816	69.725	70.451	71.616	Continuing	Continuing
0135: <i>ONR Science & Technology Mgmt</i>	68.045	66.712	66.625	-	66.625	66.147	66.120	66.809	67.899	Continuing	Continuing
2353: <i>DFAS Billings</i>	1.815	2.549	2.406	-	2.406	2.423	2.418	2.441	2.490	Continuing	Continuing
3234: <i>Office of Naval Research - N-ERP</i>	2.301	4.656	1.271	-	1.271	1.246	1.187	1.201	1.227	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element (PE) covers Office of Naval Research (ONR) corporate expenses including salaries, Information Technology (IT), and some of the day-to-day logistical costs. The vast majority of these items represent fixed costs associated with Scientists and Engineers supporting the Navy's Science and Technology (S&T) Programs.

The Defense Finance and Accounting Service (DFAS) Billings project 2353 funds accounting services provided to ONR and Navy Research and Development (R&D) activities.

The decrease in the Office of Naval Research Navy ERP project 3234 is due to reduced costs associated with the initial stand-up of N-ERP.

B. Program Change Summary (\$ in Millions)

	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	72.094	73.917	68.389	-	68.389
Current President's Budget	72.161	73.917	70.302	-	70.302
Total Adjustments	0.067	-	1.913	-	1.913
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	1.032	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	2.819	-	2.819
• Rate/Misc Adjustments	-	-	-0.906	-	-0.906
• Congressional General Reductions Adjustments	-0.965	-	-	-	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>
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Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>				PROJECT 0135: <i>ONR Science & Technology Mgmt</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0135: <i>ONR Science & Technology Mgmt</i>	68.045	66.712	66.625	-	66.625	66.147	66.120	66.809	67.899	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project supports ONR leadership, management and direction for the Naval S&T program. This project funds ONR Corporate salaries, communications, and other fixed costs at ONR Headquarters and field offices. ONR sponsors scientific advances, which lead to Future Naval Capabilities (FNC's), supporting the Fleet's ability to operate from a position of technological superiority. Functions performed include (1) scientific and technical direction of the nationwide 6.1 basic research program with colleges, universities, non-profit organizations and Naval Laboratories and Warfare Centers; (2) scientific and technical direction of the 6.2 applied research program through the Naval R&D laboratories and Warfare Centers and industry; (3) scientific and technical direction of the Naval 6.3 advanced technology development program through the Navy's R&D laboratories, Warfare Centers and industry; (4) management, resource formulation, program assessment, and contract negotiation/administration of the Navy basic research, applied research and advanced technology development program; and (5) coordination of the Navy's Technology Base program within the context of total DoD/Government (e.g., National Science Foundation, National Academy of Sciences) R&D initiatives in order to maximize scientific advances. This project also supports ONR management and direction for the following Navy-wide programs: Small Business Innovation Research, Naval Research Advisory Committee, Navy Patent Program, Historically Black Colleges and Universities/Minority Institutions Program, Navy Manufacturing Technology Program and the Ballistic Missile Submarine Nuclear (SSBN) Security Technology Program. In addition, this project supports ONR's Navy-wide responsibilities in the negotiation and establishment of indirect cost rates for DoD-assigned universities and performance of contract administration for all DoD contracts/grants at all colleges and universities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: S&T MANAGEMENT SUPPORT	68.045	66.712	66.625
Articles:	0	0	0
Description: This project provides for basic costs and support of ONR Headquarters and its field activities in support of the entire Navy S&T program. Most all the funds in this project are fixed costs, such as salaries, and communications. Specifically, it pays the salaries of Scientific and Engineering and corporate business personnel who direct the execution of the Navy's basic research, applied research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories, Warfare Centers, and private industry.			
FY 2011 Accomplishments: -This project provided for all basic costs and support of ONR Headquarters and its field activities in support of the entire Navy S&T program. Most all the funds in this project are fixed costs, such as salaries, and communications. Specifically, it pays the salaries of Scientific and Engineering and corporate business personnel who direct the execution of the Navy's basic research, applied			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>	PROJECT 0135: <i>ONR Science & Technology Mgmt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
research, and advanced technology development programs at the nation's universities/colleges, Navy laboratories, Warfare Centers, and private industry. <i>FY 2012 Plans:</i> - Continue all efforts of FY 2011. <i>FY 2013 Plans:</i> - Continue all efforts of FY 2012.			
Accomplishments/Planned Programs Subtotals	68.045	66.712	66.625

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

N/A

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

This PE funds operating costs for ONR's mission. Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>	PROJECT 2353: <i>DFAS Billings</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2353: <i>DFAS Billings</i>	1.815	2.549	2.406	-	2.406	2.423	2.418	2.441	2.490	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funding for accounting services provided to the Office of Naval Research and other Navy research and development activities by the Defense Finance and Accounting Service (DFAS).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: TRANSACTIONS PROCESSED IN SUPPORT OF DON R&D	1.815	2.549	2.406
Articles:	0	0	0
Description: This project funds the DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include payroll, transportation, commercial invoices, travel, maintenance of trial balances, associated accounting and reporting.			
FY 2011 Accomplishments: This project funded the DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include payroll, transportation, commercial invoices, travel, maintenance of trial balances, associated accounting and reporting.			
FY 2012 Plans: - Continue all efforts of FY 2011.			
FY 2013 Plans: - Continue all efforts of FY 2012.			
Accomplishments/Planned Programs Subtotals	1.815	2.549	2.406

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

N/A

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>	PROJECT 2353: <i>DFAS Billings</i>

E. Performance Metrics

This PE funds operating costs for ONR's mission. Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605861N: <i>RDT&E Science & Tech Mgmt</i>	PROJECT 3234: <i>Office of Naval Research - N-ERP</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3234: <i>Office of Naval Research - N-ERP</i>	2.301	4.656	1.271	-	1.271	1.246	1.187	1.201	1.227	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funding to support the site implementation costs for the Office of Naval Research transition to Navy's Enterprise Resource Planning (ERP) and to administratively track this continuing effort.

The decrease in the Office of Naval Research Navy ERP project 3234 is due to reduced costs associated with the initial stand-up of N-ERP.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: OFFICE OF NAVAL RESEARCH NAVY ERP	2.301	4.656	1.271
Articles:	0	0	0
Description: N-ERP implementation completes in FY2012.			
FY 2011 Accomplishments: - This project funded expenses associated with ERP implementation at ONR.			
FY 2012 Plans: - Continue N-ERP implementation.			
FY 2013 Plans: - Continue N-ERP implementation and sustainment.			
Accomplishments/Planned Programs Subtotals	2.301	4.656	1.271

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

N/A

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

This PE funds operating costs for ONR's mission. Program performance is measured by attaining financial benchmarks for planned obligations vs. actual obligations and planned expenditures vs. actual expenditures.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY			R-1 ITEM NOMENCLATURE								
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>			PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	100.759	136.531	144.033	-	144.033	151.577	156.842	95.272	97.126	Continuing	Continuing
0568: <i>RDT&E Acft Flt Hours</i>	32.213	35.831	37.215	-	37.215	35.172	35.710	35.873	36.532	Continuing	Continuing
0569: <i>RDT&E Acft Supt</i>	36.063	40.662	38.044	-	38.044	37.130	37.630	38.174	38.893	Continuing	Continuing
2924: <i>SDTS</i>	12.880	21.698	8.277	-	8.277	8.076	8.127	7.865	8.051	Continuing	Continuing
3206: <i>T&E Enterprise</i>	19.603	38.340	60.497	-	60.497	71.199	75.375	13.360	13.650	Continuing	Continuing

A. Mission Description and Budget Item Justification

This continuing program provides support for ships and aircraft required to accommodate Research, Development, Test and Evaluation (RDT&E) of new systems. The RDT&E ship and aircraft inventory is required to adequately test new and improved weapon systems, stay current with threats, and increase warfighting capability of the fleet. The program provides integrated logistics support for aircraft at selected field activities; provides depot-level rework of aircraft, engines, and components for the Navy inventory of RDT&E aircraft; and provides support for ships and aircraft bailed to contractors for Navy RDT&E projects. Costs covered under this element include aircrew training and proficiency, fuel, supplies, equipment, repair, Aviation Depot Level Repairables, overhaul of ships and aircraft, as well as organizational, intermediate, and depot maintenance of ships and aircraft in the Navy RDT&E inventory.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	95.332	136.531	104.620	-	104.620
Current President's Budget	100.759	136.531	144.033	-	144.033
Total Adjustments	5.427	-	39.413	-	39.413
• Congressional General Reductions	-	-	-	-	-
• Congressional Directed Reductions	-	-	-	-	-
• Congressional Rescissions	-	-	-	-	-
• Congressional Adds	-	-	-	-	-
• Congressional Directed Transfers	-	-	-	-	-
• Reprogrammings	8.089	-	-	-	-
• SBIR/STTR Transfer	-0.605	-	-	-	-
• Program Adjustments	-	-	38.609	-	38.609
• Rate/Misc Adjustments	-	-	0.804	-	0.804
• Congressional General Reductions Adjustments	-0.596	-	-	-	-
• Congressional Directed Reductions Adjustments	-1.461	-	-	-	-

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>
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Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 0568: <i>RDT&E Acft Flt Hours</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0568: <i>RDT&E Acft Flt Hours</i>	32.213	35.831	37.215	-	37.215	35.172	35.710	35.873	36.532	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Research, Development, Test and Evaluation (RDT&E) Aircraft Flight Hours. This non-acquisition project supports direct flight hour costs, including organizational and intermediate level maintenance, as well as associated consumables, including petroleum, oil, and lubricants. These flight hours are used for post-maintenance test flights, aircrew training, and the accomplishment of pilot proficiency requirements (approximately 3 hours per pilot per month), in support of Research and Development programs at four Naval Air Systems Command/Naval Surface Warfare Center/Office of Naval Research flight activities.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: RDT&E Acft Flt Hours	32.213	35.831	37.215
Articles:	0	0	0
FY 2011 Accomplishments: Provided planned organizational and intermediate-level maintenance, supply and petroleum, oil and lubricants in support of RDT&E aircraft operations.			
FY 2012 Plans: Continue to provide planned organizational and intermediate-level maintenance, supply and petroleum, oil and lubricants in support of RDT&E aircraft operations.			
FY 2013 Plans: Continue to provide planned organizational and intermediate-level maintenance, supply and petroleum, oil and lubricants in support of RDT&E aircraft operations.			
Accomplishments/Planned Programs Subtotals	32.213	35.831	37.215

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

N/A

D. Acquisition Strategy

Not Applicable

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 0568: <i>RDT&E Acft Flt Hours</i>

E. Performance Metrics

This Research, Development, Test and Evaluation Aircraft program supports approximately 3 hours per pilot per month of post-maintenance test flights, aircrew training and the accomplishment of pilot proficiency requirements.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 0569: <i>RDT&E Acft Supt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0569: <i>RDT&E Acft Supt</i>	36.063	40.662	38.044	-	38.044	37.130	37.630	38.174	38.893	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Research, Development, Test and Evaluation (RDT&E) Aircraft Support. This continuing project funds costs associated with RDT&E fixed and rotary wing aircraft which accommodate test and evaluation of aircraft/weapon systems. Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. Included in these costs are Aviation Depot-Level Repairables (AVDLR), which are spare and replacement aircraft parts and components to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), the Integrated Maintenance Concept (IMC) and Phased Depot Maintenance (PDM), in-service repairs, emergency repairs, and engine repairs, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, and other systems for application to and compatibility with RDT&E requirements.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Title: Aircraft/Engine Maintenance and AVDLR/IMRL Support</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments: Planned transition from Aircraft Structural Periodic Adjustment (ASPA)/SDLM to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continued operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.</p> <p>FY 2012 Plans: Continue planned transition from ASPA/SDLM to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continue operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.</p> <p>FY 2013 Plans: Continue planned transition from ASPA/SDLM to the IMC/PDM program for depot maintenance requirements, while sustaining the following programs: AVDLR/IMRL, engine repairs, support of aircraft in the RDT&E inventory. Continue operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities.</p>	<p>34.440</p> <p>0</p>	<p>39.028</p> <p>0</p>	<p>36.375</p> <p>0</p>
<p>Title: In-Service Repairs</p> <p style="text-align: right;">Articles:</p> <p>FY 2011 Accomplishments:</p>	<p>1.623</p> <p>0</p>	<p>1.634</p> <p>0</p>	<p>1.669</p> <p>0</p>

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 0569: <i>RDT&E Acft Supt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Provided planned In-Service Repair funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects. <i>FY 2012 Plans:</i> Continue to provide planned In-Service Repair funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects. <i>FY 2013 Plans:</i> Continue to provide planned In-Service Repair funds for emergent repair requirements to aircraft performing mission critical test and evaluation projects.			
Accomplishments/Planned Programs Subtotals	36.063	40.662	38.044

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

The RDT&E Aircraft Support program goal is to provide the required funds to meet NAVAIR Aircraft Controlling Custodian aircraft sustainment requirements. These sustainment costs include providing annual support for required Planned Depot Maintenance events, In-service Repairs (P&E, Repairs, Mods), Depot Engine Inductions, Individual Material Readiness List Repairs, along with the funding of management oversight of the aircraft and the Aviation Depot Level Repairable costs associated with pilot readiness requirements.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 2924: <i>SDTS</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2924: <i>SDTS</i>	12.880	21.698	8.277	-	8.277	8.076	8.127	7.865	8.051	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides for the maintenance of Hull Mechanical and Electrical (HM&E) and installed Combat Systems of the Self-Defense Test Ship (SDTS) in support of the Navy Research, Development, Test and Evaluation (RDT&E) of ship self-defense systems. Testing aboard this ship reduces the number of fleet units required to support RDT&E efforts.

SDTS provides the capability to safely test self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship, combat system and remote control maintenance. The remainder of the funds is used for purchase of expendable supplies and routine equipment, fuel and petroleum products, and repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: SDTS	12.880	21.698	8.277
Articles:	0	0	0
FY 2011 Accomplishments: NSWC PHD SDTS will support documentation development for SDTS installations of multiple combat systems configurations and support preparation to modify top side and below decks equipments. SDTS will continue to conduct planning, scheduling, and performing maintenance of all equipment installed on the SDTS to provide the Navy a safe operational test asset. Support and begin preparation for dry dock availability planned for FY12.			
FY 2012 Plans: NSWC PHD continue to conduct planning, scheduling and performing routine HM&E, combat systems and remote control systems maintenance on the SDTS to provide the Navy a safe operational test asset. Conduct a dry dock availability.			
FY 2013 Plans: NSWC PHD continue to conduct planning, scheduling and performing routine HM&E, combat systems and remote control systems maintenance on the SDTS to provide the Navy a safe operational test asset.			
Accomplishments/Planned Programs Subtotals	12.880	21.698	8.277

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 2924: <i>SDTS</i>

D. Acquisition Strategy

This line of accounting is for recurring combat system and ship maintenance.

E. Performance Metrics

Successfully remain safe, operational and available for testing and evaluation of systems. Successfully develop applicable operation and maintenance documentation and reporting of installations. Successfully timely report funding, schedule and technical delays, and issues in an unmanned, remotely controlled mode, if necessary affecting its availability status.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 3206: <i>T&E Enterprise</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3206: <i>T&E Enterprise</i>	19.603	38.340	60.497	-	60.497	71.199	75.375	13.360	13.650	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The T&E Enterprise consolidates all Air Warfare (AW) Ship Self Defense (SSD) at-sea testing across multiple class ships, beginning with CVN 74, LHD 8, LPD17, LHA 6, DDG 1000, CVN 78, and Littoral Combat Ship (LCS). This consolidated AW SSD test and evaluation approach meets the Probability of Raid Annihilation (PRA) (PRA is defined as a required surface ship defense against Anti-Ship Cruise Missiles), Self Defense Test Ship (SDTS) testing requirements as outlined in Air Warfare Ship Self Defense Enterprise TEMP 1714, and lead/operational ship testing requirements for ESSM TEMP 1471, RAM Bk 2 TEMP 286-1, DDG 1000 TEMP 1560, CVN 78 TEMP 1610, CEC TEMP 1415, SSDS TEMP 1400, LHA 6 TEMP 1697, AN/SPQ-9B TEMP 1463, SEWIP TEMP 1658 (Block 1A), 0686, and LCS TEMP 1695.

LHA 6 acquisition, installation and testing supports all big deck Amphibs and Carriers in the OA configuration as well as RAM BLK 2 OPEVAL, SSDS OA with RAM BLK 2, First non AEGIS SEWIP and ESSM.

The T&E Enterprise merges common ship, element, and system requirements into the least number of test events while leveraging planned Combat System Ship Qualification Trials (CSSQTs) to accomplish Developmental Testing (DT) and Operational Testing (OT) requirements. All tests on the SDTS require the sharing of infrastructure, missile range allocations, execution time and underway time to eliminate duplicative testing.

T&E Enterprise preserves end-to-end mission Operational Testing in a realistic operational environment, capitalizing on Probability of Raid Annihilation M&S data validated with results of that Operational Testing, and ensuring a consistent approach across ship classes. Applicability of all test events is beneficial across multiple ship classes with the same variation under test.

The T&E Enterprise acquires equipment (FY10-12) for installation onboard the SDTS (FY11-14), conducts test and evaluation on the SDTS and lead/operational ships (FY10-18) and satisfies the Probability of Raid Annihilation (PRA) Testbed Model Development and test execution requirements (FY10-18).

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: T&E Enterprise	19.603	38.340	60.497
Articles:	0	0	0
FY 2011 Accomplishments:			
In FY11, the program continued M&S development in the PRA Testbed as well as conduct Enterprise Testing on the SDTS. Progress was made in maturing all models required for PRA assessment on the LHA-6. Stage 7 testing on the LHA-6 combat systems elements was completed on the SDTS making the ship ready to conduct ET-05.			
FY 2012 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605863N: <i>RDT&E Ship & Aircraft Support</i>	PROJECT 3206: <i>T&E Enterprise</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p>The Enterprise plans on conducting ET-03 on the SDTS in the October - November 2011 timeframe prior to the SDTS entering a dry dock availability. Upon completion of dry dock, the SDTS will participate in ET-05. The PRA testbed will conduct a DT#7 adding new and newly matured software capability to the federate. The Enterprise plans on acquiring all remaining LCS combat systems elements in FY12 in order to install on SDTS in FY13 and test on SDTS in FY14.</p> <p><i>FY 2013 Plans:</i> The Enterprise plans on receiving DDG-1000 CS elements and conducting CVN-78 integration testing at SCSC Wallops Island. The Enterprise plans on receiving LCS CS elements and installing those elements on the SDTS. The PRA Testbed plans on conducting a Critical Design Review (CDR) for the LHA-6 and DDG-1000. Plans call for DDG-1000 integration testing on the SDTS.</p>				
Accomplishments/Planned Programs Subtotals		19.603	38.340	60.497
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
<p>Acquire CS elements for Enterprise Ship Classes. Acquire LCS CS elements in FY11 and FY12 Acquisition of systems is tailored to each ship class with benefits across multiple classes with similar CS elements</p>				
E. Performance Metrics				
<p>Successfully complete required documentation and reporting for Enterprise installations and required check out and testing of installations. Successfully complete all Enterprise Operational Test Readiness Reviews (OTRR). Successfully complete required Enterprise developmental testing/operational testing DT/OT testing and combat system ship qualification trials (CSSQT) related tests with 0 casualty delays. Successfully collect related test result data and distribute accordingly.</p>				

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	376.563	335.357	342.298	-	342.298	337.473	340.369	343.449	346.674	Continuing	Continuing
0541: <i>AUTEC</i>	57.591	56.239	56.698	-	56.698	55.316	56.003	56.625	57.016	Continuing	Continuing
0566: <i>NAVAIR Environmental Compliance</i>	4.187	4.324	4.444	-	4.444	4.397	4.435	4.472	4.514	Continuing	Continuing
0653: <i>NAWC Weapons Division</i>	153.459	140.716	143.110	-	143.110	141.163	141.685	142.907	143.920	Continuing	Continuing
0654: <i>NAWC Aaft Division</i>	122.137	95.311	97.492	-	97.492	96.051	96.661	97.404	98.852	Continuing	Continuing
2921: <i>Pacific Missile Range Facility</i>	5.200	5.220	5.371	-	5.371	5.446	5.534	5.616	5.660	Continuing	Continuing
2922: <i>MRTFB Maint & Repair</i>	21.192	21.026	22.333	-	22.333	22.339	23.045	23.283	23.472	Continuing	Continuing
3029: <i>T&E Policy Support</i>	0.778	0.748	0.774	-	0.774	0.758	0.767	0.774	0.780	Continuing	Continuing
3154: <i>Nanoose and Dabob Bay Ranges</i>	12.019	11.773	12.076	-	12.076	12.003	12.239	12.368	12.460	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program provides institutional maintenance and operations support for: the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center, Andros Island, Bahamas; the Environmental Compliance Program; Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu and China Lake, CA; Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD; Test and Evaluation (T&E) related capabilities at the Pacific Missile Range Facility, Barking Sands, HI; Maintenance and Repair at NAWCWD and NAWCAD; and the Naval Undersea Warfare Center Keyport Nanoose and Dabob Bay Ranges. The T&E activities make up the Navy portion of the Department of Defense's Major Range and Test Facility Base. These activities are chartered to perform T&E for the development and acquisition of technology advanced weapons systems. Core T&E capabilities and capacity are operated to obtain weapons system performance documentation for acquisition program milestone decisions to provide operational forces with effective weapons systems. This program provides Navy Acquisition Program Managers required test capabilities; lowers cost of T&E; removes cost and scheduling impact of providing their own T&E resources; and retains the physical airspace, land space and sea space needed to conduct testing.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>
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B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	376.418	335.367	334.401	-	334.401
Current President's Budget	376.563	335.357	342.298	-	342.298
Total Adjustments	0.145	-0.010	7.897	-	7.897
• Congressional General Reductions	-	-0.010			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	2.257	-			
• SBIR/STTR Transfer	-0.198	-			
• Program Adjustments	-	-	6.307	-	6.307
• Rate/Misc Adjustments	-	-	1.590	-	1.590
• Congressional General Reductions Adjustments	-1.914	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0541: <i>AUTEC</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0541: <i>AUTEC</i>	57.591	56.239	56.698	-	56.698	55.316	56.003	56.625	57.016	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

As a detachment of Naval Undersea Warfare Center, Division Newport, the mission of the Atlantic Undersea Test and Evaluation Center (AUTEC) is to provide the US Navy an underwater range facility for full-spectrum test and evaluation of Undersea Warfare systems and for Fleet training and readiness assessment. The AUTEC Program Office is headquartered at Newport, RI. AUTEC's administrative offices are located at West Palm Beach, Florida. Test facilities are located at Andros Island, Sites 1 through 4, and the Berry Islands in the Bahamas. AUTEC aircraft make scheduled daily flights between West Palm Beach and Andros Town Airport.

AUTEC manages and, under service contract, maintains and operates a 500 square nautical miles deep-water and a 100 square nautical miles shallow-water acoustic tracking range; air-target tracking capabilities; sonobuoy simulation systems; electronic warfare threat simulation systems; fixed and rotary wing aircraft; aircraft ground support facilities; acoustic targets; torpedo retrieval and flushing capabilities; open-ocean range craft; marine support facilities; and, data processing and analysis capabilities.

Major test facilities on Andros Island are located at Site 1. The Command Control Building houses the range tracking displays and replay centers, the computer center, operations support functions, communications center, and the central timing system. The Range Support Facility houses a torpedo post-run workshop, Mark 46 /Mark 50 lightweight torpedo Intermediate Maintenance Activity (IMA), a Mark 30 undersea target IMA, a Mark 48 heavyweight torpedo Research and Development (R&D) Turnaround facility and related technical facilities. The complex includes electrical and physical calibration labs, a complete electronics maintenance shop, a dive locker, a precision machine shop, and logistics support areas.

AUTEC has a 285-foot concrete pier with a controlling depth of 17 feet (5.2 meters) at mean low tide. An adjacent wharf is approximately 240 feet in length (72 meters) with a controlling depth of 15 feet at mean low tide. Power is available at both locations. Facilities at the pier/marine area include fully equipped machine /fabrication and marine overhaul shops. Also at Site 1, six Range User Buildings are maintained for assembling test equipment and equipment check-out during test mobilization or dockside periods. These staging areas are equipped with a variety of power sources, gantry cranes, compressed air and security features. A fully equipped range user hanger for ground maintenance and storage of helicopters is located at the AUTEC helicopter airstrip. Sites 2, 3, and 4 are small instrumented areas located south of Site 1 used to extend tracking of sonobuoys, communications, and air target track.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Atlantic Undersea Test and Eval Ctr Facility	46.541	45.189	45.427
Articles:	0	0	0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0541: <i>AUTEC</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<p>Description: AUTEC is a Test and Evaluation facility for collecting selected underwater, surface and air tracking data on test participants. This project funds the overhead/institutional costs required to sustain the Major Range and Test Facility capabilities at AUTEC in accordance with Department of Defense Directive 3200.11.</p> <p>FY 2011 Accomplishments: Atlantic Undersea Test and Evaluation Center Facility. Continued to maintain and operate mission essential/core test support resources, instrumentation systems and marine craft required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Major Range and Test Facility Base (MRTFB) operations. Reimbursed the Command for General and Administrative support services.</p> <p>FY 2012 Plans: Continue all efforts of FY2011.</p> <p>FY 2013 Plans: Continue all efforts of FY2012.</p>				
<p>Title: Bahamian Lease</p> <p align="right">Articles:</p> <p>Description: Rental payments to the Bahamian government for use of land and ocean in the Bahamas.</p> <p>FY 2011 Accomplishments: Bahamian Lease. Continued to provide rental payments to the Bahamian government for use of land and ocean in the Bahamas.</p> <p>FY 2012 Plans: Continue all efforts of FY2011.</p> <p>FY 2013 Plans: Continue all efforts of FY2012.</p>		11.050 0	11.050 0	11.271 0
Accomplishments/Planned Programs Subtotals		57.591	56.239	56.698
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
Not applicable.				

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0541: <i>AUTEC</i>

E. Performance Metrics

Maintain MRTFB infrastructure in a ready state to provide between 2,500-2,900 range hours in support of multiple Navy and Department of Defense acquisition programs and fleet training.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0566: <i>NAVAIR Environmental Compliance</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0566: <i>NAVAIR Environmental Compliance</i>	4.187	4.324	4.444	-	4.444	4.397	4.435	4.472	4.514	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This continuing project supports environmental compliance, conservation and pollution prevention related efforts at the Navy Major Range and Test Facility Base (MRTFB) located at Patuxent River, MD, China Lake, CA, Point Mugu, CA, and Atlantic Undersea Test and Evaluation Center (AUTEC), Bahamas. The Navy MRTFB environmental projects include ongoing efforts to comply with Federal, State, and local environmental requirements.

The MRTFB are test and evaluation facilities that provide for Department of Defense test and evaluation support missions. These missions include: Weapons system testing, military operational squadron training on new weapon systems, and validation of performance or operational characteristics.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Environmental Compliance	4.187	4.324	4.444
Articles:	0	0	0
Description: Continues hazardous waste disposal, solid waste disposal, natural and cultural resources programs, environmental permits, and environmental monitoring at AUTEC, Patuxent River, China Lake and San Nicolas Island.			
FY 2011 Accomplishments: Continued mandated monitoring of range operations environmental impacts. Continued monitoring of endangered species and marine mammals which is required in order to comply with applicable laws and regulations.			
FY 2012 Plans: Continue mandated monitoring of range operations environmental impacts. Continue monitoring of endangered species and marine mammals which is required in order to comply with applicable laws and regulations.			
FY 2013 Plans: Continue all efforts of FY2012.			
Accomplishments/Planned Programs Subtotals	4.187	4.324	4.444

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0566: <i>NAVAIR Environmental Compliance</i>

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Execute 15-20 environmental projects per year required to comply with existing laws, regulations, executive orders, and final governing standards.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0653: <i>NAWC Weapons Division</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0653: <i>NAWC Weapons Division</i>	153.459	140.716	143.110	-	143.110	141.163	141.685	142.907	143.920	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Project provides continuing maintenance and operational support for the Naval Air Warfare Center Weapons Division Test and Evaluation (T&E) capabilities. These capabilities include the Pacific Ranges and Facilities, consisting of China Lake Ranges and the Point Mugu Sea Range, aerial and surface targets, test instrumentation, and T&E aircraft. The Pacific Ranges use China Lake's 1.1 million acres of land and 17,000 square miles of military restricted (R-2508) airspace together with Point Mugu's 125,000 square miles of instrumented sea range and 36,000 square miles of controlled overlying airspace, and airfield and test instrumentation at San Nicolas Island to perform its T&E mission. Included in the China Lake ranges is the Electronic Combat Range (ECR), which provides outdoor free space development and operational testing of airborne electronic warfare systems and tactics against shipboard and land based air defense systems. These ranges perform metric radar, multilateration and optical tracking of test objects; command, control, and destruct for range safety purposes; communications; frequency interference control and analysis; collection processing and display of telemetered data; real-time data processing and display; and the operation of a sub scale aerial target launch capability. Other test capabilities include an outdoor High Power Microwave measurement facility; propulsion, warhead, environmental, rocket motor, and other missile component test facilities; and gun ranges. This project funds costs that are not chargeable to customers.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Pacific Ranges	61.388	57.426	59.715
Articles:	0	0	0
Description: In accordance with Department of Defense Directive 3200.11., this project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities at the Pacific Ranges and Facilities located at China Lake and Point Mugu CA. These facilities provide safe, instrumented, controlled open air testing utilizing the Land Range, Sea Range, ECR, Air Vehicle Modification and Instrumentation, and San Nicholas Island.			
FY 2011 Accomplishments: Pacific Ranges. Continued to maintain and operate mission essential/core test support resources. These resources included test article instrumentation and/or modification for Flight Test Aircraft, Weapons Under Test and Aircraft Engines Undergoing Un-installed test. Scheduled and control air, land, sea and associated range operating areas required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.			
FY 2012 Plans: Continue all efforts of FY2011.			
FY 2013 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0653: <i>NAWC Weapons Division</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Continue all efforts of FY2012.				
<p>Title: Navy Test Wing Pacific</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities of the Naval Test Wing Pacific located at China Lake and Point Mugu CA. These facilities provide the Navy's principal Pacific test activity for Naval Aviation Systems Team aircraft, engaged in or supporting Test & Evaluation of aircraft, weapons and weapons systems.</p> <p>FY 2011 Accomplishments: Navy Test Wing Pacific. Continued to maintain and operate mission essential/core test support resources associated with 13 aircraft and related systems and flight test safety required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p>FY 2012 Plans: Navy Test Wing Pacific. Continue to maintain and operate mission essential/core test support resources associated with 10 aircraft and related systems and flight test safety required to meet customer test workload. Fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p>FY 2013 Plans: Continue all efforts of FY2012.</p>		24.637 0	20.124 0	20.930 0
<p>Title: Threat/Target Systems</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Threat/Target Systems facilities. These facilities provide the airborne and seaborne threats for test and evaluation.</p> <p>FY 2011 Accomplishments: Threat/Target Systems. Continued to maintain and operate mission essential/core test support resources associated with airborne and seaborne targets required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p>FY 2012 Plans:</p>		11.851 0	10.875 0	11.245 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0653: <i>NAWC Weapons Division</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Continue all efforts of FY2011.				
FY 2013 Plans: Continue all efforts of FY2012.				
Title: Test and Evaluation Ordnance		3.207	2.824	3.035
		Articles: 0	0	0
Description: This project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities of the Test and Evaluation Ordnance facilities. These facilities provide test and evaluation of All-Up live ordnance and components.				
FY 2011 Accomplishments: Test and Evaluation Ordnance. Continued to maintain and operate mission essential/core test support resources associated propulsion, warhead, environmental, rocket motor, and other missile component test facilities required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.				
FY 2012 Plans: Continue all efforts of FY2011.				
FY 2013 Plans: Continue all efforts of FY2012.				
Title: Naval Air Warfare Center Weapons Division (NAWCWD) Command		52.376	49.467	48.185
		Articles: 0	0	0
Description: This project funds the overhead/institutional costs required to sustain the NAWCWD MRTFB Test and Evaluation capabilities.				
FY 2011 Accomplishments: NAWCWD Command. Continued to reimburse the Command for General and Administrative Support services. Continued to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Additional funds for utility costs increased due to implementation of Department of Defense Inspector General utility charging findings.				
FY 2012 Plans:				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0653: <i>NAWC Weapons Division</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Continue all efforts of FY2011.				
FY 2013 Plans: Continue all efforts of FY2012.				
Accomplishments/Planned Programs Subtotals		153.459	140.716	143.110
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
Not applicable.				
E. Performance Metrics				
Maintain Major Range Test Facility Base infrastructure in a ready state to provide between 4,300-4,800 range hours, 125-150 aerial target presentations, 400-450 surface target presentations, 11,000-11,500 ordnance test hours, and over 6,000 flight hours in support of multiple Navy and Department of Defense acquisition programs and fleet training.				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0654: <i>NAWC Acft Division</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0654: <i>NAWC Acft Division</i>	122.137	95.311	97.492	-	97.492	96.051	96.661	97.404	98.852	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funds for the maintenance and operations of the Naval Air Warfare Center Aircraft Division's (NAWCAD's) Major Range Test Facility Base (MRTFB) capabilities used to conduct test and evaluation for air platforms. NAWCAD has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft Research Development Test and Evaluation. This includes 50,000 square miles of airspace, 39,375 square miles of sea space, and 7,950 acres of land space. Product areas include aircraft systems flight test and evaluation, carrier suitability certification, test article preparation, installed system test and evaluation, and modeling and simulation support of the acquisition process. The Test and Evaluation Group, Patuxent River, performs development and operational test and evaluation of manned and unmanned air vehicle systems, including mission systems, equipment, subsystems, components, and support systems. This project also provides test and evaluation facilities for air-breathing propulsion systems and extensive facilities for conducting both installed and uninstalled aircraft engine development and test and evaluation. This project funds costs that are not chargeable to customers.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Atlantic Ranges	25.065	23.275	24.220
Articles:	0	0	0
Description: This project funds the overhead/institutional costs required to sustain the MRTFB capabilities associated with the Atlantic Ranges and Facilities and Air Vehicle Modification and Instrumentation. These facilities provide safe, instrumented, controlled flight testing and training in air, sea, and land arenas.			
FY 2011 Accomplishments: Atlantic Ranges. Continued to maintain and operate mission essential/core test support resources. These resources included test article instrumentation and/or modification for Flight Test Aircraft and Weapons Under Test as well as, ground and flight test instrumentation systems, range instrumentation systems and data processing and communication systems required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increased for the Aircraft Prototype Facility.			
FY 2012 Plans: Continue all efforts of FY2011.			
FY 2013 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0654: <i>NAWC Acft Division</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Continue all efforts of FY2012.				
<p>Title: Electromagnetic Environmental Effects and Air Combat Environment Test and Evaluation Facility</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities associated with Electromagnetic Environmental Effects (E-Cubed) and Air Combat Environment Test and Evaluation Facility (ACETEF). These facilities provide Test & Evaluation (T&E) support with integrated, interactive, and repeatable synthetic environments and reduce the risk and cost for programs with the use of installed systems tests to include simulation and stimulation tools, techniques and technologies.</p> <p>FY 2011 Accomplishments: E-Cubed and ACETEF. Continued to maintain and operate mission essential/core test support resources required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p>FY 2012 Plans: Continue all efforts of FY2011.</p> <p>FY 2013 Plans: Continue all efforts of FY2012.</p>		21.226 0	19.692 0	20.355 0
<p>Title: Propulsion Systems Test Facility</p> <p align="right">Articles:</p> <p>Description: This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Propulsion System Evaluation facility. These facilities perform T&E of propulsion systems in the laboratories, engine test chambers and component test rigs of the Propulsion Systems Test Facility and the Aircraft T&E Facility. Propulsion Systems consists of engines, engine components and accessories.</p> <p>FY 2011 Accomplishments: Continued to maintain and operate mission essential/core test support resources required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations.</p> <p>FY 2012 Plans: Continue all efforts of FY2011.</p> <p>FY 2013 Plans:</p>		4.469 0	4.200 0	4.335 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0654: <i>NAWC Acft Division</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
Continue all efforts of FY2012.				
Title: Threat/Target Systems Description: This project funds the overhead/institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities of the Threat/Target Systems facilities. These facilities provide the airborne and seaborne threats for test and evaluation. FY 2011 Accomplishments: Threat/Target Systems. Continued to maintain and operate mission essential/core test support resources associated with airborne and seaborne targets required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2012 Plans: Continue all efforts of FY2011. FY 2013 Plans: Continue all efforts of FY2012.		2.361 0 Articles:	1.564 0	1.637 0
Title: Naval Test Wing Atlantic Description: This project funds the overhead/institutional costs required to sustain the MRTFB capabilities of the Naval Test Wing Atlantic. These facilities provide support for Naval Aviation Systems Team aircraft, engaged in or supporting T&E aircraft systems. FY 2011 Accomplishments: Naval Test Wing Atlantic. Continued to maintain and operate mission essential/core test support resources associated with 23 aircraft and related systems and flight test safety required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Increased to support additional chase and tanker aircraft required to support F/A-18E/F/G and Joint Strike Fighter. FY 2012 Plans: Continue to maintain and operate mission essential/core test support resources associated with 12 aircraft and related systems and flight test safety required to meet customer test workload. Funds civilian labor, travel, transportation, equipment, supplies,		41.850 0 Articles:	22.694 0	22.963 0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 0654: <i>NAWC Acft Division</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. FY 2013 Plans: Continue all efforts of FY2012.				
Title: Naval Air Warfare Center Aircraft Division (NAWCAD) Command Description: This project funds the overhead/institutional costs required to sustain the NAWCAD MRTFB Test and Evaluation capabilities. FY 2011 Accomplishments: Naval Air Warfare Center Aircraft Division (NAWCAD) Command. Continued to reimburse the Command for General and Administrative Support services. Continued to fund civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain Major Range Test Facility Base (MRTFB) operations. Continued all efforts of FY2010 except for the funding of Naval Marine Corps Intranet equipment which was realigned to different program element. FY 2012 Plans: Continue all efforts of FY2011. FY 2013 Plans: Continue all efforts of FY2012.		27.166 0	23.886 0	23.982 0
		Articles:		
Accomplishments/Planned Programs Subtotals		122.137	95.311	97.492
C. Other Program Funding Summary (\$ in Millions) N/A				
D. Acquisition Strategy Not applicable.				
E. Performance Metrics Maintain MRTFB infrastructure in a ready state to provide between 8,700-9,200 range hours, 4,900-5,300 chamber hours, 9,500-10,000 Electromagnetic Environmental Effects test hours, and over 10,000 flight hours in support of multiple Navy and Department of Defense acquisition programs and fleet training.				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2921: <i>Pacific Missile Range Facility</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2921: <i>Pacific Missile Range Facility</i>	5.200	5.220	5.371	-	5.371	5.446	5.534	5.616	5.660	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program provides continuing maintenance and operations support for Test & Evaluation (T&E) related capabilities at the Pacific Missile Range Facility (PMRF) located at Barking Sands on Kauai, HI. PMRF's T&E capabilities include precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), and Stabilized High-accuracy Optical Tracking System (SHOTS). These assets support Navy, Department of Defense, and Army Missile Defense Test & Evaluation. This project funds costs not chargeable to customers. Effective FY 12 and out, PMRF instrumentation will be phased out due to large funding reductions.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: PMRF	5.200	5.220	5.371
Articles:	0	0	0
Description: This project funds the overhead/institutional costs required to sustain the recognized Major Range Test Facility Base (MRTFB) capabilities at PMRF in accordance with Department of Defense Directive 3200.11.			
FY 2011 Accomplishments: PMRF Test and Evaluation Assets. Continued to maintain and operate mission essential/core test support resources including the precision radar and telemetry assets, the MATSS, the SHOTS, and the Telemetry Systems required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimbursed the Command for General and Administrative support services.			
FY 2012 Plans: Effective FY 12 and out, PMRF instrumentation will be phased out due to large funding reductions.			
FY 2013 Plans: Continue all efforts of FY2012.			
Accomplishments/Planned Programs Subtotals	5.200	5.220	5.371

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

N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2921: <i>Pacific Missile Range Facility</i>

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Maintain Major Range Test Facility Base infrastructure in a ready state to provide between 600-1,000 range hours in support of multiple Navy and Department of Defense acquisition programs and fleet training.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2922: <i>MRTFB Maint & Repair</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2922: <i>MRTFB Maint & Repair</i>	21.192	21.026	22.333	-	22.333	22.339	23.045	23.283	23.472	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funding for the maintenance and repair of the Major Range Test Facility Base (MRTFB) Real Property Maintenance Activities (RPMA) at the Naval Air Warfare Center Weapons Division (NAWCWD), the Naval Air Warfare Center Aircraft Division (NAWCAD), and the Atlantic Undersea Test and Evaluation Center (AUTEC). Funds mission critical emergency services, recurring maintenance and repair, and major repair projects. In addition it addresses priority items on the Backlog of Maintenance and Repair list.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Facility Maintenance and Repair	21.192	21.026	22.333
Articles:	0	0	0
Description: Maintenance and repair of the MRTFB RPMA at NAWCWD, NAWCAD, and AUTEC.			
FY 2011 Accomplishments: Facility Maintenance and Repair. Continued to support mission critical emergency services, recurring maintenance and repair, and minor and major repair efforts at NAWCWD, NAWCWD, and AUTEC. FY11 budget funds MRTFB facility to 90% of DoD sustainment model.			
FY 2012 Plans: Continue all efforts of FY2011.			
FY 2013 Plans: Continue all efforts of FY2012.			
Accomplishments/Planned Programs Subtotals	21.192	21.026	22.333

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

N/A

D. Acquisition Strategy

Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 2922: <i>MRTFB Maint & Repair</i>

E. Performance Metrics

Maintain the 141, 357, and 784 building/structures at AUTECH, NAWCAD, and NAWCWD respectively. Execute 15-20 major repair projects per year to address mission critical services.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3029: <i>T&E Policy Support</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3029: <i>T&E Policy Support</i>	0.778	0.748	0.774	-	0.774	0.758	0.767	0.774	0.780	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides funds to support Test and Evaluation (T&E) policy, transformation, programming, requirements validation, and T&E dispute arbitration and resolution in an evolutionary acquisition environment. This expertise is also used as required to support the completion of the Navy T&E mission including oversight of T&E plans for Navy and Joint acquisition programs, liaison with other agencies on T&E matters, development of T&E strategic plans, conduct of T&E studies and assessments, formulation and validation of T&E capability needs, assessment and support of future testing of formal acquisition programs, and identification of Science and Technologies required to support T&E of future acquisition programs.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: T&E Policy & Requirements Validation Support	0.778	0.748	0.774
Articles:	0	0	0
Description: T&E policy and requirements validation.			
FY 2011 Accomplishments: T&E Policy & Requirements Validation Support. Continued to provide funding for labor, material, and travel in support of the T&E policy and requirements validation.			
FY 2012 Plans: Continue all efforts of FY2011.			
FY 2013 Plans: Continue all efforts of FY2012.			
Accomplishments/Planned Programs Subtotals	0.778	0.748	0.774

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

N/A

D. Acquisition Strategy

Not applicable.

E. Performance Metrics

Assess and validate requirements for over 25 Navy and Joint test capability investments per year.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3154: <i>Nanoose and Dabob Bay Ranges</i>	12.019	11.773	12.076	-	12.076	12.003	12.239	12.368	12.460	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides maintenance and operations support for the Nanoose and Dabob Bay Ranges along with associated support systems to provide Test and Evaluation (T&E) and readiness assessment services for acquisition programs and the Fleet. Operates ocean-based environment, measurement and support systems. Maintains and repairs systems that measure warfare system performance. Oversees test, training, and measurement facilities, equipment, operations and maintenance processes. Satisfies customer exercise and measurement requirements through the operation of ocean based test and measurement systems. Assures the readiness of systems through the implementation of calibration, maintenance, repair and life cycle processes. Performs exercise planning, exercise interpretation and development of surrogate environments, measurement and support systems. Assists in the design, fabrication and testing of systems for Undersea Warfare warfare environment simulation and performance measurement. Oversees the manning and maintenance of Naval Undersea Warfare Center Division Keyport range craft and range craft systems.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Undersea Ranges	12.019	11.773	12.076
Articles:	0	0	0
Description: This project funds the overhead/Institutional costs required to sustain the Major Range Test Facility Base (MRTFB) capabilities at the Nanoose and Dabob Bay undersea tracking ranges.			
FY 2011 Accomplishments: Undersea Ranges. Continued to maintain and operate mission essential/core test support resources associated with the unique test environments for T&E of undersea weapons, sensors, submarines and other undersea systems required to meet customer test workload. Funded civilian labor, travel, transportation, equipment, supplies, communication, equipment maintenance, purchased service contracts, annual utilities and any costs necessary to manage and sustain MRTFB operations. Reimbursed the Command for General and Administrative support services.			
FY 2012 Plans: Undersea Ranges. Continue all efforts of FY2011.			
FY 2013 Plans: Undersea Ranges. Continue all efforts of FY2012.			
Accomplishments/Planned Programs Subtotals	12.019	11.773	12.076

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605864N: <i>Test & Evaluation Support</i>	PROJECT 3154: <i>Nanoose and Dabob Bay Ranges</i>

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

D. Acquisition Strategy
Not applicable.

E. Performance Metrics
Maintain Major Range Test Facility Base infrastructure in a ready state to provide between 1,600-2,000 range hours in support of multiple Navy and Department of Defense acquisition programs and fleet training.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	15.592	16.634	16.399	-	16.399	16.711	16.894	17.162	17.507	Continuing	Continuing
0831: <i>OPTEVFOR Support</i>	15.151	16.163	15.920	-	15.920	16.223	16.400	16.659	16.993	Continuing	Continuing
2923: <i>Navy JT&E Support</i>	0.441	0.471	0.479	-	0.479	0.488	0.494	0.503	0.514	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element (PE) provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding for headquarters annual operating costs and ensures COMOPTEVFOR compliance with Secretary of Defense (SECDEF) and Secretary of the Navy (SECNAV) directives to conduct independent operational testing and evaluation. Funding supports planning, conducting, and reporting on the operational effectiveness and suitability of new and improved systems and recommending fleet usage to the Chief of Naval Operations (CNO). Funding also supports ongoing development and implementation of new requirements relative to integrated testing. The CNO, as well as acquisition executives and managers at all levels, have a continuing need for expeditious and efficient conduct of Operational Test and Evaluation (OT&E) by COMOPTEVFOR in support of training and equipping fleet forces. To this end, this funding supports COMOPTEVFOR's continued pursuit of a variety of senior management initiatives aimed at increasing efficiencies in T&E; these senior management initiatives include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation, thus ensuring delivery to fleet units of fully tested and capable combat systems. OT&E issues have direct long term Navy-wide implications on the Fleet's readiness and war fighting capability. Rapid advances in technology, changes in fleet tactics, and increased complexity of weapons systems and platforms, combined with reductions in manpower, force structure, and budgets have created an increased need for technical and operational analyses that are sophisticated and timely in order to ensure an optimal return on investment of Navy resources. Funding is also provided for Navy support of the Office of the Secretary of Defense (OSD) sponsored Joint Test and Evaluation (JT&E) program.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>
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B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	15.746	16.634	16.829	-	16.829
Current President's Budget	15.592	16.634	16.399	-	16.399
Total Adjustments	-0.154	-	-0.430	-	-0.430
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.074	-			
• Program Adjustments	-	-	-0.430	-	-0.430
• Rate/Misc Adjustments	-	-	-	-	-
• Congressional General Reductions Adjustments	-0.080	-	-	-	-

Change Summary Explanation

Technical: N/A

Schedule: N/A

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>	PROJECT 0831: <i>OPTEVFOR Support</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0831: <i>OPTEVFOR Support</i>	15.151	16.163	15.920	-	15.920	16.223	16.400	16.659	16.993	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This program element (PE) provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding for headquarters annual operating costs and ensures COMOPTEVFOR compliance with Secretary of Defense (SECDEF) and Secretary of the Navy (SECNAV) directives to conduct independent operational testing and evaluation. Funding supports planning, conducting, and reporting on the operational effectiveness and suitability of new and improved systems and recommending fleet usage to the Chief of Naval Operations (CNO). Funding also supports ongoing development and implementation of new requirements relative to integrated testing. The CNO, as well as acquisition executives and managers at all levels, have a continuing need for expeditious and efficient conduct of Operational Test and Evaluation (OT&E) by COMOPTEVFOR in support of training and equipping fleet forces. To this end, this funding supports COMOPTEVFOR's continued pursuit of a variety of senior management initiatives aimed at increasing efficiencies in T&E; these senior management initiatives include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation, thus ensuring delivery to fleet units of fully tested and capable combat systems. OT&E issues have direct long term Navy-wide implications on the Fleet's readiness and war fighting capability. Rapid advances in technology, changes in fleet tactics, and increased complexity of weapons systems and platforms, combined with reductions in manpower, force structure, and budgets have created an increased need for technical and operational analyses that are sophisticated and timely in order to ensure an optimal return on investment of Navy resources. Funding is also provided for Navy support of the Office of the Secretary of Defense (OSD) sponsored Joint Test and Evaluation (JT&E) program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: OPTEVFOR SUPPORT	15.151	16.163	15.920
Articles:	0	0	0
Description: The CNO increased funding program support for COMOPTEVFOR beginning FY 2011 and beyond to support ongoing pursuit of a variety of senior management initiatives aimed at increasing efficiencies in T&E; new senior management initiatives include IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation, thus ensuring delivery to fleet units of fully tested and capable combat systems.			
FY 2011 Accomplishments: - Continued to operationally test and evaluate CNO projects commensurate with authorized funding level.			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>	PROJECT 0831: <i>OPTEVFOR Support</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
<p>- Continued to maintain level of effort associated with the DoD 5000-acquisition guidance, which requires increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations.</p> <p>- Implemented senior management initiatives aimed at increasing efficiencies in T&E including IT database and decision making technology upgrades, implementation of Integrated Testing and Mission Based Test Design across all programs, and improved civilian staffing and expertise in the areas of DON acquisition processes, Modeling and Simulation, Statistical Studies, Cost Analysis, Information Assurance, and similar disciplines. All of these senior management initiatives are aimed at improving the quality of testing and evaluation, thus ensuring delivery to fleet units of fully tested and capable combat systems.</p> <p><i>FY 2012 Plans:</i></p> <p>- Continue all efforts of FY11.</p> <p>- Complete implementation of senior management initiatives above (IT database and decision making technology upgrades, implementation of Mission Based Test Design across all programs, improved civilian staffing expertise in areas previously indicated).</p> <p><i>FY 2013 Plans:</i></p> <p>- Continue all efforts of FY12.</p> <p>- Continue application and evaluation and improvement of senior management initiatives implemented in previous years (IT database and decision making technology upgrades, implementation of Mission Based Test Design across all programs, improved staffing expertise in areas previously indicated).</p>			
Accomplishments/Planned Programs Subtotals	15.151	16.163	15.920

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

As indicated in section A above, funding provides for core headquarters operations and support (O&S) costs related to required operational testing and evaluation (T&E) conducted in support of Navy acquisition programs. The preponderance of funding provides for the annual O&S costs for day to day operations of the staff/headquarters of COMOPTEVFOR, located in Norfolk, Virginia. (Pursuant to DoD Financial Management Regulations and Navy financial policy guidance, as a T&E activity, COMOPTEVFOR's annual support costs are funded via RDTEN vice OMN; hence, and unlike most RDT&EN programs, these funds provide for O&S costs typical of military field commands/activities). Within this project, over 1/2 of the funding supports salaries of assigned civilian personnel. The remaining funds provide for other routine support costs such as travel, IT support, supplies, and other overhead/administrative support costs. The primary metric used within the project involves

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0605865N: <i>Operational Test & Eval Capability</i>	0831: <i>OPTEVFOR Support</i>

support for scheduled Navy acquisition program testing and subsequent analysis and reporting of results of testing to appropriate senior Navy acquisition officials and to the Navy chain of command directly to the CNO and various OPNAV/SECNAV staff offices. The performance goal is met when all assigned/scheduled testing and reporting is supported each year. Specific test program success is measured through analytic results of testing conducted throughout the year and constant interaction with program offices, acquisition decision makers, OPNAV staff resource sponsor offices, OSD and other service T&E offices/activities, and miscellaneous other customers/stakeholders. This project also supports testing and evaluation of various Joint/multi-service programs in which the Navy shares responsibilities in support of the acquisition community. The following metrics relate directly to the funding provided and are applicable to current operations.

Number of Tests Conducted - FY11 = 110; FY12 = 119; FY13 = 119
Number of Programs Supported - FY11 = 420; FY12 = 425; FY13 = 425

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605865N: <i>Operational Test & Eval Capability</i>	PROJECT 2923: <i>Navy JT&E Support</i>
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COST (\$ in Millions)	FY 2011		FY 2012		FY 2013		FY 2014		FY 2015		FY 2016		FY 2017		Cost To Complete	Total Cost
2923: <i>Navy JT&E Support</i>	0.441	0.471	0.479	-	0.479	0.488	0.494	0.503	0.514	Continuing	Continuing					
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0							

A. Mission Description and Budget Item Justification

This project provides funding for Navy support of the OSD-sponsored JT&E program. This funding covers cost associated with facilities, personnel, and administrative support for T&E-focused Navy-led Joint Feasibility Studies and Joint Tests to ensure Navy compliance with requirements established by directive from the SECDEF to carry out the JT&E program. The funding is used for planning, conducting, and reporting the results of T&E-focused JT&E projects to assess the interoperability of recommendations on improvements in joint technical and operational concepts, to evaluate and validate testing methodologies having multi-service application, to assess technical or operational performance of interrelated and/or interacting systems under realistic joint operational conditions, and to provide data from joint field tests and exercises with which to validate models, simulations, and test beds. This funding is essential for Navy participation with the other services in these critical joint areas.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: JOINT TEST & EVALUATION			
Articles:	0.441 0	0.471 0	0.479 0
FY 2011 Accomplishments: - Continue to support JT&E projects as directed by the JT&E Senior Advisory Council.			
FY 2012 Plans: - Continue all efforts of FY11.			
FY 2013 Plans: - Continue all efforts of FY12.			
Accomplishments/Planned Programs Subtotals	0.441	0.471	0.479

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

This project supports testing and evaluation of various Joint/multi-service programs in which the Navy shares responsibilities in support of the acquisition community.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	9.140	4.223	4.579	5.200	9.779	4.605	4.570	4.778	4.888	Continuing	Continuing
0706: <i>EMC & RF Mgmt</i>	8.507	3.622	3.992	5.200	9.192	4.014	3.983	4.192	4.290	Continuing	Continuing
0739: <i>Navy C2 Top Level</i>	0.633	0.601	0.587	-	0.587	0.591	0.587	0.586	0.598	Continuing	Continuing

A. Mission Description and Budget Item Justification

Project 0706, Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management: Develops advanced technology to identify and reduce EMI sources from Navy systems research and development technology to develop top-level plans and space systems in the Space and Electronic Warfare (SEW) mission area. The Space and Electronic Warfare Shipboard Electromagnetic Compatibility Improvement Program (SEMCIP) is an element of the Electromagnetic Compatibility (EMC) Systems Engineering Program.

Project 0739, Navy Command, Control, Communications, Computers, and Intelligence (C4I) Top Level Requirements - This project provides analysis of both Fleet requirements and research and development technology to develop top-level plans and space systems in the Space and Electronic Warfare (SEW) mission area. The Space and Electronic Warfare Studies and Analysis Program (SEWSAP) supports analyses of fleet requirements and research and development technology to develop top-level plans for operating Navy Command, Control, Communications, Intelligence, Surveillance and Reconnaissance (C4ISR) and space systems in the SEW mission area.

Overseas Contingency Operations (OCO) Request: Combat Enabler in Theatre Operation Iraqi Freedom (OIF) and Operation Enduring Freedom - Afghanistan (OEF-A) - Joint Emitters during the continuing OCO operations was a source of debilitating electromagnetic interference to critical United States Navy (USN) Air Operations (OPS) and Ballistic Missile Defense (BMD) assets.

In-Theater and Pre-Deployment OIF and OEF-A: Will address impact of upgrades to deploying ships and development of electromagnetic interference solutions for the deploying strike group.

JUSTIFICATION FOR BUDGET ACTIVITY:

This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations and installations required for general research and development use.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
1319: <i>Research, Development, Test & Evaluation, Navy</i>	PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>
BA 6: <i>RDT&E Management Support</i>	

B. Program Change Summary (\$ in Millions)	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	4.013	4.228	4.674	-	4.674
Current President's Budget	9.140	4.223	4.579	5.200	9.779
Total Adjustments	5.127	-0.005	-0.095	5.200	5.105
• Congressional General Reductions	-	-0.005			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.050	-			
• Program Adjustments	5.200	-	-0.002	5.200	5.198
• Rate/Misc Adjustments	-	-	-0.093	-	-0.093
• Congressional General Reductions Adjustments	-0.023	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0706: <i>EMC & RF Mgmt</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0706: <i>EMC & RF Mgmt</i>	8.507	3.622	3.992	5.200	9.192	4.014	3.983	4.192	4.290	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management. This project develops tools, processes, and algorithms to identify and reduce EMI sources for Navy systems and platforms.

(a) Automated spectrum capabilities will be enhanced to comply with fleet operational requirements and streamline Strike Force frequency management processes. It will provide automated Spectrum Management (SM) tools for development of operational task communication and radar/weapon plans to support fleet deployments, exercises, contingency operations, and the war on terrorism. It will provide identification and mitigation of EMI in Navy, North Atlantic Treaty Organization (NATO), Allied, Ashore and Joint Combat Operations.

(b) It will support the Shipboard Electromagnetic Compatibility Improvement Program (SEMCIP), an element of the Electromagnetic Compatibility (EMC) Systems Engineering Program to identify, engineer, and evaluate effectiveness of potential EMI corrections.

(c) Electromagnetic Pulse (EMP) Survivability Program assesses the EMP survivability of all mission critical systems and funds development of a hardness assurance and maintenance program. Develops improved modeling capability to reduce hardness validation costs at delivery and over the lifetime of the system/platform. Provides design criteria, test methodology, test limits, and survivability validation procedures for all Navy systems, ships, submarines and shore facilities.

(d) Advanced Technology: Investigates below deck electromagnetic environmental effects and develops the capability to perform remote spectrum monitoring and electromagnetic noise monitoring. Also, develops the tools and technologies for innovative and efficient spectrum use, and continues the development of relationships between measured EMI and system performance for selected communications systems.

(e) FY11 OCO Planned Program funds will be used for Combat Enabler in Theater OIF / OEF-A and Pre-Deployment OIF / OEF-A.

(f) FY13 Overseas Contingency Operations (OCO) Request: Combat Enabler in Theatre Operation Iraqi Freedom (OIF) and Operation Enduring Freedom - Afghanistan (OEF-A) - Joint Emitters during the continuing OCO operations was a source of debilitating electromagnetic interference to critical United States Navy (USN) Air Operations (OPS) and Ballistic Missile Defense (BMD) assets.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: AESOP (Integrated CPM and EMCAP)	0.691	0.700	0.692	-	0.692
Articles:	0	0	0		0

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0706: <i>EMC & RF Mgmt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
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FY 2011 Accomplishments:
Institutionalized frequency management process for operational fleet by developing procedures that can be utilized by strike groups. Made recommendations to update existing combatant commands, and numbered fleet directives regarding spectrum use in their areas of responsibility. Coordinated with Navy stakeholders regarding impacts of spectrum relocation for systems (based on the National Broadband Plan (NBP). Updated the AESOP with the new radiation restrictions that reflect current legal requirements that resulted from spectrum re-allocations.

FY 2012 Plans:
Initiate frequency management coordination with NATO/Coalition partners to enhance operational capability of spectrum management analysis tools used by Operational Fleet. Continue to monitor the National Broadband Plan, provide analysis capability to support National Level recommendations, and update spectrum radiation restrictions.

FY 2013 Base Plans:
Continue frequency management coordination with NATO/Coalition partners to enhance operational capability of spectrum management applications used by Operational Fleet. Continue to monitor the National Broadband Plan, provide analysis capability to support National Level recommendations, and update spectrum radiation restrictions. Update the AESOP application with NATO/Coalition/National Spectrum requirements and distribute to all commands.

<i>Title:</i> EMC Systems Engineering (SEMCIP)	1.500	1.030	1.000	-	1.000
<i>Articles:</i>	0	0	0		0

FY 2011 Accomplishments:
Identified and characterized EMI which can debilitate the Combat capability of strike force capability and operational readiness. Focused in on Ku-Band Common Data Link (CDL) and next generation systems (Commercial Broadband SATCOM Program and High Frequency Synthetic Aperture Radar (HF SAR)). Evaluated the effectiveness of proposed EMI solutions and coordinate for procurement of final EMI fix.

FY 2012 Plans:
Continue efforts to identify and characterize EMI which can debilitate the Combat capability of strike force capability and operational readiness. Focus in on the next generation radars [i.e., AN/SPY-3 and the Multi-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0706: <i>EMC & RF Mgmt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
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Function Radar (MFR)]. Evaluate the effectiveness of proposed EMI solutions and coordinate for procurement of final EMI fix.					
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FY 2013 Base Plans: Continue efforts to identify and characterize EMI which can debilitate the Combat capability of strike force capability and operational readiness. Focus in on the Navy's Air and Missile Defense Radar (AMDR) program and consolidated Satellite Communications (SATCOM)/Communication stacked antenna technology. Evaluate the effectiveness of proposed EMI solutions and coordinate for integration/procurement of final EMI fix.					
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Title: EMP Survivability	1.001	1.050	1.200	-	1.200
Articles:	0	0	0		0

FY 2011 Accomplishments: Developed and published EMP Certification process in accordance with Military Standard (MIL-STD) 188-125 High-Altitude Electromagnetic Pulse (HEMP) Protection for Ground-Based C41 Facilities. Supported Navy and Defense Threat Reduction Agency (DTRA) in the development of a Maritime EMP Standard.					
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FY 2012 Plans: Continue development of a Maritime EMP Standard. Perform shipboard testing aboard decommissioned platforms to attain required parametric information to complete standard requirements. Support development of new technologies to harden ashore sites and mission critical systems from a nuclear blast.					
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FY 2013 Base Plans: Investigate capabilities to improve shipboard corrosion resistance and ensure reduced life cycle costs of EMP hardening materials. Develop improved modeling capability to reduce hardness validation costs at ship delivery and over the lifetime of the system and platforms. Work with new ship program managers to ensure best practices for EMP hardness are incorporated in system and ship design; publish best practice guide. Work with ship program managers to ensure appropriate EMP hardness assurance and maintenance programs are in place to maintain the designed-in EMP survivability.					
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Title: Advanced Technology	0.115	0.842	1.100	-	1.100
Articles:	0	0	0		0

FY 2011 Accomplishments:					
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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0706: <i>EMC & RF Mgmt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
<p>Initiated research into spectrum efficiency studies to allow radars and communication systems to operate compatible in the electromagnetic (EM) battlespace. Reviewed available technologies and publish an Information Dominance Roadmap for Electromagnetic Spectrum (EMS) Usage and Control.</p> <p>FY 2012 Plans: Continue research into spectrum efficiency studies to allow radars and communication systems to operate compatibly in the EM battle space. Develop a dynamic spectrum operations schema to collect information from spectrum dependent systems and allocate the electromagnetic spectrum - on the fly - mitigating electromagnetic interference. Demonstrate concept on a single platform or land-based test site.</p> <p>FY 2013 Base Plans: Publish Phase 2 of the Information Dominance Roadmap, detailing total ownership costs (TOC), and refine the action plan to identify top level Navy investments that will make a significant technological advancement in the effort to provide real-time spectrum operations. Initiate the acquisition processes and procedures, and architecture protocols to support the new schema, and issue to industry for review and comment. Publish new governance and standards to ensure new systems are developed with the correct interfaces to allow proper spectrum control.</p>					
<p>Title: Overseas Contingency Operations (OCO)</p> <p align="right">Articles:</p> <p>FY 2011 Accomplishments: (\$1.900) Combat Enabler in Theater (Overseas Contingency Operation - OCO) Operation Iraqi Freedom (OIF) and Operation Enduring Freedom - Afghanistan (OEF-A): Joint Emitters during the continuing OCO operations was a source of debilitating Electromagnetic Interference (EMI) to critical air operations and BMD assets. In response to FY11 OIF and OEF-A requirements, funding will be used to expand afloat and ashore spectrum management tools to address the critical need for interoperability with the USMC's spectrum management applications and put into place a joint capability for the warfighter. USN/USMC integration promotes interoperability with the multi-national deployed forces fighting the OCO and decreases the risk of friendly fire incidents. Accurate and timely information on the interoperability of USN and USMC systems provided by this joint capability leverages the response of both the USN and USMC to OCO. Increased situational awareness, reduction of interference, and restored mission capability are all expected benefits of the improved processes and procedures. The requested funds will deliver a joint capability system that allows group planning and execution, information data discovery, data interoperability, and data fusion to USN and USMC forces directly supporting OIF and the OCO. Data tasking and deliverables are classified.</p>	5.200 8	-	- 0	5.200 8	5.200 8

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0706: <i>EMC & RF Mgmt</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
<p>(\$3.300) In-Theater & Pre-Deployment (OCO) OIF and OEF-A: Funding to address impact of upgrades to deploying ships and development of an EMI solution for the deploying strike group. This funding will be used to evaluate and mitigate potential EMI problems that may be introduced as the fleet continues to field additional variants of combat systems and commission new ships. Timely development of EMI solutions restores combat capability lost due to EMI. In theater requirements demand an acceleration of the development of EMI solutions & prototype hardware (in theater) in order to prompt EMI mitigation. Evaluation of short-term and long-term EMI fix evaluation on deploying ships is required to determine optimum EMI solution. Funds requested support the procurement and installation of EMI Solutions within 12 months for strike groups and independent deployers. Higher operating tempo and incremental costs associated with increased pace of Fleet Deployments drive an accelerated response to the development of EMI Fixes which then supports higher usage of equipment (rate of return) and extends communication capabilities.</p> <p>FY 2013 Base Plans: N/A</p> <p>FY 2013 OCO Plans: (\$2.200) Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems and platforms.</p> <p>Combat Enabler in Theater: Joint Emitters during the OCO operations was a source of debilitating Electromagnetic Interference (EMI) to critical air operations and BMD assets. Funding will be used to expand afloat and ashore spectrum management tools to address the critical need for interoperability. USN/USMC integration promotes interoperability with the multi-national deployed forces fighting the OCO and decreases the risk of friendly fire incidents. Increased situational awareness, reduction of interference, and restored mission capability are all expected benefits of the improved processes and procedures. The requested funds will deliver a Joint capability system that allows group planning and execution, information data discovery, data interoperability, and data fusion to USN and USMC forces directly supporting OCO OPS.</p> <p>(\$3.000) Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems and platforms.</p> <p>In-Theater & Pre-Deployment: Funding to address actions taken to restore units to a desired level of combat capability. Upgrades to deploying ships and development of EMI solution for the deploying strike group.</p>					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0706: <i>EMC & RF Mgmt</i>

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
This funding will be used to evaluate and mitigate potential EMI problems that may be introduced as the fleet continues to field additional variants of combat systems and commission new ships. Timely development of EMI solutions restores combat capability lost due to EMI. Evaluation of short-term and long-term EMI fix evaluation on deploying ships is required to determine optimum EMI solution.					
Accomplishments/Planned Programs Subtotals	8.507	3.622	3.992	5.200	9.192

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

N/A

D. Acquisition Strategy

An acquisition strategy is not required.

E. Performance Metrics

Performance metrics will consist of quarterly program reviews.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0739: <i>Navy C2 Top Level</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0739: <i>Navy C2 Top Level</i>	0.633	0.601	0.587	-	0.587	0.591	0.587	0.586	0.598	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

This project provides analysis of both Fleet requirements and research and development technology, to develop top-level plans and space systems in the Space and Electronic Warfare (SEW) mission area. The Space and Electronic Warfare Studies and Analysis Program (SEWSAP) supports analyses of Fleet requirements and research and development technology to develop top-level plans for operating Navy Command, Control, Communications, Intelligence, Surveillance and Reconnaissance (C4ISR) and space systems in the SEW mission area.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Title: Navy C2 Top Level	0.633	0.601	0.587	-	0.587
Articles:	0	0	0		0
FY 2011 Accomplishments:					
Initiated and completed studies supporting resource and requirement decisions in the Planning, Programming, and Budgeting Execution (PPBE) System; FORCEnet Fleet experiments; FORCEnet Architecture selection; evaluation of Tactics, Techniques and Procedures (TTP); alignment of Science and Technology (S&T) and Research, Development, Test, and Evaluation (RDT&E) efforts with FORCEnet requirements; evaluation and selection of Modeling and Simulation (M&S) tools and scenarios.					
SEWSAP (1) applied previously-developed models and analytical methods to identify areas of highest sensitivity in Command, Control, Communications (C3) performance, (2) extend previous architectural work on Naval operational functions and networks to detailed analyses of C3 and network requirements and, (3) extend previous system engineering results to newly emerging implementation issues.					
FY 2012 Plans:					
Initiate studies supporting resource and requirement decisions in the PPBE System. Conduct FORCEnet Fleet experiments; FORCEnet Architecture selection; evaluation of TTP and Research, Development, Test, and Evaluation (RDT&E) efforts with FORCEnet requirements. Begin evaluation of M&S tools and scenarios.					
FY 2013 Base Plans:					
Continue to initiate and complete studies supporting resource and requirement decisions in the PPBE System. Conduct FORCEnet/Information Dominance Fleet experiments; FORCEnet/Information Dominance Architecture					

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605866N: <i>Navy Space & Electr Warfare Supt</i>	PROJECT 0739: <i>Navy C2 Top Level</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
selection; evaluation of TTP and Research, Development, Test, and Evaluation (RDT&E) efforts with FORCEnet/Information Dominance requirements. Begin evaluation of M&S tools and scenarios.					
Accomplishments/Planned Programs Subtotals	0.633	0.601	0.587	-	0.587

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

N/A

D. Acquisition Strategy

An acquisition strategy is not required.

E. Performance Metrics

Conduct studies and report plans and analysis of Fleet requirements for operating Navy C4ISR and space systems in the space, electronic warfare, and information dominance mission areas.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605867N: <i>Space & Elec War Surv/Recon</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	19.600	7.642	8.000	-	8.000	8.000	8.000	8.000	8.000	Continuing	Continuing
1034: <i>TAC SAT Recon Office</i>	19.600	7.642	8.000	-	8.000	8.000	8.000	8.000	8.000	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Link Crimson program was congressionally chartered in 1977 (updated in 1980) to oversee the tactical use of reconnaissance satellites. The program rapidly develops (1-2 years) prototype systems, sensors, and software that exploit space systems to support tactical Fleet problems. Additionally, Link Crimson focuses on elements of National Intelligence Surveillance and Reconnaissance (ISR) systems and National-Tactical Integration operations to rapidly fill tactical capability gaps via improved, fused, all-source products at multiple security levels. Link Crimson also supports and participates in fleet exercises, which provide the venue for testing and demonstrating new prototype capabilities and enhancements to existing programs into which R&D efforts transition.

This program supports the operations and installations required for general research and development use. Program baseline funds will address research and development into potential unmanned vehicles, irregular warfare, anti-piracy, strike, information operations, battle space and maritime domain awareness (anti-submarine warfare and anti-surface warfare), fusion, visualization, ballistic missile defense (BMD) threats and cross-domain and cyber solutions. Additional information is held at a higher classification.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	19.700	7.642	12.221	-	12.221
Current President's Budget	19.600	7.642	8.000	-	8.000
Total Adjustments	-0.100	-	-4.221	-	-4.221
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	-4.221	-	-4.221
• Congressional General Reductions Adjustments	-0.100	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0605867N: <i>Space & Elec War Surv/Recon</i>

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605867N: <i>Space & Elec War Surv/Recon</i>	PROJECT 1034: <i>TAC SAT Recon Office</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
1034: <i>TAC SAT Recon Office</i>	19.600	7.642	8.000	-	8.000	8.000	8.000	8.000	8.000	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Link Crimson program was congressionally chartered in 1977 (updated in 1980) to oversee the tactical use of reconnaissance satellites. The program rapidly develops (1-2 years) prototype systems, sensors, and software that exploit space systems to support tactical Fleet problems. Additionally, Link Crimson focuses on elements of National Intelligence Surveillance and Reconnaissance (ISR) systems and National-Tactical Integration operations to rapidly fill tactical capability gaps via improved, fused, all-source products at multiple security levels. Link Crimson also supports and participates in fleet exercises, which provide the venue for testing and demonstrating new prototype capabilities and enhancements to existing programs into which R&D efforts transition.

This program supports the operations and installations required for general research and development use. Program baseline funds will address research and development into potential unmanned vehicles, irregular warfare, anti-piracy, strike, information operations, battle space and maritime domain awareness (anti-submarine warfare and anti-surface warfare), fusion, visualization, ballistic missile defense (BMD) threats and cross-domain and cyber solutions. Additional information is held at a higher classification.

The program exploits all national and service sensor systems to improve tactical support to fleet operational commanders. Project also supports equipment upgrades, training and fleet exercises, which provide the venue for testing modifications to existing programs.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: TAC SAT Recon Office	19.600	7.642	8.000
Articles:	0	0	0
FY 2011 Accomplishments:			
Joint Exercise/Training			
Precision Strike/Mission Planning			
Anti-Submarine Warfare			
Improved Info. Management (Dissemination/Exploitation/Fusion/Visualization)			
Information Operations/GWOT and Cyber			
Enterprise ISR Convergence			
FY 2012 Plans:			
Joint Exercise/Training			
Precision Strike/Mission Planning			
Anti-Submarine Warfare			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605867N: <i>Space & Elec War Surv/Recon</i>	PROJECT 1034: <i>TAC SAT Recon Office</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Improved Info. Management (Dissemination/Exploitation/Fusion/Visualization) Information Operations/GWOT and Cyber Enterprise ISR Convergence			
<i>FY 2013 Plans:</i> Joint Exercise/Training Precision Strike/Mission Planning Anti-Submarine Warfare Improved Info. Management (Dissemination/Exploitation/Fusion/Visualization) Information Operations/GWOT and Cyber Enterprise ISR Convergence			
Accomplishments/Planned Programs Subtotals	19.600	7.642	8.000

C. Other Program Funding Summary (\$ in Millions)												
<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u> <u>Base</u>	<u>FY 2013</u> <u>OCO</u>	<u>FY 2013</u> <u>Total</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To Complete</u>	<u>Total Cost</u>	
• O&M,N/1C3C: <i>Space Systems & Surveillance</i>	0.231	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

D. Acquisition Strategy
An acquisition strategy is not required.

E. Performance Metrics
Performance will be evaluated quarterly.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY				R-1 ITEM NOMENCLATURE							
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				PE 0605873M: <i>Marine Corps Program Wide Supt</i>							
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	17.225	25.538	18.490	-	18.490	19.453	20.456	21.494	22.587	Continuing	Continuing
0030: <i>Studies & Analysis/MC</i>	6.352	6.586	5.487	-	5.487	6.063	6.671	7.312	7.990	Continuing	Continuing
0033: <i>OT&E Support</i>	3.565	7.944	8.378	-	8.378	8.568	8.763	8.962	9.163	Continuing	Continuing
2330: <i>Chem Bio Consequence Mgmt</i>	3.139	6.661	1.064	-	1.064	1.173	1.292	1.423	1.567	Continuing	Continuing
2930: <i>Phase 0 Activities</i>	4.169	4.347	3.561	-	3.561	3.649	3.730	3.797	3.867	Continuing	Continuing

A. Mission Description and Budget Item Justification

This program element (PE) provides the analytical foundation for the Marine Corps Studies System (MCSS), including mandated Mission Area Analyses and Cost and Operational Effectiveness Analyses. The MCSS is the front end of the Marine Corps' acquisition system. This PE also supports the material acquisition process as follows: managing the Marine Corps Operational Test and Evaluations (OT&E); providing Chem Bio Consequence Management of capabilities for Weapons of Mass Destruction (WMD) incident response forces; and conducting Phase 0 activities to investigate potential material solutions that validate needs, program costs, business decisions, and prevent undue delays in pursuing priority requirements.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	17.721	25.655	25.572	-	25.572
Current President's Budget	17.225	25.538	18.490	-	18.490
Total Adjustments	-0.496	-0.117	-7.082	-	-7.082
• Congressional General Reductions	-	-0.117			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.016	-			
• SBIR/STTR Transfer	-0.380	-			
• Program Adjustments	-	-	-7.076	-	-7.076
• Rate/Misc Adjustments	-	-	-0.006	-	-0.006
• Congressional General Reductions Adjustments	-0.132	-	-	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0030: <i>Studies & Analysis/MC</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0030: <i>Studies & Analysis/MC</i>	6.352	6.586	5.487	-	5.487	6.063	6.671	7.312	7.990	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Marine Corps Studies System (MCSS) provides oversight on all matters pertaining to studies and operations analysis, to include the Quarterly Call for Studies. This includes the nomination process, approval and prioritization, respository maintenance, and announcement of approved studies for execution.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Studies & Analysis/MC	6.352	6.586	5.487
Articles:	0	0	0
Description: Further integrate Operations and Analysis Division (OAD) analytical activities into a responsive, focused program of research and analyses. Studies result from nominations to produce comprehensive and integrated analyses aligned to Senior Leadership's requirements and decision timelines. A 'call' for studies occurs quarterly and is targeted to a particular audience that understands USMC current and future mission requirements and the need the comprehensive analyses that meets the Commandant's Strategic Goals, saves lives, and utilizes funds efficiently.			
FY 2011 Accomplishments: Multi-year study efforts: Joint External Analysis Analytical Support Contract. Professional Staff Analytical Services Contract specialized analysts to assist with JCIDS analyses. Synthetic Theater Operations Research Model (STORM): STORM emerging as important campaign-level analysis model for Joint Analysis community. Marine Corps warfare enhancements under development make STORM more representative of full-spectrum capabilities of joint force meeting the collaboration and integration goals of the Department of Defense (DoD) Modeling & Simulation (M&S) Strategic Vision. Attrition Calibration/ Combat Sample Generator (ATCAL/COSAGE): Design and implement improvements to the COSAGE model improving overall representation of ground combat in joint, combined arms environment. Includes the COSAGE model Phase II online for use with COSAGE production studies. Define and implement software developmental efforts to implement changes improving the representation of "precision munitions" fired from indirect fire shooters in COSAGE. Force Mobility Analysis Support Tool (FMAST III): Commandant chartered a Force Structure Review Group (FSRG) to examine organization, training, and equipping issues associated with task force organization in global security arena. Measures end-strength, training cycle, and dwell-time impacts on the Marine Corps manpower, operations, and support functions. COMBATXXI: MCCDC Behavior Development and Technical Support: Tasked to conduct the Amphibious Combat Vehicle (ACV) AoA. Requires extensive modification of existing scenarios and development of at least one new scenario. Improvised Explosive Device (IED) Detection and Prevention Tool (IDAPT):			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0030: <i>Studies & Analysis/MC</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Develop a multi-attribute decision model to evaluate mixes of infantry anti-armor weapons for both state-on-state warfare (typified by a significant armored threat) and hybrid conflicts (typified by a negligible armored threat)</p> <p>Aviation Crew Seat Ration Model: Develop optimization model for crew capabilities; USMC Unmanned Aerial System (UAS)</p> <p>Cargo Capabilities: Optimizing the Deployment of Cargo Unmanned Aerial Systems in Logistical Support Missions at the Tactical Level.</p> <p>Intelligence Analysis: Provided an assessment tool, given to military personnel in order to screen and assess a person's capacity to perform higher-level cognitive thinking relating to intelligence analysis skills.</p> <p>USMC Counter Battery Radar Capabilities; Command Control (C2) TECOM; Marine Air and Ground (MAGTF) Capabilities Metrics.</p> <p>IED Statistical Research Analysis: Program of data, statistical, geospatial, and text content research and analysis of events in the CIDNE database to assist the U.S. Marine Corps(USMC) Operations Analysis Division (OAD) in managing the threats to Marines deployed in Afghanistan.</p> <p>Command and Control Training and Education Center of Excellence (C2 TECOE) and Marine Air Ground Task Force (MAGTF) Integrated Systems Training Centers (MISTCs) Mission, Tasks, and Structure to Resources Study. Conduct comparative analysis contrasting the C2 TECOE mission and individual and collective training and education tasking, and its organizational structure, with other like training organizations to accurately define and articulate its resource requirements.</p> <p>Naval Engineering Capacity Required to Support Marine Corps Operations Study: Quantify current capacity and requirements of Navy and Marine engineering support to MAGTF operations along with future capacity requirements through 2025. Identified complementary capabilities, gaps, and redundancies of Navy and Marine engineering capacity to support current Marine Corps operation. Provides alternative solutions that shape Navy and Marine engineering capacity to support MAGTF operations from the present state.</p> <p>Cost Comparison between Actual and Flight Time versus Simulator Time Study: Quantify and qualify factors used in real flight time verses simulated flight time cost comparisons and provide a comparison across transitional Marine Corps aircraft that possess a high fidelity training system. The factual data obtained will standardize the information used in developing procurement plans and leadership briefings for the massive increase in simulator infrastructure coming within the Department of the Navy (DON).</p> <p>Command and Control Airborne (C2 (A)) Analysis of Alternatives (AoA): Evaluated operational effectiveness, suitability, cost, and risks of alternatives that satisfy C2(A) capability gaps. Establish baseline for decision-making by gaining visibility into technology drivers and program risks. AoA supports Program Office and Advocacy recommendations to the Milestone Decision Authority (MDA) for Milestone A Review, as well as satisfy Joint Capabilities Integration and Development System (JCIDS) requirements to facilitate development of the Capability Development Document (CDD).</p> <p>Analytical Support Irregular Warfare Analytic Baseline: Continue support currently provided to the following activities: Irregular Warfare Analytic Baseline; Irregular Warfare Cloud Computing; USMC Anti-Armor Mix Analysis; Command and Control TECOE; MISTC's Mission, Tasks and Structure; Close Combat Missile; Enhanced MAGTF Operations; Evaluation COA for Operational</p>			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0030: <i>Studies & Analysis/MC</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
<p>Cultural Learning in the Trans-Sahel; Expeditionary Energy; Requirement and Effectiveness of Role Players in Training Events; CARF Regression Model Development and Validation; Combat Hunter; COAST Afghanistan Improvised Explosive Device and Engagement Area Analysis; Personnel Casualty Data Archival/Analysis; Counter Improvised Explosive Device Effectiveness Assessment; Vehicle Damage and Casualty Rate Analysis; National Defense University Irregular Warfare Model; G/ATOR Key Performance Parameter Validation; and Electronic Warfare Coordination Cell Capability Analysis.</p> <p>Foreign Area Officer (FAO)/Regional Affairs Officer (RAO) Requirement Study: To assess the overall health of the IAOP, a program to which the Marine Corps commits substantial resources (graduate degree funding, reimbursement of relocation expenses, accrued in-country expenses, etc).</p> <p>Depot Maintenance (DM) Core Logistics Capabilities Determination Study: Analyzed the United States Marine Corps (USMC) Core Maintenance Determination process established well defined, executable methodology for determining, establishing and maintaining DM core logistics capabilities.(workforce, support equipment, infrastructure), as required by law, for those weapon systems that support Joint Chiefs of Staff (JCS) contingency scenarios based on Defense Planning Guidance. Identified where in the JCS Core Determination exists and how they track USMC Core Capability.</p> <p>FY 2012 Plans:</p> <p>Continue efforts initiated in FY 2011 to include: Joint External Analysis Analytical Support Contract. Professional Staff Analytical Services Contract specialized analysts to assist with JCIDS analyses. Synthetic Theater Operations Research Model (STORM): STORM emerging as important campaign-level analysis model for Joint Analysis community. Marine Corps warfare enhancements under development make STORM more representative of full-spectrum capabilities of joint force meeting the collaboration and integration goals of the Department of Defense (DoD) Modeling & Simulation (M&S) Strategic Vision. Attrition Calibration/Combat Sample Generator (ATCAL/COSAGE): Design and implement improvements to the COSAGE model improving overall representation of ground combat in joint, combined arms environment. Includes the COSAGE model Phase III online for use with COSAGE production studies. Define and implement software developmental efforts to implement changes improving the representation of "precision munitions" fired from indirect fire shooters in COSAGE. Force Mobility Analysis Support Tool (FMAST IV): Commandant chartered a Force Structure Review Group (FSRG) to examine organization, training, and equipping issues associated with task force organization in global security arena. Measures end-strength, training cycle, and dwell-time impacts on the Marine Corps manpower, operations, and support functions. COMBAT XXI: MCCDC Behavior Development and Technical Support: Tasked to conduct the Amphibious Combat Vehicle (ACV) AoA. Requires extensive modification of existing scenarios and development of at least one new scenario. Improvised Explosive Device (IED) Detection and Prevention Tool (IDAPT): Develop a multi-attribute decision model to evaluate mixes of infantry anti-armor weapons for both state-on-state warfare (typified by a significant armored threat) and hybrid conflicts (typified by a negligible armored threat).</p> <p>Naval Surface Fire Support:Develop future amphibious doctrine refining the requirements for the amphibious combat vehicle.</p>			

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0030: <i>Studies & Analysis/MC</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
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<p>G/ATOR Key Performance Parameter Validation Analysis: Designated a special interest program by the USD(AT&L). MDA recommended an ACAT IC designation for the recently restructured G/ATOR program. To validate G/ATOR Key Performance Parameters in support of ACAT I designation.</p> <p>The Ground Based Air Defense (GBAD) Weapon System Validation Analysis: Low altitude air defense capability for MAGTF, replacing the Stinger Missile System and capable of neutralizing UAVs with a secondary capability against cruise missiles (CMs) and manned rotary and fixed wing aircraft. Requires study to determine the necessary Probability of Kill (Pk) to counter single, multiple and swarm UAVs.</p> <p>Persistent Intelligence, Surveillance, and Reconnaissance Sensing Investment/Divestment Strategy (PISR): Facilitate the ongoing PISR and follow-on requirements documentation. Study to assess the ability of future MAGTF's organic ISR capabilities to support Marine Corps requirements identified in the Marine Corps Service Campaign Plan and POM-14 CMC Guidance and consider the future operating environment identified in the Marine Corps Intelligence Activity Long Range Threat Assessment 2008-2028 and model this against POM-14 Defense Planning Scenarios and Marine Corps approved vignette.</p> <p>Initiate new studies based on USMC requirements and directed by Assistant Commandant, Marine Corps. Initiate the high priority studies and analyses projects approved in the FY2012 - FY2013 Marine Corps Studies System Master Plan (MCSSMP).</p> <p>FY 2013 Plans:</p> <p>Continue efforts initiated in FY 2011 to include: Joint External Analysis Analytical Support Contract. Professional Staff Analytical Services Contract specialized analysts to assist with JCIDS analyses. Synthetic Theater Operations Research Model (STORM): STORM emerging as important campaign-level analysis model for Joint Analysis community. Marine Corps warfare enhancements under development make STORM more representative of full-spectrum capabilities of joint force meeting the collaboration and integration goals of the Department of Defense (DoD) Modeling & Simulation (M&S) Strategic Vision. Planned Attrition Calibration/Combat Sample Generator (PACCAL/COSAGE): Design and implement improvements to the COSAGE model improving overall representation of ground combat in joint, combined arms environment. Includes the COSAGE model Phase IV online for use with COSAGE production studies. Define and implement software developmental efforts to implement changes improving the representation of "precision munitions" fired from indirect fire shooters in COSAGE. Force Mobility Analysis Support Tool (FMAST V): Commandant chartered a Force Structure Review Group (FSRG) to examine organization, training, and equipping issues associated with task force organization in global security arena. Measures end-strength, training cycle, and dwell-time impacts on the Marine Corps manpower, operations, and support functions. COMBATXXI: MCCDC Behavior Development and Technical Support: Tasked to conduct the Amphibious Combat Vehicle (ACV) AoA. Requires extensive modification of existing scenarios and development of at least one new scenario. Persistent Intelligence, Surveillance, and Reconnaissance Sensing Investment/Divestment Strategy (PISR): Facilitate the ongoing PISR and follow-on requirements documentation. Study to assess the ability of future MAGTF's organic ISR capabilities to support Marine Corps requirements identified in the Marine Corps Service Campaign Plan and POM-14 CMC Guidance and consider the future operating environment</p>			
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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0030: <i>Studies & Analysis/MC</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
identified in the Marine Corps Intelligence Activity Long Range Threat Assessment 2008-2028 and model this against POM-14 Defense Planning Scenarios and Marine Corps approved vignette. Support studies and analyses approved for execution in annual Marine Corps Studies System Master Plan (MCSSMP) includes: mandated Mission Area Analyses (MAAs), Milestone A, and Pre-Milestone A (Conceptual) Analysis of Alternatives (AoAs), technology assessments, force structure analysis, weapons systems analysis, concept development and analysis, logistics, feasibility and cost benefits, training assessments, and scenario development. Supports Marine Corps Logistics, the Expeditionary Force Development System (EFDS), and Combat Development Process (CDP). Mission Area Analyses (MAA) provides quantitative and qualitative information utilized by decision makers to initiate improvements in operational concepts, doctrine, force structure, education, training, and procurement.			
Accomplishments/Planned Programs Subtotals	6.352	6.586	5.487

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Provide analytical documentation and support to decision makers for resolution of current and future issues identified by operating forces. Utilize Marine Corps Research University and Naval Post Graduate School to conduct studies and analysis projects in basic and applied research and advanced technology development. Provide funds to the Naval Sea Systems Command (NAVSEA) for direct support, technical analyses, and liaison services to assure a sound bridge between the Marine Corps' role in defining Expeditionary Warfare Specialist (EXW)/Seabasing requirements and the SEA 05 role for Future Concepts and Ships Designs for amphibious ships/aircraft, Maritime Prepositioning Force (Future)(MPF (F)), High Speed Connectors, and related systems. Space and Naval Warfare Systems Center (SPAWAR) funded to support Naval Assessment Program to modify and upgrade all DoN war fighting, crisis response and support capabilities and vulnerabilities and provide baseline of future capabilities. Baseline analysis supports Mission Capability Packages (MCPs), Investment Strategy, Joint Capability Areas (JCAs), and the Naval Strategic Plan providing the DoN assessments for future force development.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0033: <i>OT&E Support</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0033: <i>OT&E Support</i>	3.565	7.944	8.378	-	8.378	8.568	8.763	8.962	9.163	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Marine Corps Operational Test and Evaluation Activity (MCOTEA) supports the material acquisition process by managing the Marine Corps Operational Test (OT) programs for Acquisition Categories (ACAT) I through ACAT IV (less OT of manned aircraft) and performs other functions that may be directed by the Commandant of the Marine Corps. The primary purpose of Operational Test and Evaluation (OT&E) is to provide information to the Milestone Decision Authority (MDA) regarding the Operational Effectiveness (OE) and Operational Suitability (OS) of the system addressed at a decision point. MCOTEA must ensure that the Marines in the Operating Forces receive the very best possible equipment and support. MCOTEA must also ensure each system proposed for acquisition is tested adequately, evaluated objectively and reported independently.

Marine Corps Operational Test and Evaluation Activity (MCOTEA) is the only unit that provides the Marine Corps with required operational test and evaluation (OT&E) capability, ensuring the Marine Corps is compliant with laws and regulations, and ensuring that training and equipment are operationally effective, relevant, and suitable. Additionally, MCOTEA's early involvement, coordination, and oversight in developmental testing and evaluation of new combat and combat support systems ensures that our Marines are the best trained, and have the best equipment, with the lowest test costs for taxpayers. Finally, MCOTEA's support of rapid acquisitions ensures that Marines in the fight are supported with the newest and most advanced equipment and that the Marine Corps is compliant with regulations.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: MCOTEA	3.565	4.279	8.378
Articles:	0	0	0
FY 2011 Accomplishments: DOT&E/DON Policy initiatives broaden MCOTEA involvement in: focusing on starting early, being operationally realistic, and continuing throughout life cycle during the Operational and testing evaluation and will be Integrating Developmental and Operational Testing with Greater participation in Developmental Tests and RAM scoring conferences. Also experimenting to learn impacts on capabilities. MCOTEA also plans on Evaluating mission context at time of fielding and Capabilities Testing while expanding use of Modeling & Simulation.			
FY 2012 Plans: MCOTEA will be evaluating, quantifying and reporting the operational effectiveness, suitability, and survivability of planned acquisitions to meet warfighter capabilities and will be providing Milestone Decision Authority (MDAs) a comprehensive understanding of operational risk associated with ACAT programs.			
FY 2013 Plans:			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 0033: <i>OT&E Support</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
MCOTEA will be evaluating, quantifying and reporting the operational effectiveness, suitability, and survivability of planned acquisitions to meet warfighter capabilities and will be providing Milestone Decision Authority (MDAs) a comprehensive understanding of operational risk associated with ACAT programs.				
Title: MCOTEA ENHANCEMENT		-	3.665	-
Articles:			0	
FY 2012 Plans: Implement internal professional staff test and evaluation capability upgrades with advanced training in special testing methodologies. This will increase the critical in-house capability to determine unique testing sciences and evaluation methodolgies needed for efficacy in tests and evaluations of urgent in-theater capabilites. Some examples are specialized day and night optics technologies; and specialized electronic tests for communications and computer applications in command and control areas. MCOTEA's support of rapid acquisitions ensures that Marines in the fight are supported with the newest and most advanced equipment and that the Marine Corps is compliant with regulations.				
Accomplishments/Planned Programs Subtotals		3.565	7.944	8.378
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
N/A				
E. Performance Metrics				
N/A				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy								DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>				PROJECT 2330: <i>Chem Bio Consequence Mgmt</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2330: <i>Chem Bio Consequence Mgmt</i>	3.139	6.661	1.064	-	1.064	1.173	1.292	1.423	1.567	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

The Family of Incident Response Systems (FIRS) consists of equipment, systems, and services designed to provide Weapons of Mass Destruction (WMD) incident response forces the capabilities needed to effectively respond to a terrorist attack using Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE). The Family of Incident Response Systems meets the mission requirements for the detection; mass casualty decontamination; force protection; responder inter-agency interoperability; C4I; urban search and rescue; medical and general support requirements needed by these forces to mitigate the effects of a CBRNE terrorist attack. The Family of Incident Response Systems relies primarily on Commercial Off-The-Shelf/Non-Developmental Items (COTS/NDI) equipment and systems that meet the particular mission requirements of Consequence Management (CM). Nuclear, Biological, and Chemical (NBC) systems are adopted if they meet the CM mission requirements. The Family of Incident Response Systems (FIRS) R&D effort allows the program to keep abreast of emerging technologies in the commercial sector and address operational capability gaps that cannot be met by commercial items.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: *FIRS: Reconnaissance Mission Area.			
Articles:	1.435 0	3.910 0	0.511 0
FY 2011 Accomplishments: FIRS: Reconnaissance Mission Area includes: 1) completed the assessment of emerging technologies for Toxic Industrial Chemical detection and identification in conjunction with the Department of Homeland Security and the Technical Support Working Group (TSWG); 2) continued the transition of a Field Chemical Analytical Tool (GC/MS); and 3) continued the development and testing of the Chemical Biological Incident Response Force (CBIRF) Standoff Chemical Agent Detector.			
FY 2012 Plans: FIRS: Reconnaissance Mission Area includes: 1) begin to field test the person portable Gas Chromatograph Mass Spectrometer (GC/MS); 2) complete the development and testing of the Chemical Biological Incident Response Force (CBIRF) Standoff Chemical Agent Detector (SCAD); and 3) begin development of next generation field detectors.			
FY 2013 Plans: FIRS: Reconnaissance Mission Area includes: complete field testing the person portable Gas Chromatograph Mass Spectrometer (GC/MS).			
Title: *FIRS: Search and Rescue (SAR) Mission Area.			
Articles:	0.150 0	-	-

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 2330: <i>Chem Bio Consequence Mgmt</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
<i>FY 2011 Accomplishments:</i> FIRS: Search and Rescue (SAR) Mission Area includes: 1) completed the evaluation of SAR HazMat boots that can be decontaminated 2) completed evaluation of Commercial Off the Shelf (COTS) and emerging SAR tools.				
<i>Title:</i> *FIRS: Decontamination Mission Area				
		<i>Articles:</i>	0.200 0	- -
<i>FY 2011 Accomplishments:</i> FIRS: Decontamination Mission Area includes: 1) completed the development and evaluation of improved mass casualty decon equipment (flash heaters) and procedures.				
<i>Title:</i> *FIRS: C4I Mission Area.				
		<i>Articles:</i>	0.150 0	- -
<i>FY 2011 Accomplishments:</i> FIRS: C4I Mission Area includes: 1) completed technology assessments; 2) completed field user evaluations; and 3) completed development of prototypes.				
<i>Title:</i> *FIRS: Force Protection Mission Area				
		<i>Articles:</i>	1.004 0	2.751 0
<i>FY 2011 Accomplishments:</i> FIRS: Force Protection Mission Area includes: 1) completed the transition of the Improved Level A Protective Ensemble developed in concert with Technical Support Working Group (TSWG); 2) continued the development and validation of an electronic filter matrix from military and commercial filter testing data; 3) completed the testing and evaluation of a hydration system in conjunction with the Army; 4) completed the testing and evaluation of the M-53 mask as a system with Commercial Self Contained Breathing Apparatus and Powered Air Purifying Respirators; and 5) began development of a new breathable lightweight chemical biological protective undergarment to NFPA Class 3.				
<i>FY 2012 Plans:</i> FIRS: Force Protection Mission Area includes: 1) complete testing and certification of the next generation Improved Chemical Garment (NFPA Class 2); 2) begin the testing of a new breathable lightweight chemical biological protective undergarment to NFPA Class 3; 3) complete testing of the universal hose connection between the M53 mask and COTS existing commercial Powered Air Purifying Respirators; and 4) begin development of a new positive/negative pressure adaptable mask.				
<i>FY 2013 Plans:</i>				

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 2330: <i>Chem Bio Consequence Mgmt</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
FIRS: Force Protection Mission Area includes: 1) complete the testing of a new breathable lightweight chemical biological protective undergarment to NFPA Class 3; and 2) complete development of a new positive/negative pressure adaptable mask.			
Title: *FIRS: Medical Mission Area	0.200	-	-
Articles:	0		
FY 2011 Accomplishments: FIRS: Medical Mission Area includes: 1) complete the development of a standoff patient triage tool.			
Accomplishments/Planned Programs Subtotals	3.139	6.661	1.064

C. Other Program Funding Summary (\$ in Millions)											
<u>Line Item</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2013</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>Cost To Complete</u>	<u>Total Cost</u>
			<u>Base</u>	<u>OCO</u>	<u>Total</u>						
• 652200: <i>Field Medical Equipment-FIRS</i>	3.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	140.379

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 2930: <i>Phase 0 Activities</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
2930: <i>Phase 0 Activities</i>	4.169	4.347	3.561	-	3.561	3.649	3.730	3.797	3.867	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Phase A (previously known as Phase 0) Activities consist of a series of interrelated activities of the acquisition process designed to investigate potential material solutions to validate needs, estimate program costs, support sound business decisions, correct inherent disconnects between the Programming, Planning, Budgeting and Execution (PPBE) cycle, the Combat Development and Acquisition Management Systems, and prevent undue delays in pursuing priority requirements. The process supports Commanding General (CG), MCCDC and Commander, Marine Corps Systems Command (COMMARCORSSYSCOM) by providing funding to priority programs, thus allowing for the examination of concepts and alternatives to support an orderly transition from requirements to initiatives and initiatives to funded programs. This will permit the POM process to focus on activities of evaluating, prioritizing and integrating rather than defining and resolving raw, immature requirements.

Phase A activities "jump start" high priority programs of the acquisition process. Furthermore, since 70% of a program's life cycle cost is determined during Phase A, this initiative will put resources to work where the return on investment is the greatest. Typical studies conducted on Phase A activities include, but are not limited to Market Surveys, Business Case Analysis (BCA), Cost as an Independent Variable (CAIV) analysis, Life Cycle Cost Estimates, Cost Comparison Analysis, Acquisition Strategies, and Trade-off Analysis in lieu of an Analysis of Alternatives.

To satisfy the emerging requirements, the Deputy Commandant for Combat Development is leading the Marine Expeditionary Force Future Vehicle (MEFFV) effort to conduct Joint Capability Integration and Development System analysis to establish a capabilities framework specifically tailored to assess technologies for transition to the Marine Air Ground Task Force (MAGTF). MEFFV efforts are directed at capability refinement and integration, analysis of multiple concepts, determining technology objectives, and continued development of Initial Capabilities Documents (ICDs) and Capabilities Development Documents supporting "spin-out" technology transitions. This budget item supports combat development activities supporting the three Marine Requirements Oversight Council (MROC) priorities in compliance with JROC and USD AT&L guidance to participate in a Joint Program with the Army's Future Combat Systems Program.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: *Phase A Activities	4.169	4.347	3.561
Articles:	0	0	0
FY 2011 Accomplishments:			
Phase A Activities - Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: Electronic Records Management, Net Enabled Command Capability, Target Processing, Ground Based Air Defense, Ground Based Operational Surveillance, Optical			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0605873M: <i>Marine Corps Program Wide Supt</i>	PROJECT 2930: <i>Phase 0 Activities</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Systems, Route Reconnaissance and Clearance, Mortar Fire Control and Indirect Fire, Ground Radio and Maintenance and the Squad Immersive Training Environment. FY 2012 Plans: Phase A Activities - Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: Networking On-The-Move, Targeting Studies and Analysis, Tank Reset and Sustainment, AAVC7, Autonomic Logistics, Visual Info Systems and Medium Tactical Replacement Vehicle configuration. FY 2013 Plans: Phase A Activities - Initiate, assist and complete Phase A activities of high priority programs during their concept refinement and in some cases their technology development phases in the areas of Business Case Analysis, Trade Studies, Economic Analysis, Life Cycle Cost Estimates and Market Research Studies in support of the following efforts: Combat Operations Center (COC) and COC Green Initiatives, Networking On-The-Move, Low Altitude Air Defense Integrated Picture, Data Fusion and Dissemination, HMMWV Survivability, Logistics Support Tools, Next Generation Automated Test System, and Command and Control Airborne.			
Accomplishments/Planned Programs Subtotals	4.169	4.347	3.561

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0305885N: <i>Tactical Cryptologic Activities</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	1.850	2.764	2.795	-	2.795	2.835	1.877	1.913	1.946	Continuing	Continuing
0037: <i>TACT COMBAT OPER SYS</i>	1.850	2.764	2.795	-	2.795	2.835	1.877	1.913	1.946	Continuing	Continuing

A. Mission Description and Budget Item Justification

SURFACE ELECTRONIC CAPABILITY AUGMENTATION CAPABILITY SUPPORT: This is a continuing program that will provide advanced technologies and capabilities to current Electronic Warfare (EW) / Electronic Intelligence (ELINT) System Programs of Record (POR). The program develops concepts of data / information exchange within the Global Information Grid (GIG). To comply with the intent of the GIG, this program addresses compression, transmission, decompression, re-compression and long-term storage of targeted data / information without degradation. This program will become an enabler for future capabilities such as remote operation of surface, subsurface, and air EW/ELINT open architecture PORs. A holistic approach to data / information format, processing transmission, and storage will require developments in antenna technology, communications capabilities, operational concepts, and software development.

COMTENTHFLT MARITIME OPERATIONS CENTER (MOC): The Maritime Operations Center (MOC) visualization system provides the common operational picture (COP) in support of the Commander's mission requirements. The system design permits the connection of numerous data feeds at various security classification levels in order to project and adjust the COP as required on multiple output displays electronically.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	1.859	2.764	2.795	-	2.795
Current President's Budget	1.850	2.764	2.795	-	2.795
Total Adjustments	-0.009	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Rate/Misc Adjustments	-	-			
• Congressional General Reductions Adjustments	-0.009	-			

Change Summary Explanation

Technical: Not applicable.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE
1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	PE 0305885N: <i>Tactical Cryptologic Activities</i>

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0305885N: <i>Tactical Cryptologic Activities</i>	PROJECT 0037: <i>TACT COMBAT OPER SYS</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0037: <i>TACT COMBAT OPER SYS</i>	1.850	2.764	2.795	-	2.795	2.835	1.877	1.913	1.946	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

SURFACE ELECTRONIC CAPABILITY AUGMENTATION CAPABILITY SUPPORT: This is a continuing program that will provide advanced technologies and capabilities to current Electronic Warfare (EW) / Electronic Intelligence (ELINT) System Programs of Record (POR). The program develops concepts of data / information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept. To comply with the intent of the GIG, this program addresses compression, transmission, decompression, re-compression and long-term storage of targeted data / information without degradation. This program will become an enabler for future capabilities such as remote operation of surface, subsurface, and air EW/ELINT open architecture PORs. A holistic approach to data / information format, processing transmission, and storage will require developments in antenna technology, communications capabilities, operational concepts, and software development.

COMTENTHFLT MARITIME OPERATIONS CENTER (MOC): The Maritime Operations Center (MOC) visualization system provides the common operational picture (COP) in support of the Commander's mission requirements. The system design permits the connection of numerous data feeds at various security classification levels in order to project and adjust the COP as required on multiple output displays electronically.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Surface Electronic Capability Augmentation Capability Support	1.850	1.764	1.795
Articles:	0	0	0
Description: Development of antenna technology, communication, capabilities, operational concepts and software.			
FY 2011 Accomplishments: Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.			
FY 2012 Plans: Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept.			
FY 2013 Plans: Develop concepts of data/information exchange within the Global Information Grid (GIG) as envisioned by Chief of Naval Operations (CNO) and outlined within the FORCEnet concept. Continuation of the Maritime Operations Center (MOC) visualization system. This system will provide the common operational picture (COP) in support of the Commander's mission			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy	DATE: February 2012
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APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0305885N: <i>Tactical Cryptologic Activities</i>	PROJECT 0037: <i>TACT COMBAT OPER SYS</i>
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B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
requirements. The system design permits the connection of numerous data feeds at various security classification levels in order to project and adjust the COP as required on multiple output displays electronically.			
<p>Title: COMTENTHFLT Maritime Operations Center (MOC)</p> <p style="text-align: right;">Articles:</p> <p>Description: Development of MOC Visualization System</p> <p>FY 2012 Plans: Development of the Maritime Operations Center (MOC) visualization system. This system will provide the Common Operational Picture (COP) in support of the Commander's mission requirements. The system design permits the connection of numerous data feeds at various security classification levels in order to project and adjust the COP as required on multiple output displays electronically.</p> <p>FY 2013 Plans: Continuation of the Maritime Operations Center (MOC) visualization system. This system will provide the Common Operational Picture (COP) in support of the Commander's mission requirements. The system design permits the connection of numerous data feeds at various security classification levels in order to project and adjust the COP as required on multiple output displays electronically.</p>	-	1.000 0	1.000 0
Accomplishments/Planned Programs Subtotals	1.850	2.764	2.795

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

N/A

D. Acquisition Strategy

Not required.

E. Performance Metrics

Provide advanced technologies and capabilities to current Electronic Warfare/Electronic Intelligence System Programs of Record (POR).

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	4.104	-	-	-	-	-	-	-	-	0.000	4.104
3152: <i>Service Support to JFCOM/ JNTC</i>	4.104	-	-	-	-	-	-	-	-	0.000	4.104

A. Mission Description and Budget Item Justification

Per the FY 2005 National Defense Authorization Act, Navy Joint National Training Capability (JNTC) RDT&E is managed by US Fleet Forces Command (USFF) Joint & Sustainment Branch (N71) from P/E 0804758N. This management reflects the decentralized execution of JNTC RDT&E from JFCOM. Throughout the FYDP, these funds will continue to be managed and executed by USFF N71.

The Navy continues to develop joint training technologies that will play a crucial role in it's ability to address current and future joint operational training requirements. Navy program activities include conducting research, development, test and evaluation and cross-service architecture certification on Navy capable systems, developing architectures and roadmaps to ensure that service instrumentation follows a common standard, and researching and assessing Navy mission rehearsal, Joint Semi-Automated Forces (JSAF), Joint National Training Capability (JNTC) Joint Live-Virtual Constructive (JLVC) Federation Object Model (FOM) Interoperabilities.

The Navy will further develop capabilities that integrate live, virtual, and constructive elements into a seamless joint training environment. Using a scientific and phased approach, Navy will leverage and research new technologies and methods, based upon focused joint operational training requirements, that provide a crucial technology-based foundation supporting all current and "to be" Navy joint training capabilities. Available commercial-off-the-shelf (COTS) and government -off-the-shelf (GOTS) networked information technologies and collaborative planning tools will be leveraged to provide improved net-centric joint training capability. Navy will lead the collaboration process to identify, collect and validate the requirements in order to design and develop the modeling and simulation capabilities that address the shortfalls in current abilities to support Joint Task training to standards.

The Navy Joint Live-Virtual Constructive (JLVC) Federation Object Model (FOM) development program is the primary means of providing a persistent and interoperable network among the Navy, Joint and Coalition federation components.

The Navy JNTC RDT&E Program efforts directly support the Unified Command Plan (UCP) series and is aligned with the DoD Information Operations (IO) Roadmap.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>
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B. Program Change Summary (\$ in Millions)	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013 Base</u>	<u>FY 2013 OCO</u>	<u>FY 2013 Total</u>
Previous President's Budget	4.260	-	-	-	-
Current President's Budget	4.104	-	-	-	-
Total Adjustments	-0.156	-	-	-	-
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.134	-			
• Congressional General Reductions Adjustments	-0.022	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>				PROJECT 3152: <i>Service Support to JFCOM/JNTC</i>			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
3152: <i>Service Support to JFCOM/JNTC</i>	4.104	-	-	-	-	-	-	-	-	0.000	4.104
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

BASE REQUEST:

Navy Warfare Development Command (NWDC) provides dedicated Joint Semi-Automated Forces (JSAF) software via development, configuration management, verification and validation and engineering management to ensure that Fleet and Joint requirements are incorporated. NWDC also supports the development of standards in networking, simulation federation, and tactical system interfaces for Fleet Synthetic Training (FST) interoperability to meet training objectives. The Joint Live-Virtual Constructive (JLVC) Navy Continuous Training Environment (NCTE) Federation Object Model (FOM) program provides a persistent and interoperable network among the Navy, Joint and Coalition federation components.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: JSAF Improvement Program	2.265	-	-
Articles:	2		
Description: JSAF improvements provide core stimulation for Fleet Synthetic Training (FST) providing the environment and scenario for Naval Forces training from unit level to Force level structures. FST is the major certifying event for readiness.			
Articles:			
1. Improve Joint exercise and home station training.			
2. Maximize inclusion of distributed command and control (C2) and intelligence.			
Accomplishments / Planned Program:			
JSAF Release v4.2.0 released December 2010			
JSAF Release v4.3.0 released March 2011			
JSAF Release v4.5 release August 2011			
FY 2011 Accomplishments:			
Stability and robustness improvements to support Fleet Synthetic Training. Improved capability of Automated Status Boards and Link 16 Information Display for the Tactical Training Group Schoolhouses. Improved capability of Class III and V Logistics, Theater Battle Management Core Systems (TBMCS) mission support interface, and Intel fidelity (ELINT) in support of Joint			

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>	PROJECT 3152: <i>Service Support to JFCOM/JNTC</i>		
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)		FY 2011	FY 2012	FY 2013
National Training Capability (JNTC) and NTF/PACOM requirements. Improved capability in support of virtual and constructive users such as: Manned Flight Systems' H-60R and H-60S trainers, JLVC, and NWDC.				
Title: JNTC/JLVC Navy Training FOM Support				
Description: Integration functions for Fleet Synthetic Training (FST) events integrating over 20 Navy programs and Coalition countries as well as Joint simulations into FSTs. FST is the major certifying event for deployment readiness.				
Articles:				
1. Improve Joint exercise and home station training				
2. Maximize inclusion of distributed command and controls (C2) and intelligence				
Articles: 1. Improve Joint exercise and home station training 2. Maximize inclusion of distributed command and controls (C2) and intelligence		1.839	-	-
Articles: 1. Improve Joint exercise and home station training 2. Maximize inclusion of distributed command and controls (C2) and intelligence		2		
Accomplishments / Planned Programs MRT3/EDRT/EP-3 MAST Fielded / Complete Integrate P-3 TORT and MH-60 TOFT Trainers Integrate Aegis Ballistic Missile Defense 4.0.1				
FY 2011 Accomplishments:				
Navy will further develop capabilities to address ASW improvements, information operations, BLUFOR capability representation including Littoral Combat Ship (LCS), P-8A, Surface Warfare Enterprise Advanced Capability Build (ACB) - 12/14 development and integration and emergent threats. Navy will further address additional Coalition Partner Integration, LCS Shore Based Training Facility (SBTF) integration, Combined Armed Forces (CAF) - Distributed Mission Operations (DMO) integrations and Korean Simulation Battle Center (KSBC) integration.				
Accomplishments/Planned Programs Subtotals		4.104	-	-
C. Other Program Funding Summary (\$ in Millions)				
N/A				
D. Acquisition Strategy				
N/A				

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0804758N: <i>Service Support To JFCOM, JNTC</i>	PROJECT 3152: <i>Service Support to JFCOM/JNTC</i>

E. Performance Metrics

- 1) Navy Warfare Development Command (NWDC) will produce one Joint Semi-Automated Forces (JSAF) software release to include documentation; will design and implement upgrades to JSAF consistent with approved requirements and Change Requests and document the effects of JSAF capabilities (robustness) and stability. Will design, implement, test, and integrate JSAF enhancements in accordance with requirements.
- 2) NWDC will produce one Navy Training FOM (NTF) release to include applicable documentation updates for the Guidance, Rational, and Interoperability Manual (GRIM) and Federation Agreement Document (FAD). Will implement JSAF capability enhancements to support evolving joint and Coalition training requirements.
- 3) NWDC will deliver one Navy Continuous Training Environment (NCTE) Interoperability Guide update to be promulgated to all NCTE users.
- 4) Facilitate integration by providing dedicated support to the effort, improving the quality of participation and documentation of Navy efforts in the Joint National Training Capability (JNTC). Refine and mature the Navy Training Federation Object Model (NTF), improving interoperability and integration with other services and the Joint community. Provides a standardized Federation Object Model (FOM) for integration across the Navy training simulations.
- 5) Current Joint Live-Virtual-Constructive (JLVC) and other federation simulation distribution is accomplished by tying simulation data to multicast groups. This is neither a scalable solution nor is it an effective one as federates are not able to publish and subscribe with fine enough precision. The Simulation Aware Software Router will address this shortcoming and additionally provide a flexible solution for federating heterogeneous networks and on-the-wire protocols without forcing all federates onto a single, uniform, lowest common denominator solution for each training event. Ultimately, a simulation aware router will allow simulation users to optimize the network for both simulation scalable traffic and for voice and Command, Control, Communications, (Computers), Intelligence (C4I) traffic.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0909999N: <i>Cancelled Account Adjustments</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	0.377	-	-	-	-	-	-	-	-	0.000	0.377
0000: <i>UNDIST</i>	0.377	-	-	-	-	-	-	-	-	0.000	0.377

A. Mission Description and Budget Item Justification

Funding is to reimburse the Department of Treasury for cancelled account liabilities.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	-	-	-	-	-
Current President's Budget	0.377	-	-	-	-
Total Adjustments	0.377	-	-	-	-
• Congressional General Reductions	-	-	-	-	-
• Congressional Directed Reductions	-	-	-	-	-
• Congressional Rescissions	-	-	-	-	-
• Congressional Adds	-	-	-	-	-
• Congressional Directed Transfers	-	-	-	-	-
• Reprogrammings	0.378	-	-	-	-
• SBIR/STTR Transfer	-	-	-	-	-
• Rate/Misc Adjustments	-0.001	-	-	-	-

Change Summary Explanation

Technical: Not applicable.

Schedule: Not applicable.

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy **DATE:** February 2012

APPROPRIATION/BUDGET ACTIVITY 1319: <i>Research, Development, Test & Evaluation, Navy</i> BA 6: <i>RDT&E Management Support</i>	R-1 ITEM NOMENCLATURE PE 0909999N: <i>Cancelled Account Adjustments</i>	PROJECT 0000: <i>UNDIST</i>
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COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
0000: <i>UNDIST</i>	0.377	-	-	-	-	-	-	-	-	0.000	0.377
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		

A. Mission Description and Budget Item Justification

Funding is to reimburse the Department of Treasury for a judgment fund bill.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)

	FY 2011	FY 2012	FY 2013
Title: Cancelled Accounts Liabilities			
Articles:	0.377 0	-	-
FY 2011 Accomplishments: Funding is to reimburse the Department of Treasury for cancelled account liabilities.			
Accomplishments/Planned Programs Subtotals	0.377	-	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Not applicable.