

DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2002
AMENDED BUDGET SUBMISSION



JUSTIFICATION OF ESTIMATES
JUNE 2001

RESEARCH, DEVELOPMENT, TEST &
EVALUATION, NAVY
BUDGET ACTIVITY 6

UNCLASSIFIED
DEPARTMENT OF DEFENSE
FY 2002 RDT&E PROGRAM

SUMMARY
(\$ IN THOUSANDS)

JUNE 2001

APPROPRIATION -----	FY 2000 -----	FY 2001 -----	FY 2002 -----
Research, Development, Test & Eval, Navy	9,064,511	9,458,007	11,123,389
Total Research, Development, Test & Evaluation	9,064,511	9,458,007	11,123,389

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DEPARTMENT OF DEFENSE

FY 2002 RDT&E PROGRAM

SUMMARY
(\$ IN THOUSANDS)

JUNE 2001

Summary Recap of Budget Activities -----	FY 2000 -----	FY 2001 -----	FY 2002 -----
Basic Research	367,129	393,835	406,120
Applied Research	610,404	659,154	626,550
Advanced Technology Development	739,492	786,425	680,500
Demonstration and Validation	2,353,009	2,557,636	2,414,880
Engineering and Manufacturing Development	2,225,926	2,214,621	4,122,698
RDT&E Management Support	810,339	651,178	738,841
Operational Systems Development	1,958,212	2,195,158	2,133,800
Total Research, Development, Test & Evaluation	9,064,511	9,458,007	11,123,389
 Summary Recap of FYDP Programs -----			
Strategic Forces	92,729	84,953	82,614
General Purpose Forces	964,735	885,771	829,774
Intelligence and Communications	736,160	867,632	824,611
Guard and Reserve Forces		5,863	13,082
Research and Development	7,129,776	7,495,719	9,269,069
Central Supply and Maintenance	132,808	118,069	104,239
Administration and Associated Activities	8,303		
Total Research, Development, Test & Evaluation	9,064,511	9,458,007	11,123,389

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DEPARTMENT OF THE NAVY
FY 2002 RDT&E PROGRAM

EXHIBIT R-1

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

Date: JUNE 2001

Line No --	Program Element Number -----	Item -----	Act ---	Thousands of Dollars			S E C -
				FY 2000 -----	FY 2001 -----	FY 2002 -----	
1	0601152N	In-House Laboratory Independent Research	1	15,262	16,193	16,291	U
2	0601153N	Defense Research Sciences	1	351,867	377,642	389,829	U
		Basic Research		367,129	393,835	406,120	
3	0602111N	Air and Surface Launched Weapons Technology	2	54,629	54,957		U
4	0602114N	Power Projection Applied Research	2			66,322	U
5	0602121N	Ship, Submarine & Logistics Technology	2	60,710	56,291		U
6	0602122N	Aircraft Technology	2	21,759	20,864		U
7	0602123N	Force Protection Applied Research	2			117,072	U
8	0602131M	Marine Corps Landing Force Technology	2	17,233	12,180	31,248	U
9	0602232N	Communications, Command and Control, Intelligence, Surveilla	2	83,113	113,851		U
10	0602233N	Human Systems Technology	2	33,717	40,068		U
11	0602234N	Materials, Electronics and Computer Technology	2	101,725	102,377		U
12	0602235N	Common Picture Applied Research	2			83,557	U
13	0602236N	Warfighter Sustainment Applied Research	2			71,294	U
14	0602270N	Electronic Warfare Technology	2	34,412	25,804		U
15	0602271N	RF Systems Applied Research	2			62,141	U
16	0602314N	Undersea Warfare Surveillance Technology	2	47,540	52,898		U
17	0602315N	Mine Countermeasures, Mining and Special Warfare	2	44,159	50,397		U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
18	0602435N	Ocean Warfighting Environment Applied Research	2	66,642	76,363	50,738	U
19	0602633N	Undersea Warfare Weaponry Technology	2	37,127	40,652		U
20	0602747N	Undersea Warfare Applied Research	2			76,510	U
21	0602782N	Mine and Expeditionary Warfare Applied Research	2			57,668	U
22	0602805N	Dual Use Science and Technology Program	2	7,638	12,452	10,000	U
		Applied Research		----- 610,404	----- 659,154	----- 626,550	
23	0603114N	Power Projection Advanced Technology	3			76,410	U
24	0603123N	Force Protection Advanced Technology	3			85,297	U
25	0603217N	Air Systems and Weapons Advanced Technology	3	47,825	60,592		U
26	0603235N	Common Picture Advanced Technology	3			48,583	U
27	0603236N	Warfighter Sustainment Advanced Technology	3			57,685	U
28	0603238N	Precision Strike and Air Defense Technology	3	84,946	86,752		U
29	0603270N	Advanced Electronic Warfare Technology	3	20,361	17,361		U
30	0603271N	RF Systems Advanced Technology	3			76,876	U
31	0603508N	Surface Ship & Submarine HM&E Advanced Technology	3	78,230	72,758		U
32	0603640M	Marine Corps Advanced Technology Demonstration (ATD)	3	66,432	60,687	51,310	U
33	0603706N	Medical Development	3	73,821	84,823		U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
34	0603707N	Manpower, Personnel and Training Adv Tech Dev	3	38,370	45,566		U
35	0603712N	Environmental Quality and Logistics Advanced Technology	3	24,682	48,129		U
36	0603727N	Navy Technical Information Presentation System	3	42,300	51,033	118,802	U
37	0603729N	Warfighter Protection Advanced Technology	3			17,678	U
38	0603747N	Undersea Warfare Advanced Technology	3	56,535	66,182	56,303	U
39	0603758N	Navy Warfighting Experiments and Demonstrations	3			43,277	U
40	0603782N	Mine and Expeditionary Warfare Advanced Technology	3	57,077	48,172	48,279	U
41	0603792N	Advanced Technology Transition	3	106,018	99,116		U
42	0603794N	C3 Advanced Technology	3	42,895	45,254		U
		Advanced Technology Development		739,492	786,425	680,500	
43	0603207N	Air/Ocean Tactical Applications	4	28,441	32,536	32,332	U
44	0603216N	Aviation Survivability	4	13,622	7,458	25,572	U
45	0603237N	Stall/Spin Inhibitors (H)	4			50,000	U
46	0603254N	ASW Systems Development	4	19,657	27,409	12,922	U
47	0603261N	Tactical Airborne Reconnaissance	4	1,956	2,332	1,934	U
48	0603382N	Advanced Combat Systems Technology	4	6,547	6,879	3,458	U
49	0603502N	Surface and Shallow Water Mine Countermeasures	4	107,938	101,984	135,284	U
50	0603506N	Surface Ship Torpedo Defense	4	6,092	15,853	4,818	U
51	0603512N	Carrier Systems Development	4	134,194	149,549	165,150	U

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Line No --	Program Element Number -----	Item -----	Act ---	Thousands of Dollars			S E C -
				FY 2000 -----	FY 2001 -----	FY 2002 -----	
52	0603513N	Shipboard System Component Development	4	108,548	256,065	288,382	U
53	0603525N	PILOT FISH	4	96,019	106,611	99,600	U
54	0603527N	RETRACT LARCH	4	7,568	11,786	50,441	U
55	0603536N	RETRACT JUNIPER	4	5,980			U
56	0603542N	Radiological Control	4	585	567	1,056	U
57	0603553N	Surface ASW	4	6,723	6,690	3,724	U
58	0603559N	SSGN Coverision	4		37,416	30,000	U
59	0603561N	Advanced Submarine System Development	4	127,615	128,082	110,766	U
60	0603562N	Submarine Tactical Warfare Systems	4	4,352	4,317	5,405	U
61	0603563N	Ship Concept Advanced Design	4	31,995	5,115	1,949	U
62	0603564N	Ship Preliminary Design & Feasibility Studies	4	9,969	56,374	14,922	U
63	0603570N	Advanced Nuclear Power Systems	4	145,355	166,938	175,176	U
64	0603573N	Advanced Surface Machinery Systems	4	25,685	9,547	3,921	U
65	0603576N	CHALK EAGLE	4	89,512	64,176	35,313	U
66	0603582N	Combat System Integration	4	76,800	54,461	42,915	U
67	0603609N	Conventional Munitions	4	37,665	33,310	22,299	U
68	0603611M	Marine Corps Assault Vehicles	4	110,937	147,100	263,066	U
69	0603635M	Marine Corps Ground Combat/Support System	4	47,331	32,416	25,957	U
70	0603654N	Joint Service Explosive Ordnance Development	4	10,821	14,546	12,918	U
71	0603658N	Cooperative Engagement	4	182,307	177,612	74,231	U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
72	0603713N	Ocean Engineering Technology Development	4	15,058	15,230	16,077	U
73	0603721N	Environmental Protection	4	79,565	65,506	46,117	U
74	0603724N	Navy Energy Program	4	6,719	7,869	5,025	U
75	0603725N	Facilities Improvement	4	1,927	1,807	1,728	U
76	0603734N	CHALK CORAL	4	39,402	52,401	48,187	U
77	0603739N	Navy Logistic Productivity	4	17,428	12,880	11,735	U
78	0603746N	RETRACT MAPLE	4	118,066	122,572	148,856	U
79	0603748N	LINK PLUMERIA	4	47,924	41,983	62,601	U
80	0603751N	RETRACT ELM	4	21,233	13,417	22,200	U
81	0603755N	Ship Self Defense - Dem/Val	4	9,628	6,550	8,353	U
82	0603764N	LINK EVERGREEN	4	7,812	9,623	26,151	U
83	0603787N	Special Processes	4	68,013	61,936	58,858	U
84	0603790N	NATO Research and Development	4	5,118	8,909	11,551	U
85	0603795N	Land Attack Technology	4	129,300	138,956	130,993	U
86	0603800N	Joint Strike Fighter (JSF) - Dem/ Val	4	238,420	240,820		U
87	0603851M	Nonlethal Weapons - Dem/Val	4	25,827	29,309	34,008	U
88	0603857N	All Service Combat Identification Evaluation Team (ASCJET)	4	13,898	12,989	13,530	U
89	0603879N	Single Integrated Air Picture (SIAP) System Engineer (SE)	4		20,000	43,140	U
90	0603889N	Counterdrug RDT&E Projects	4	24,091			U
91	0604327N	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	4	4,591			U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
92	0604707N	Space and Electronic Warfare (SEW) Architecture/Engineering Support	4	34,775	37,750	32,259	U
		Demonstration and Validation		2,353,009	2,557,636	2,414,880	
93	0603208N	Training System Aircraft	5	295			U
94							
95	0604212N	Other Helo Development	5	72,173	36,024	64,392	U
96	0604214N	AV-8B Aircraft - Eng Dev	5	36,410	28,654	32,897	U
97	0604215N	Standards Development	5	74,391	100,740	120,552	U
98	0604216N	Multi-Mission Helicopter Upgrade Development	5	110,097	83,115	149,418	U
99	0604217N	S-3 Weapon System Improvement	5	4,918	450	428	U
100	0604218N	Air/Ocean Equipment Engineering	5	5,733	5,995	6,346	U
101	0604221N	P-3 Modernization Program	5	10,531	7,333	3,220	U
102	0604231N	Tactical Command System	5	44,510	59,242	64,832	U
103	0604234N	Common Strategic Rotary Launcher (H)	5			96,000	U
104	0604235N	Cruise Missile Surveillance Sensors (H)	5			388,496	U
105	0604245N	H-1 Upgrades	5	178,524	138,189	170,068	U
106	0604261N	Acoustic Search Sensors	5	24,782	20,545	16,825	U
107	0604262N	V-22A	5	175,919	146,589	546,735	U
108	0604264N	Air Crew Systems Development	5	17,412	28,672	7,717	U
109	0604270N	EW Development	5	208,163	133,399	112,473	U
110	0604300N	SC-21 Total Ship System Engineering	5	160,894	289,591	355,093	U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
111	0604307N	Surface Combatant Combat System Engineering	5	240,898	200,330	262,037	U
112	0604311N	LPD-17 Class Systems Integration	5	2,387	270	1,001	U
113	0604312N	Tri-Service Standoff Attack Missile	5	1,913	3,503	1,946	U
114	0604366N	Standard Missile Improvements	5	625	1,183	1,309	U
115	0604373N	Airborne MCM	5	51,103	50,842	52,041	U
116	0604503N	SSN-688 and Trident Modernization	5	70,764	72,132	43,706	U
117	0604504N	Air Control	5	14,537	13,394	12,821	U
118	0604507N	Enhanced Modular Signal Processor	5	871	867	1,013	U
119	0604512N	Shipboard Aviation Systems	5	8,675	9,627	16,375	U
120	0604518N	Combat Information Center Conversion	5	7,715	3,686	5,392	U
121	0604524N	Submarine Combat System	5	9,184	3,609		U
122	0604528N	SWATH (Small Waterplane Area Twin Hull) Oceanographic Ship	5	8,690			U
123	0604558N	New Design SSN	5	236,660	212,127	201,596	U
124	0604561N	SSN-21 Developments	5	30,505	6,557	5,770	U
125	0604562N	Submarine Tactical Warfare System	5	12,556	26,249	29,246	U
126	0604567N	Ship Contract Design/ Live Fire T&E	5	57,901	77,488	130,388	U
127	0604574N	Navy Tactical Computer Resources	5	56,160	30,608	3,836	U
128	0604601N	Mine Development	5	3,276	1,635		U
129	0604603N	Unguided Conventional Air-Launched Weapons	5	2,836	2,553	12,890	U
130	0604610N	Lightweight Torpedo Development	5	8,984	9,262	10,310	U

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Date: JUNE 2001

Line No --	Program Element Number -----	Item -----	Act ---	Thousands of Dollars			S E C -
				FY 2000 -----	FY 2001 -----	FY 2002 -----	
131	0604618N	Joint Direct Attack Munition	5	10,800	28,845	56,285	U
132	0604654N	Joint Service Explosive Ordnance Development	5	6,870	7,037	8,123	U
133	0604703N	Personnel, Training, Simulation, and Human Factors	5	1,240	1,259	1,300	U
134	0604710N	Navy Energy Program	5	5,236	5,480	3,157	U
135	0604721N	Battle Group Passive Horizon Extension System	5	1,663	2,211	8,130	U
136	0604727N	Joint Standoff Weapon Systems	5	28,920	27,694	26,852	U
137	0604755N	Ship Self Defense - EMD	5	129,872	114,514	52,163	U
138	0604756N	Advanced Distributed Learning	5			33,530	U
139	0604757N	Medical Chemical Defense Life Material (H)	5			41,670	U
140	0604771N	Medical Development	5	15,274	27,519	5,455	U
141	0604777N	Navigation/ID System	5	16,395	18,314	23,884	U
142	0604784N	Distributed Surveillance System	5	39,077	30,924	34,711	U
143	0604800N	Joint Strike Fighter (JSF) - EMD	5		100,344	767,259	U
144	0604805N	Commercial Operations and Support Savings Initiative	5	19,587			U
145	0604910N	Smart Card	5		1,228	896	U
146	0605013M	Information Technology Development	5		6,770	11,031	U
147	0605013N	Information Technology Development	5		32,159	49,333	U
148	0605014N	Defense Integrated Military Human Resources System (DIMHRS) - RDT&E	5			47,184	U
149	0605015N	Joint Counter-Intelligence Assessment Group (JCAG) - RDT&E	5			6,000	U

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EXHIBIT R-1

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

Date: JUNE 2001

Line No --	Program Element Number -----	Item -----	Act ---	Thousands of Dollars			S E C -
				FY 2000 -----	FY 2001 -----	FY 2002 -----	
150	0508713N	Navy Standard Integrated Personnel System (NSIPS)	5		5,863	13,082	U
		Engineering and Manufacturing Development		2,225,926	2,214,621	4,122,698	
151	0604256N	Threat Simulator Development	6	27,702	25,934	30,110	U
152	0604258N	Target Systems Development	6	51,592	40,699	49,511	U
153	0604759N	Major T&E Investment	6	45,267	45,227	41,804	U
154	0605152N	Studies and Analysis Support - Navy	6	6,114	5,997	6,679	U
155	0605154N	Center for Naval Analyses	6	42,521	43,487	44,891	U
156	0605155N	Fleet Tactical Development	6	2,948	2,715	2,912	U
157	0605502N	Small Business Innovative Research	6	143,492			U
158	0605804N	Technical Information Services	6	10,047	10,848	951	U
159	0605853N	Management, Technical & International Support	6	16,646	17,481	21,628	U
160	0605856N	Strategic Technical Support	6	2,302	2,381	2,391	U
161	0605861N	RDT&E Science and Technology Management	6	54,851	52,877	54,825	U
162	0605862N	RDT&E Instrumentation Modernization	6	9,218	11,935	11,601	U
163	0605863N	RDT&E Ship and Aircraft Support	6	72,181	75,341	71,735	U
164	0605864N	Test and Evaluation Support	6	264,958	270,214	277,414	U
165	0605865N	Operational Test and Evaluation Capability	6	9,344	8,874	11,649	U
166	0605866N	Navy Space and Electronic Warfare (SEW) Support	6	1,955	3,232	3,433	U
167	0605867N	SEW Surveillance/Reconnaissance Support	6	10,975	11,586	12,693	U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
168	0605873M	Marine Corps Program Wide Support	6	29,923	17,727	9,614	U
169	0305885N	Tactical Cryptologic Activities	6		4,623	85,000	U
170	0909999N	Financing for Cancelled Account Adjustments	6	8,303			U
		RDT&E Management Support		810,339	651,178	738,841	
171							
172							
173							
174	0604227N	HARPOON Modifications	7	300			U
175	0604805N	Commercial Operations and Support Savings Initiative	7		8,372		U
176	0101221N	Strategic Sub & Weapons System Support	7	57,292	53,195	43,322	U
177	0101224N	SSBN Security Technology Program	7	31,580	30,887	34,091	U
178	0101226N	Submarine Acoustic Warfare Development	7	3,857	871	996	U
179	0101402N	Navy Strategic Communications	7			4,205	U
180	0204136N	F/A-18 Squadrons	7	307,589	234,490	253,257	U
181	0204152N	E-2 Squadrons	7	38,694	44,890	20,583	U
182	0204163N	Fleet Telecommunications (Tactical)	7	11,790	11,902	21,136	U
183	0204229N	Tomahawk and Tomahawk Mission Planning Center (TMPC)	7	137,445	90,461	76,036	U
184	0204311N	Integrated Surveillance System	7	16,908	37,084	20,041	U
185	0204413N	Amphibious Tactical Support Units	7		11,837	24,387	U

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				FY 2000 -----	FY 2001 -----	FY 2002 -----	
186	0204571N	Consolidated Training Systems Development	7	36,853	36,774	22,407	U
187	0204575N	Electronic Warfare (EW) Readiness Support	7	8,678	9,833	7,659	U
188	0205601N	HARM Improvement	7	36,773	39,409	13,630	U
189	0205604N	Tactical Data Links	7	42,706	26,005	39,362	U
190	0205620N	Surface ASW Combat System Integration	7	22,544	29,314	28,119	U
191	0205632N	MK-48 ADCAP	7	19,400	15,707	17,130	U
192	0205633N	Aviation Improvements	7	48,959	50,475	41,430	U
193	0205658N	Navy Science Assistance Program	7			4,945	U
194	0205667N	F-14 Upgrade	7	1,354	11,122		U
195	0205675N	Operational Nuclear Power Systems	7	52,880	52,945	55,202	U
196	0206313M	Marine Corps Communications Systems	7	89,355	107,102	104,835	U
197	0206623M	Marine Corps Ground Combat/ Supporting Arms Systems	7	29,020	39,061	43,935	U
198	0206624M	Marine Corps Combat Services Support	7	11,852	3,876	8,483	U
199	0207161N	Tactical AIM Missiles	7	38,872	21,473	16,402	U
200	0207163N	Advanced Medium Range Air-to-Air Missile (AMRAAM)	7	13,063	12,011	10,795	U
201							
202							
203	0303109N	Satellite Communications (SPACE)	7	40,015	39,413	54,230	U
204	0303140N	Information Systems Security Program	7	20,105	31,835	20,942	U

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DEPARTMENT OF THE NAVY
FY 2002 RDT&E PROGRAM

EXHIBIT R-1

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

Date: JUNE 2001

Line No --	Program Element Number -----	Item -----	Act ---	Thousands of Dollars			S E C -
				FY 2000 -----	FY 2001 -----	FY 2002 -----	
205							
206	0305160N	Navy Meteorological and Ocean Sensors-Space (METOC)	7	18,202	19,549	23,492	U
207	0305188N	Joint C4ISR Battle Center (JBC)	7	8,045	9,705	13,618	U
208	0305192N	Joint Military Intelligence Programs	7	1,994	6,936	7,179	U
209	0305204N	Tactical Unmanned Aerial Vehicles	7	75,029	121,753	66,349	U
210	0305206N	Airborne Reconnaissance Systems	7	18,779	26,135	5,736	U
211	0305207N	Manned Reconnaissance Systems	7	39,582	46,014	29,232	U
212	0305208N	Distributed Common Ground Systems	7	5,530	4,434	4,467	U
213	0305927N	Naval Space Surveillance	7	1,685	1,425	4,237	U
214	0308601N	Modeling and Simulation Support	7	10,920	13,976	7,828	U
215	0702207N	Depot Maintenance (Non-IF)	7	42,822	39,802	13,569	U
216	0708011N	Industrial Preparedness	7	69,474	68,987	70,605	U
217	0708730N	Maritime Technology (MARITECH)	7	20,512	9,280	20,065	U
		Operational Systems Development		----- 1,958,212	----- 2,195,158	----- 2,133,800	
		Total Research, Development, Test & Eval, Navy		----- 9,064,511	----- 9,458,007	----- 11,123,389	

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EXHIBIT R-2, RDT&E Budget Item Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0604256N, Threat Simulator Development					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost		27.702	25.934	30.110						Continuing	Continuing
E0602 Electronic Warfare Environment Sim (ECHO)		14.689	13.412	16.421						Continuing	Continuing
R0672 Effectiveness of Navy E.W. Systems (ENEWS)		13.013	12.522	13.689						Continuing	Continuing
Quantity of RDT&E Articles	Not Applicable										
<p>(U) 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 (DT&E/OT&E) environments to test Tri-Services EW systems and defensive tactics. These projects develop former Soviet and Free-World Anti-Air and Anti-Ship weapon systems simulators in accordance with the Services requirements.</p> <p>(U) The E0602 Project, EW Environment Simulation (ECHO) provides airborne system component level Test and Evaluation (T&E) at the Electronic Combat Simulation and Evaluation Laboratory (ECSEL), Naval Air Warfare Center Weapons Division (NAWCWD), Point Mugu, CA. ECHO also provides a secure anechoic closed loop T&E facility for fully integrated, aircraft-installed systems testing at the EW Integrated Systems Test Laboratory (EWISTL) at the Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, MD. Included in this Project is the T&E of airborne systems and tactics in flight, against the open air range at the Electronic Combat Range (ECR) complex located at the NAWCWD, China Lake, CA.</p> <p>(U) The R0672 Project (formally E0672), Effectiveness of Navy EW Systems (ENEWS), is a Department of the Navy (DON) unique project that supports Test and Evaluation of Ships EW efforts. ENEWS provides T&E for surface and subsurface shipboard systems and tactics in digitally modeled battle scenarios at the component, fully integrated single ship, multi-ship and full-up multi-platform battle group levels. ENEWS also provides a secure anechoic closed loop T&E facility specifically designed to test shipboard systems at the stand alone subsystem or fully integrated systems level. The last and largest portion of this project addresses the flyable Infr and Radio Frequency simulators flown on specially configured NP-3D aircraft to provide at-sea open air T&E for systems and tactics. All ENEWS assets are developed, operated and maintained by the Naval Research Laboratory (NRL), Washington, DC.</p> <p>(U) 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.</p>											

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EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0604256N, Threat Simulator Development					E0602, ECHO					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		14.689	13.412	16.421						Continuing	Continuing
RDT&E Articles Qty	Not Applicable										
<p>(U) 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 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.</p> <p>(U) The EW Environment Simulation (ECHO) project is unique in that it is the only program within the Department of Defense (DOD) which develops and provides Naval anti-air warfare threat assets for Testing and Evaluation (T&E) and is a critical part of the Office of the Secretary of Defense (OSD) Test Resource Master Plan. The OSD Master Plan employs many ECHO project resources for planning, analysis, testing and verification of airborne EW equipment.</p> <p>(U) This project directly supports the T&E requirements of the following programs: High Speed Anti-Radiation Missile, ALR-67(V)2,3,4, ALQ-126B, ALQ-156, EW Advanced Technology (EWAT), Integrated Defensive Electronic Countermeasures (IDECM) (including the Radio Frequency Countermeasures (RFCM), Common Missile Warning System (CMWS), and Advanced Strategic Tactical Expenditures (ASTE) subsystem T&E milestones), AVR-2, AAR-47, ALE-50, as well as other Tri-Service EW systems with initial operational capability dates in the early 2000's.</p> <p>(U) 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: NAWCWD, China Lake and Point Mugu in CA, and NAWCAD, Patuxent River, MD.</p>											

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 2 of 13)

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	PE 0604256N, Threat Simulator Development	E0602, ECHO
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS (continued):</p> <p>1. FY 2000 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none">- (U) (\$.459) Completed replacement of Fire and Forget Missile System.- (U) (\$.400) Continued SUTLER HITCH to support ASTE, Navy Advanced Expendables.- (U) (\$.400) Initiated/Completed Infrared Seeker Evaluation Van/Airborne Turret Infrared Measurement System (IRSEV/ATIMS).- (U) (\$1.711) Continued Advanced Multiple-Emitter Simulator Direction Finding Modification.- (U) (\$1.668) Initiated Radar Signal Density Environment (RSDE) Mobile.- (U) (\$.850) Continued I-23 additional seeker integration.- (U) (\$1.260) Continued Blue Army Threat Seeker for Missile on Mountain (MOM).- (U) (\$3.458) Initiated Hybrid Laboratory Simulator (HLS) MOBCAP Upgrades.- (U) (\$.593) Initiated IR/UV/RF Sensor/Facilities Integration.- (U) (\$.100) Continued Validation and Updates- Simulation Validation (SIMVAL).- (U) (\$.501) Continued Validation and Updates- Radar and Weapon Simulator Updates.- (U) (\$.063) Continued Validation and Updates- Missile/Gun Updates.- (U) (\$.415) Continued Validation and Updates- Validation.- (U) (\$1.314) Continued ECHO technical and engineering support.- (U) (\$.569) Continued ECHO System Engineering activity.- (U) (\$.928) Continued ECHO Test Requirements activity.		

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 3 of 13)

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	PE 0604256N, Threat Simulator Development	E0602, ECHO
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>2. FY 2001 PLANS:</p> <ul style="list-style-type: none">- (U) (\$.457) Complete SUTLER HITCH to support ASTE, Navy Advanced Expendables.- (U) (\$1.768) Initiate IR Target Array.- (U) (\$1.099) Continue Advanced Multiple-Emitter Simulator Direction Finding Modification.- (U) (\$2.180) Complete Radar Signal Density Environment (RSDE) Mobile.- (U) (\$.350) Complete I-23 additional seeker integration.- (U) (\$1.200) Complete Blue Army Threat Seeker for Missile on Mountain (MOM).- (U) (\$2.818) Continue Hybrid Laboratory Simulator (HLS) MOBCAP Upgrades.- (U) (\$.068) Initiate SA-XX for support of RF countermeasure programs Seeker Integration.- (U) (\$.326) Complete infrared ultra violet radio frequency (IR/UV/RF) Sensor/Facilities Integration.- (U) (\$.100) Continue Validation and Updates- SIMVAL.- (U) (\$.200) Continue Validation and Updates- Radar and Weapon Simulator Updates.- (U) (\$.400) Continue Validation and Updates- Validation.- (U) (\$1.080) Continue ECHO technical and engineering support.- (U) (\$.250) Continue ECHO System Engineering activity.- (U) (\$1.029) Continue ECHO Test Requirements activity.- (U) (\$.087) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68.		

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 4 of 13)

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	PE 0604256N, Threat Simulator Development	E0602, ECHO
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>3. FY 2002 PLANS:</p> <ul style="list-style-type: none">- (U) (\$1.019) Initiate IR/UV Mobile.- (U) (\$1.600) Initiate IR Stimulator.- (U) (\$2.763) Continue IR Target Array.- (U) (\$500) Complete Advanced Multiple-Emitter Simulator Direction Finding Modification.- (U) (\$750) Initiate Advanced ManPads.- (U) (\$500) Initiate Reprogrammable Early Warning (EW)/Acquisition (ACQ) Radar.- (U) (\$900) Complete Hybrid Laboratory Simulator (HLS) MOBCAP Upgrades.- (U) (\$477) Complete SA-XX for support of RF countermeasure programs Seeker Integration.- (U) (\$243) Initiate remote/terminal electronic combat range- electronic combat simulation and evaluation laboratory (R/T ECR-ECSEL) Link.- (U) (\$075) Initiate air combat environment test and evaluation facility (ACETEF) IR Instrumentation.- (U) (\$3.197) Initiate and develop 1 vs 1 IR Alert/Response.- (U) (\$410) Initiate and develop 1 vs 2 IR Alert/Response.- (U) (\$100) Continue Validation and Updates- SIMVAL.- (U) (\$375) Continue Validation and Updates- Radar and Weapon Simulator Updates.- (U) (\$375) Continue Validation and Updates- Missile/Gun Updates.- (U) (\$400) Continue Validation and Updates- Validation.- (U) (\$1.396) Continue ECHO technical and engineering support.- (U) (\$300) Continue ECHO System Engineering activity.- (U) (\$1.041) Continue ECHO Test Requirements activity.		

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 5 of 13)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME PE 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME E0602, ECHO																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: 100px; border: none;"> <thead> <tr> <th></th> <th style="text-align: right;">FY2000</th> <th style="text-align: right;">FY2001</th> <th style="text-align: right;">FY2002</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: right;">16.087</td> <td style="text-align: right;">13.557</td> <td style="text-align: right;">17.980</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: right;">-1.398</td> <td style="text-align: right;">-0.145</td> <td style="text-align: right;">-1.559</td> </tr> <tr> <td>(U) FY 2002/2003 OSD/OMB Budget Submit:</td> <td style="text-align: right;">14.689</td> <td style="text-align: right;">13.412</td> <td style="text-align: right;">16.421</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2000 net decrease of \$1.398 million consists of \$ 1.126 million decrease for a reprioritization of requirements within the Navy, \$.209 million decrease for Small Business Inovative Research assessment, and \$0.063 million decrease for a Congressional Recission. The FY 2001 net decrease of \$.145 million consists of \$ 0.020 million decrease for a reprioritization of requirements within the Navy and \$0.125 million decrease for a Congressional Recission. The FY 2002 net decrease of \$1.559 million consists of \$1.420 million decrease for a reprioritization of requirements within the Navy and \$0.139 million decrease for economic assumptions.</p> <p>(U) Schedule: Schedule changes from the President's budget are a direct result of the funding changes identified above. The FY 2000 decrease resulted in the IR/UV/RF Sensor/Facilities Integration effort being descoped. Plans and specifications for some portions of this outyear analysis task will now not be completed until FY 2002. The FY 2000 decrease also resulted in the Blue Army Threat Seeker for Missile on Mountain project being descoped. The advanced multiple emitter simulator (AMES) Advanced Modulation project will be delayed two years (from FY02 to FY04). The Reprogrammable surface-to-Air missiles air interceptors (SAMs/ALs) will be delayed two years (from FY03 to FY05). The Micro tactical electronic warfare environment simulator (TEWES) replacement project is no longer required.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable</p> <p>(U) D. ACQUISITION STRATEGY: The Electronic Warfare Threat Simulator Development program is a Non-ACAT Program which operates in accordance with the OPNAV approved Electronic Warfare Test and Evaluation Resource Investment Strategy (with no specific acquisition strategies). The Electronic Warfare Environment Simulation Project, under the Threat Simulator Development Program, is unique in that it is the only program within the Department of Defense dedicated solely to developing and providing Naval threat assets for test and evaluation and is a critical part of the Under Secretary of Defense for Acquisition (USD(A)) annual Electronic Warfare Plan. This plan employs many of the Electronic Warfare Simulation Development project resources for the planning, analysis, testing, and verification of airborne EW equipment. To preclude unwarranted intra-Service and inter-Service duplication, T&E resource requirements are coordinated through the OSD Test Investment Coordinating Committee and the Navy Tri-Center complex for mutual support, cost reduction, and increased test effectiveness. The Navy's Electronic Warfare Test and Evaluation Resource Investment Strategy emphasizes a coordinated analysis and prioritization of Navy EW T&E requirements and implementation of disciplined design-to-cost techniques</p> <p>(U) E. SCHEDULE PROFILE: Not applicable</p>				FY2000	FY2001	FY2002	(U) FY 2001 President's Budget:	16.087	13.557	17.980	(U) Adjustments from the President's Budget:	-1.398	-0.145	-1.559	(U) FY 2002/2003 OSD/OMB Budget Submit:	14.689	13.412	16.421
	FY2000	FY2001	FY2002															
(U) FY 2001 President's Budget:	16.087	13.557	17.980															
(U) Adjustments from the President's Budget:	-1.398	-0.145	-1.559															
(U) FY 2002/2003 OSD/OMB Budget Submit:	14.689	13.412	16.421															

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Exhibit R-3 Cost Analysis (page 2)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			PE 0604256N, Threat Simulator Development			E0602, ECHO						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks: Not Applicable												
Travel	WX	NADEP, Jax, FL	0.069	0.015	10/00	0.015	10/01			Continuing	Continuing	
SBIR Assessment				0.087								
Subtotal Management			0.069	0.102		0.015				Continuing	Continuing	
Remarks:												
Total Cost			79.054	13.412		16.421				Continuing	Continuing	
Remarks: There are no support costs.												

R-1 SHOPPING LIST - Item No. 151

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EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development				PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)						
COST (\$ in Millions)		Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			13.013	*10.638	13.689						Continuing	Continuing
RDT&E Articles Qty												

*Controls reduced by 1.884 (Issue 68268 NMCI). Funding will be reprogrammed out

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The objective of the Effectiveness of Navy 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 NAVSEA, OPTEVFOR, Special Operations and other EW RDT&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 situations such as the Lebanon, Libyan and Persian Gulf crisis, the Iran Harpoon threat and Operation Desert Storm/Shield. The primary threat to surface ships is Anti-Ship Capable Missile (ASCM) systems. The ENEWS Project is unique in that it is the only project within the Department of Defense (DOD) dedicated to developing and providing realistic ASCM 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 OSD 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 DT&E, OT&E and FOT&E support to the Surface Navy for all ship classes. DT, OT and FOT support includes SLQ-32 updates as required, R17.OX (NULKA), the phase-in of AIEWS beginning in FY-00, Rapid Anti-ship Integrated Defense System (RAIDS), all MK245 GIANT tests, Advanced IR Decoys, Decoy placement (Littoral), Ship IR Signature and RCS measurement of DDG-51, LPD-17, DD-21 and PC class ships, AIEWS phase two, High Power Microwave (HPM) Program, and other Ship Self-Defense initiatives, including testing and evaluation of Future Navy Initiatives Capability (FNC) process. In addition, ENEWS assets are regularly employed to test the effectiveness of NATO ships' EW systems in Joint Allied Exercises

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$.572) Continued COMSIM System Readiness
- (U) (\$.425) Continued COMSIM Scenario Implementation, Environment Generator & System Engineering
- (U) (\$.175) Continued COMSIM Validation (Completed 1 Validation Process Report)
- (U) (\$.165) Continued COMSIM Instrumentation, Data Analysis and ASM Distributed Simulation Capability Improvements
- (U) (\$.220) Continued COMSIM Threat Database Repository Updates
- (U) (\$.442) Continued COMSIM Anti Ship Missile Updates (4 Systems)
- (U) (\$.493) Continued COMSIM Development of Anti Ship Missile Engagement Simulation (Completed INDIA)
- (U) (\$2.843) Continued RFSIM Simulator Readiness
- (U) (\$1.300) Continued RFSIM Multi-Threat Processor Upgrade. (Completed J-Band)
- (U) (\$.250) Continued RFSIM OEM Simulator Upgrades. (Completed OSCAR)
- (U) (\$.300) Completed RFSIM Validation (Completed 2 Validation Reports)
- (U) (\$.381) Continue RFSIM Dual RF/ARM Seeker Simulator.

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. FY 2000 ACCOMPLISHMENTS CONTINUED:</p> <ul style="list-style-type: none"> · (U) (\$.375) Initiated RFSIM CTS 3 Axis Flight Simulator. · (U) (\$.100) Continued RFSIM Analytical and Reporting Software (Complete India Tools). · (U) (\$.633) Continued RFSIM CTS Target Fidelity Development (Calibrated FA). · (U) (\$1.078) Continued IRSIM Readiness · (U) (\$.229) Continued IRSIM FOXTROT Simulator Upgrades (SIM 1 and B1). · (U) (\$.191) Continued IRSIM VICTOR Simulator Upgrade (SIM B and SIM3a) and System Eng. · (U) (\$.150) Initiated IRSIM VICTOR Simulator Upgrade (SIM 4) · (U) (\$.054) Continued IRSIM Validation (Completed 1 Validation Report) · (U) (\$.120) Continued IRSIM MEIR II System Development. (01) Flight Capability (04) · (U) (\$.162) Continued IRSIM FOXTROT I and FOXTROT II Simulator Development. · (U) (\$.525) Continued IRSIM VICTOR I and VICTOR II Simulator Development. · (U) (\$.185) Initiated IRSIM Littoral Warfare Sim 1 Hardware Development. · (U) (\$.145) Continued IRSIM Lab/Field Systems · (U) (\$1.500) Continued ENEWS Plans & Programs. <p>2. FY 2001 PLANS:</p> <ul style="list-style-type: none"> · (U) (\$.640) Continue COMSIM System Readiness · (U) (\$.272) Continue COMSIM Scenario Implementation, Environment Generator & System Engineering (Complete RADAR/Tactics Model Transitions) · (U) (\$.070) Continue COMSIM Validation (Complete 1 Validation Report) · (U) (\$.121) Continue COMSIM Threat Database Repository Updates · (U) (\$1.465) Continue RFSIM Simulator Readiness. · (U) (\$.990) Continue RFSIM Multi-Threat Processor Upgrade. (I-Band) · (U) (\$.260) Continue RFSIM Validation (Complete 2 Validation Reports) · (U) (\$.050) Complete RFSIM Dual RF/ARM Seeker Simulator · (U) (\$.065) Continue RFSIM Analytical and Reporting Software (Complete November Tools). · (U) (\$1.050) Continue IRSIM Readiness · (U) (\$.092) Complete IRSIM VICTOR Simulator Upgrades (SIM B and SIM3a) and System Eng. · (U) (\$.065) Continue IRSIM Validation (Complete 1 Validation Report). · (U) (\$.328) Continue ENEWS Plans & Programs. · (U) (\$5.100) Initiate Classified Program · (U) (\$.070) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638. 		

R-1 SHOPPING LIST - Item No. 151

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDTE&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 06042556N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>3. FY 2002 PLANS:</p> <ul style="list-style-type: none">· (U) (\$.640) Continue COMSIM System Readiness· (U) (\$.552) Continue COMSIM Scenario Implementation, Environment Generator & System Engineering· (U) (\$.105) Continue COMSIM Validation (Complete 1 Validation Report)· (U) (\$.120) Continue COMSIM Threat Database Repository Updates· (U) (\$2.039) Continue RFSIM Simulator Readiness.· (U) (\$.900) Continue RFSIM Multi-Threat Processor Upgrade. (I-Band)· (U) (\$.300) Continue RFSIM Validation (Complete 2 Validation Reports)· (U) (\$.120) Continue RFSIM Analytical and Reporting Software· (U) (\$.500) Initiate RFSIM New Flyable Simulator Development· (U) (\$.170) Initiate RFSIM Laboratory Upgrades· (U) (\$1.299) Continue IRSIM Readiness· (U) (\$.195) Initiate/Complete IRSIM VICTOR Simulator Upgrades· (U) (\$.059) Continue IRSIM Validation (Complete 1 Validation Report).· (U) (\$.590) Continue ENEWS Plans & Programs.· (U) (\$6.100) Continue Classified Program		

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Exhibit R-2a, RDTE&E Project Justification
(Exhibit R-2a, page 11 of 13)

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																
APPROPRIATION/BUDGET ACTIVITY RDTE, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604256N, Threat Simulator Development	PROJECT NUMBER AND NAME R0672, Effectiveness of Navy Electronic Warfare Systems (ENEWS)																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: 40px; border: none;"> <thead> <tr> <th></th> <th style="text-align: center;">FY2000</th> <th style="text-align: center;">FY2001</th> <th style="text-align: center;">FY2002</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: center;">13.394</td> <td style="text-align: center;">10.736</td> <td style="text-align: center;">13.458</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: center;">-0.381</td> <td style="text-align: center;">-1.786</td> <td style="text-align: center;">0.231</td> </tr> <tr> <td>(U) FY 2002 PresBudg Submission:</td> <td style="text-align: center;">13.013</td> <td style="text-align: center;">12.522</td> <td style="text-align: center;">13.689</td> </tr> </tbody> </table> <p style="margin-left: 40px;">CHANGE SUMMARY EXPLANATION:</p> <p style="margin-left: 80px;">(U) Funding: The FY 2000 net decrease of \$.381 million consists of -\$.063 million for SBIR reduction, -\$.053 million for proportionate reduction, and -\$252 million for BTRs programs The FY 2001 net decrease of \$.098 million consists of -\$.075 million pro-rata share and -\$.023 million governmentwide rescission and -\$1.884 million reprogrammed for higher priority programs The FY 2002 net adjustments of \$.231 million consists of , +\$297 million for NWCF rate adjustment, and -\$.053 million for NWCF *See Technical discussion below for other funding impact.</p> <p style="margin-left: 40px;">(U) Schedule: Not Applicable</p> <p style="margin-left: 40px;">(U) Technical: Starting in FY01 the Project will be reduced by approximately 50% with funding being applied to a separate classified program. Future Project plans to accomplish stated technical objectives for threat simulator development are being re-baselined and re-prioritized to accommodate this change.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable</p> <p>(U) D. ACQUISITION STRATEGY: Not Required</p> <p>(U) E. SCHEDULE PROFILE: Not Required</p>				FY2000	FY2001	FY2002	(U) FY 2001 President's Budget:	13.394	10.736	13.458	(U) Adjustments from the President's Budget:	-0.381	-1.786	0.231	(U) FY 2002 PresBudg Submission:	13.013	12.522	13.689
	FY2000	FY2001	FY2002															
(U) FY 2001 President's Budget:	13.394	10.736	13.458															
(U) Adjustments from the President's Budget:	-0.381	-1.786	0.231															
(U) FY 2002 PresBudg Submission:	13.013	12.522	13.689															

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 12 of 13)

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY BA-6						R-1 ITEM NOMENCLATURE 0604258N TARGET SYSTEMS DEVELOPMENT (TSD)					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost		51.592	40.699	49.511							
20612 Surface Targets Development		1.065	1.117	1.149							
A0609 Aerial Target Systems Development		31.425	29.795	36.751							
A0610 Weapon Systems T&E Development/Procurement		19.102	9.787	11.611							
Quantity of RDT&E Articles		10	4	4							
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element funds the development and procurement of aerial and surface targets and associated Target Augmentation and Auxiliary Systems (TA/AS) necessary to duplicate or simulate threat characteristics in support of weapons systems test and evaluation and fleet training. Included within this program element are development of: Subsonic Subscale Aerial Target (SSAT), various TA/AS, Target Threat Characterization (TTC), Supersonic Sea Skimming Target (SSST), Navy Full Scale Aerial Target (FSAT) for conversions, the FSAT Follow-On (FO), surface targets for test and evaluation, surface towed targets, improved target control system, and an anti-radiation missile target. This program element also includes Vandal (EER) testing and procurement of TA/AS Vector Scoring.</p> <p>(U) B. 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.</p>											

R-1 SHOPPING LIST - Item No. 152

Exhibit R-2, RDTE Budget Item Justification
(TSD exhibits R-2, page 1 of 10)

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CLASSIFICATION:

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EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER				PROJECT NAME AND NUMBER					
RDT&E, N	0604258N/Target Systems Development				20612/Surface Targets Development					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Project Cost	1.065	1.117	1.149							
RDT&E Articles Qty	1	1	1							
<p>A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project develops seaborne targets systems and their related target augmentation systems in support of air-to-surface and surface-to-surface weapons test and evaluation and fleet training.</p> <p>FY 2000 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> - (\$40) Continued Requirements Study Update. (Oct 99- Sep 00) - (\$170) Continued Weapons System/Emitter, TAS Upgrade. (Oct 99-Sep 00) - (\$53) Continued Target/Threat Characterization and Validation. (Oct 99-Sep 00) - (\$272) Continued Command and Control System Upgrade Development. (Oct 99- Sep 00) - (\$290) Continued development of Target Scoring System. (Oct 99-Sep 00) - (\$240) Procured prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 99-Sep 00) <p>FY 2001 PLAN:</p> <ul style="list-style-type: none"> - (\$45) Continue Requirements Study Update. (Oct 00-Sep 01) - (\$180) Continue Weapons System/Emitter, TAS Upgrade. (Oct 00-Sep 01) - (\$60) Continue Target/Threat Characterization and Validation. (Oct 00-Sep 01) - (\$290) Continue Command and Control System Upgrade Development. (Oct 00-Sep 01) - (\$297) Continue development of Target Scoring System. (Oct 00-Sep 01) - (\$242) Procure prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 00-Sep 01) - (\$3) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68. <p>FY 2002 PLAN:</p> <ul style="list-style-type: none"> - (\$50) Continue Requirements Study Update. (Oct 01-Sep 02) - (\$185) Continue Weapons System/Emitter, TAS Upgrade. (Oct 01-Sep 02) - (\$65) Continue Target/Threat Characterization and Validation. (Oct 01-Sep 02) - (\$295) Continue Command and Control System Upgrade Development. (Oct 01-Sep 02) - (\$310) Continue development of Target Scoring System. (Oct 01-Sep 02) - (\$244) Procure prototype off-the-shelf boat for testing and evaluation of enhanced HSMST. (Oct 01-Sep 02) 										

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Exhibit R-2a, RDT&E Project Justification
 (Exhibit R-2a, page 2 of 10)

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER	PROJECT NAME AND NUMBER	
RDT&E, N	0604258N/Target Systems Development	20612/Surface Targets Development	
B. Program Change Summary:			
	FY 2000	FY 2001	FY 2002
FY 2001 President's Budget:	1.094	1.127	1.165
Adjustments from President's Budget :	-0.029	-0.010	-0.016
FY 2002 President's Budget Submit:	1.065	1.117	1,149
CHANGE SUMMARY EXPLANATION:			
Funding: The FY 2000 net decrease of -\$0.029 is due to reprioritization of requirements within the Navy.			
The FY 2001 net decrease of -\$0.010 consists of -\$0.008 if for Congression reductions (Pro-Rata reduction and Recission).			
The FY 2002 net decrease of -\$0.016 is due to reprioritization of requirements within the Navy.			
Schedule: Not applicable.			
OTHER PROGRAM FUNDING SUMMARY:			
	FY 2000	FY 2001	FY 2002
OPN Line 545500 ASW Range Support Equipment	6,292	6,841	6,012
Related RDT&E: Not applicable			
D. ACQUISITION STRATEGY: Not applicable			
E. SCHEDULE PROFILE: Not applicable			

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Exhibit R-2a, RDT&E Project Justification
(Exhibit R-2a, page 3 of 10)

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CLASSIFICATION: UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0604258N Target Systems Development (TSD)					A0609 Aerial Target Systems Development					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		31.425	29.795	36.751							
RDT&E Articles Qty	Not Applicable	NA	NA	NA							
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Aerial Target Systems and associated target augmentation and auxiliary systems are developed in response to the need to test and provide training for Joint strike and littoral warfare systems required to defend fleet surface and air units in a hostile environment. The threat envelope covered extends from the surface to 100K feet for speeds in the low subsonic range to MACH 4.</p> <p>(U) B. PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p style="margin-left: 40px;">1. FY 2000 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> -(U) (\$14.663) Initiated Subsonic Subscale Aerial Target (SSAT) Development. -(U) (\$0.674) Continued Target Threat Characterization (TTC). -(U) (\$1.059) Continued Target Augmentation and Auxillary Systems (TA/AS) development. -(U) (\$13.111) Continued Supersonic Sea Skimming Target (SSST) development. -(U) (\$1.918) Continued Target Support. <p style="margin-left: 40px;">2. FY 2001 PLANS:</p> <ul style="list-style-type: none"> -(U) (\$13.776) Continued Subsonic Subscale Aerial Target (SSAT) Development.. -(U) (\$1.477) Continue Target Threat Characterization (TTC). -(U) (\$1.878) Continue Target Augmentation and Auxillary Systems (TA/AS) development. -(U) (\$10.000) Continue Supersonic Sea Skimming Target (SSST) development. -(U) (\$1.822) Continue Target Support. -(U) (\$0.842) Protion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68. <p style="margin-left: 40px;">3. FY 2002 PLANS:</p> <ul style="list-style-type: none"> -(U) (\$16.745) Continued Subsonic Subscale Aerial Target (SSAT) Development.. -(U) (\$1.288) Continue Target Threat Characterization (TTC). -(U) (\$4.003) Continue Target Augmentation and Auxillary Systems (TA/AS) development. -(U) (\$12.078) Continue Supersonic Sea Skimming Target (SSST) development. -(U) (\$2.637) Continue Target Support. 											

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Exhibit R-2a, RDTE Project Justification
(TSD Exhibits R-2a, page 4 of 10)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)	PROJECT NUMBER AND NAME A0609 Aerial Target Systems Development	
(U) C. PROGRAM CHANGE SUMMARY:			
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget:	32.697	30.118	34.801
(U) Adjustments from the President's Budget:	-1.272	-0.323	1.950
(U) FY 2002 President's Budget submit:	31.425	29.795	36.751
(U) D. CHANGE SUMMARY EXPLANATION:			
(U) Funding: FY 2000 net decrease of \$1.272 million consists of a decrease of \$.735 million for a SBIR assessment, \$.637 million for reprioritization of requirements within the Navy and \$.115 million for a Congressional Reduction; offset by an increase of \$.215 million realignment from A0610. FY 2001 net decrease of \$.123 million consists of a decrease of \$.257 million for a reprioritization of requirements within the Navy and a decrease of \$.066 million for Congressional Recission. FY 2002 net increase of \$1.950 million consists of an increase of \$3.000 million for the SSST Program offset by a decrease of \$1.104 million for a reprioritization of requirements within the Navy and an increase of \$.054 million for economic assumptions.			
(U) Schedule: Not required.			
(U) Technical: Not required.			
(U) E. OTHER PROGRAM FUNDING SUMMARY:			
<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
228000 WPN	45.242	58.351	66.349
Related RDT&E			
(U) P.E. 0207161N (Tactical Air Intercept)			
(U) P.E. 0207163N (Advanced Medium Range Air-to-Air Missile)			
(U) F. ACQUISITION STRATEGY: Not required			
(U) G. SCHEDULE PROFILE: Not required			

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Exhibit R-3 Cost Analysis (page 1)							DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0609 Aerial Target Systems Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SSAT	C/CPIF	Northrop-Grumman/TBD	16.210	9.964	Various	13.507	12/01					
SSST (Follow-On) 1)	SS/CPIF	Orbital Sciences Corp., Chandler,AZ.	18.135	8.200	02/01	10.000	11/01					
SSST (Precision Guidance)	CPFF	McDonnell Douglas Corp. St. Louis, MO.	4.389	1.200	06/01	0.000						
Miscellaneous Contracts	Various	Various	27.586	2.128	Various	4.926	Various					
Miscellaneous (NAWC/Other)	WXs	Various	49.075	3.729	Various	3.424	Various					
Subtotal Product Development			115.395	25.221		31.857						
Remarks: 1) FY01 MA-31 Alternative source non-recurring engineering to integrate Passive Autopilot.												
Miscellaneous (HQ/NAWC)	Various	Various	1.232	0.561	Various	0.367	Various					
Subtotal Support			1.232	0.561		0.367						
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0609 Aerial Targets Systems Development						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total P Y s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Miscellaneous (NAWCs)	Various	Various	8.382	1.929	Various	2.570	Various					
SBIR assessment				0.842								
Subtotal T&E			8.382	2.771		2.570						
Remarks:												
Miscellaneous (HQ/NAWCs)	Various	Various	5.764	1.242	Various	1.957	Various					
Subtotal Management			5.764	1.242		1.957						
Remarks:												
Total Cost			130.773	29.795		36.751						
Remarks:												

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EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0604258N Target Systems Development (TSD)					A0610 Weapon SystemsT&E Dev/Procurement					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		19.102	9.787	11.611							
RDT&E Articles Qty		9	3	3							
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for the development and procurement of aerial targets used solely for test and evaluation of Naval Weapons Systems which closely replicate current and projected threats to fleet units in the Joint Strike and the Littoral Warfare environments. This replication must include characteristics related to size, performance envelope, and electromagnetic and infrared signatures. As threats change, changes must be made to keep the targets as threat representative as possible. This is done in response to changes in the requirements of the developers of naval weapons systems.</p> <p>(U) B. PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p style="margin-left: 40px;">1. FY 2000 ACCOMPLISHMENTS:</p> <ul style="list-style-type: none"> -(U) (\$18.219) Programmed engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of nine F-4S aircraft into FSAT targets. -(U) (\$0.562) Continued T & E TA/AS Vector Scoring development/procurement/support. -(U) (\$0.181) Continued VANDAL support. -(U) (\$0.140) Continued Target Support. <p style="margin-left: 40px;">2. FY 2001 PLANS:</p> <ul style="list-style-type: none"> -(U) (\$8.222) Continue program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4S aircraft into FSAT targets. -(U) (\$1.004) Continue T & E TA/AS Vector Scoring development/procurement/support. -(U) (\$0.202) Continue VANDAL support. -(U) (\$0.272) Continue Target Support. -(U) (\$0.087) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68. <p style="margin-left: 40px;">3. FY 2002 PLANS:</p> <ul style="list-style-type: none"> -(U) (\$8.728) Continue Program, engineering and logistic support for the FSAT, including Aviation Depot Level Repairables (AVDLR), procurement of kit material and conversion of three F-4S aircraft into FSAT targets. -(U) (\$2.261) Continue T & E TA/AS Vector Scoring development/procurement/support. -(U) (\$0.200) Continue VANDAL support. -(U) (\$0.422) Continue Target Support . 											

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Exhibit R-2a, RDTE Project Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604258N Target Systems Development (TSD)	PROJECT NUMBER AND NAME A0610 Weapon Systems T&E Development/Procurement	
(U) C. PROGRAM CHANGE SUMMARY:			
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget:	21.169	9.893	15.239
(U) Adjustments from the President's Budget:	-2.067	-0.106	-3.628
(U) FY 2002 President's Budget Submit:	19.102	9.787	11.611
(U) D. CHANGE SUMMARY EXPLANATION:			
<p>(U) Funding: FY2000 net decrease of \$2.067 million consists of a decrease of \$1.727 million for reprioritization of requirements within the Navy, a decrease of \$.215 million for realignment to A060 a decrease of \$.041 million for SBIR reduction, and \$.084 million for Congressional Reduction. FY2001 net decrease of \$1.06 million consists of a decrease of \$.084 million for reprioritization of requirements within the Navy and \$.022 for Congressional Recission. FY2002 net decrease of \$3.628 million consists of a decrease of \$3.000 to be realigned to the SSST Program, a decrease of \$.621 million for reprioritization of requirements within the Navy and a decrease of \$.007 million for economic assumptions.</p>			
(U) E. OTHER PROGRAM FUNDING SUMMARY: Not applicable.			
Related RDT&E (U) P.E. 0207161N (Tactical Air Intercept) (U) P.E. 0207163N (Advanced Medium Range Air-to-Air Missile)			
(U) F. ACQUISITION STRATEGY: This is a non-ACAT program with no specific acquisition strategies.			
(U) G. SCHEDULE PROFILE: Not required			

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Exhibit R-2a, RD TEN Project Justificator
(TSD Exhibits R-2a, page 9 of 10)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604258N Target Systems Development (TSD)			A0610 Weapons Systems T & E Development/Procurement						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	FY 03 Cost	FY 03 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Vector Scorer Development	SS/FFP	Aeronautical Systems Center Eglin AFB,FL	0.972	0.850	07/01	1.776	07/02					
Miscellaneous contracts	Various	Various	23.640	0.361	Various	0.373	Various					
Miscellaneous (NAWC/NADEP)	WXs	Various	83.192	8.073	Various	8.743	Various					
Subtotal Product Development			107.804	9.284		10.892						
Remarks:												
Miscellaneous(HQ/NAWC/NADEP)	Various	Various	4.642	0.305	Various	0.487	Various					
Subtotal Support			4.642	0.305		0.487						
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0604759N Major T & E Investment					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost		45.267	45.227	41.804						Continuing	Continuing
W2195 Test and Evaluation Investment		41.305	45.227	41.804						Continuing	Continuing
W2799 NAWC, PAX River Tracking Systems Upgrades		1.981									1.981
W2800 Advanced Virtual Environment		1.981									1.981
Quantity of RDT&E Articles	Not Applicable										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project improves visibility of Test and Evaluation (T&E) resources across the Services 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 support for the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTEC), Andros Island, Bahamas; the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu, CA and China Lake, CA; and Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD.</p> <p>(U) 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.</p>											

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Exhibit R-2, RDTEN Budget Item Justification
(Exhibit R-2, page 1 of 8)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA: 6	0604759N Major T&E Investment					W2195 T&E Investment					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		41.305	45.227	41.804						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project improves visibility 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 support for the Naval Undersea Warfare Center Detachment Atlantic Undersea Test and Evaluation Center (NAVUNSEAWARCEN DET AUTECE), Andros Island, Bahamas; the Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point MUGU, CA and China Lake, CA; and the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$6.875) NAVUNSEAWARCEN DET AUTECE. Continued the Tracking Hydrophone Replacement Project. Continued Instrumentation Component Replacement (ICR) efforts. Initiated Radar Systems Improvement Project. Initiated Off-Board Advanced Systems Stimulator Project (OASYS). Initiated the Underwater Range Data Communication Project.

- (U) (\$19.223) NAVAIRWARCENWPNSDIV. Continued to modernize core instrumentation capability. Completed six and initiated upgrade of an additional six version "B" Kineto tracking mounts with video tracker, Infrared (IR) cameras and telescopes, and microwave transmission capability. Completed upgrade to all Weapons Division ranges data presentation and display systems. Continued high rate telemetry data acquisition and processing upgrades from one to four 20Mb/s data streams at the Sea Range. Continued the refurbishment and installation of the Air Reconnaissance Search Radar (ARSR-3) radar at the Sea Range. Initiated the upgrade of two metric radar (3 and 4 of 7) electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Initiated an Integrated Target Control System Keep Alive Project. Initiated modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and non-Major Range Test and Facility Base (MRTFB) Department of Defense (DoD) air control network. Initiated modernizing deteriorated copper cables providing data, video and communications within the Sea Range complex. Initiated a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Initiated replacement of obsolete GPS receivers and operating software with commercial off-the shelf receivers and inertial reference units. Continued Environmental Impact Studies at China Lake and Point Mugu. Initiated moving target launch capability/instrumentation from C130A to C130F.

- (U) (\$2.850) Network Centric Warfare (NCW) Implemented. This project is identified as a consolidated Test and Evaluation modernization effort on behalf of NAVAIRWARCENWPNDIV and NAVAIRWARCENACDIV that refocuses investments towards interconnection of existing facilities. Initiated the establishment of an enterprise federation of interconnected facilities that will utilize a common scheduling tool, interoperable models and a common network. NCW integrates Research, Development, Test and Evaluation facilities to optimize support for air combat systems integration into future joint warfare systems. Used existing communications infrastructure Defense Research Engineering Network. Procured hardware and software to improve facility connectivity, establish software capabilities such as Distributed Interactive Simulation and High Level Architecture to support interoperability testing, and develop needed collaborative tools to operate the federation.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investement	PROJECT NUMBER AND NAME W2195 T&E Investment
<p>1. FY 2000 ACCOMPLISHMENTS: (continued)</p> <p style="margin-left: 40px;">- (U) (\$11.257) NAVAIRWARCENACDIV. Continued to modernize core instrumentation capability. Modernized RIR-778 Range Instrumentation radars and the Multiple Target Instrumentation Radar. Initiated replacement of aging Telemetry acquisition and processing equipment. Initiated the replacement and upgrade of visual image generators and video display systems at the Manned Flight Simulator facility. Initiated development of full-spectrum dynamic avionics and aircraft signature measurement system. Procured Common Avionics Instrumentation System (CAIS) hardware suites. Provided fiber optic connectivity between multiple sites and range facilities. Corrected deficiency in the tactical electronic warfare simulators. Developed and installed radio frequency to fiber optic interface system.</p> <p style="margin-left: 40px;">- (U) (\$1.100) Joint Modeling and Simulation System (JMASS). Initiated efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysts in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities.</p> <p>2. FY 2001 PLANS:</p> <p style="margin-left: 40px;">- (U) (\$5.406) NAVUNSEAWARCEN DET AUTC. Complete Tracking Hydrophone Replacement Project. Continue Instrumentation Component Replacements (ICR) efforts. Continue Radar Systems Improvement efforts. Continue the Off-Board Advanced Systems Stimulator Project (OASYS). Continue the Underwater Range Data Communication Project.</p> <p style="margin-left: 40px;">- (U) (\$14.549) NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Complete high rate telemetry data acquisition and processing upgrades from one to four 20Mb/s data streams at the Sea Range. Continue the upgrade of two metric radar (3 and 4 of 7) electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Continue the Integrated Target Control System Keep Alive Project. Continue modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and non-Major Range Test and Facility Base (MRTFB) Department of Defense (DoD) air control network. Continue modernizing deteriorated copper cables providing data, video and communications within the Sea Range complex. Continue a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Continue Kineto tracking mounts with video tracker, Infrared (IR) cameras and telescopes, and microwave transmission capability. Continue replacement of obsolete GPS receivers and operating software. Complete Air Reconnaissance Search Radar (ARSR-3) radar integration at San Nicholas Island. Complete Environmental Impact Studies at China Lake and Point Mugu. Continue removal of target launch capability/instrumentation from C130A to C130F.</p> <p style="margin-left: 40px;">- (U) (\$3.100) Complete Network Centric Warfare (NCW) Implementation. Complete the consolidated Test and Evaluation effort on behalf of NAVAIRWARCENWPNSDIV and NAVAIRWARCENACDIV that refocuses investments towards interconnection of existing facilities. Complete the establishment of an enterprise federation of interconnected facilities that will utilize a common scheduling tool, interoperable models and a common network. Complete integration Research, Development, Test and Evaluation facilities to optimize support for air combat systems integration into future joint warfare systems. Complete using existing communications infrastructure Defense Research Engineering Network and Defense Information Systems Network. Complete the procurement of hardware and software to improve facility connectivity, establish software capabilities such as Distributed Interactive Simulation and High Level Architecture to support interoperability testing, and develop needed collaborative tools to operate the federation.</p>		

R-1 SHOPPING LIST - Item No. 153

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 3 of 8)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0604759N Major T&E Investement	W2195 T&E Investment
<p>2. FY 2001 PLANS: (continued)</p> <ul style="list-style-type: none">- (U) (\$15.025) NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Continue to modernize RIR-778 Range Instrumentation radars and the Multiple Target Instrumentation Radar. Continue to replace aging Telemetry acquisition and processing equipment. Continue to replace and upgrade obsolescent image generators and video display systems at the Manned Flight Simulator facility. Continue to develop full-spectrum dynamic avionics and aircraft signature measurement system. Continue procurement of Common Avionics Instrumentation System (CAIS) hardware suites. Complete correction of deficiencies in the tactical electronic warfare simulators. Complete radio frequency to fiber optic interface project. Complete fiber optic connectivity between multiple sites and range facilities.- (U) (\$2.100) Joint Modeling and Simulation System (JMASS). Continue efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysts in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities.- (U) (\$2.000) Fleet Air Training. Congress appropriated \$2M to augment and enhance the test and evaluation resources and capabilities (video scoring, laser evaluation, mobile command and control communications , portable emitters) of the Atlantic Test Range to support naval fleet aviation readiness training.- (U) (\$3.000) Acquisition/Install SPS-48E. Congress appropriated \$3M to fund the acquisition and installation of a fleet-standard AN/SPS-48E shipboard air surveillance radar in support of the Airspace Management System at Naval Air Station (NAS) Patuxent River.- (U) (\$.047) Portion of extramural program reserved for Small Business Innovation Research (SBIR) assessment in accordance with 15 USC 68.		

R-1 SHOPPING LIST - Item No. 153

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Exhibit R-2a, RDTEEN Project Justification
(Exhibit R-2a, page 4 of 8)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investement	PROJECT NUMBER AND NAME W2195 T&E Investment
<p>3. FY 2002 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$9.530) NAVUNSEAWARCEN DET AUTE C. Continue Instrumentation Component Replacement (ICR) efforts. Continue Radar Systems Improvement efforts. Continue the Off-Board Advanced Systems Stimulator Project. Continue the Underwater Range Data Communications Project. Initiate Range Ware Improvement Project. - (U) (\$16.929) NAVAIRWARCENWPNSDIV. Continue to modernize core instrumentation capability. Complete the upgrade of two metric radar (3 and 4 of 7) electronic systems and control consoles and add moving target indicators, automatic calibration and computer controls of chart recorders at San Nicolas Island. Complete the Integrated Target Control System Keep Alive project. Continue modernization of air traffic control radar processing systems, controller consoles and voice switches to systems that will be compatible with the Federal Aviation Administration (FAA) and non-Major Range Test and Facility Base (MRTFB) Department of Defense (DoD) air control network. Complete modernizing deteriorated copper cables proving data, video and communications within the Sea Range complexes. Continue a project to assemble and field remote, fixed and mobile telemetry receiving stations to provide full land range coverage required by customers. Complete Kineto tracking mounts with video tracker, Infrared (IR) cameras and telescopes, and microwave transmission capability. Complete replacement of obsolete GPS receivers and operating software. Initiate and complete upgrade of the site Command Transmitter System equipment. Develop a capability to test and evaluate effects and performance of hypersonic penetrators. Initiate replacement of aging cinesextant mount laser trackers with laser tracker kits. Initiate replacement of aging remote van equipment, vintage tracking antennas and allow multiple participant operations coverage at San Nicolas Island. Modernize frequency monitoring capabilities at Electronic Combat Range, Land Range, and Sea Range. Initiate replacement of obsolete data acquisition and electronic equipment at Skytop facility. Continue moving target launch capability/instrumentation from C130A to C130F. - (U) (\$13.245) NAVAIRWARCENACDIV. Continue to modernize core instrumentation capability. Complete modernization of RIR-778 Range Instrumentation radars and the Multiple Target Instrumentation Radar. Continue to replace aging Telemetry acquisition and processing equipment. Continue to replace and upgrade obsolescent image generators and video display systems at the Manned Flight Simulator facility. Continue to develop full-spectrum dynamic avionics and aircraft signature measurement system. Complete procurement of Common Airborne Instrumentation System (CAIS) hardware suites. Initiate replacement of obsolete data collection system with new collection and distribution system. Initiate and complete increased fuel filtration testing capabilities. Modernize the Range Control Center display systems. Initiate procurement of hardware to monitor radio frequency (RF) environment and responses in real-time for installed test facility. Integrate and support replacement of high-speed film cameras with Airborne Separation Video System. Initiate replacement of analog National Television Systems Committee (NTSC) video with digital systems based on industry and Advanced Television Systems Committee formats. Initiate upgrade universal radar moving target transponder to support all Navy radar systems. Initiate upgrade mechanical/machining capabilities. - (U) (\$2.100) Joint Modeling and Simulation System (JMASS). Continue efforts to develop a tri-service simulation infrastructure that will assist model developers, engineers, and analysis in the development of digital models, configuration and execution of simulations and analysis of simulation capabilities. 		

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 5 of 8)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0604759N Major T&E Investment	PROJECT NUMBER AND NAME W2195 T&E Investment																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: right;">FY2000</th> <th style="text-align: right;">FY2001</th> <th style="text-align: right;">FY2002</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: right;">42.386</td> <td style="text-align: right;">40.707</td> <td style="text-align: right;">42.159</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: right;">-1.081</td> <td style="text-align: right;">4.52</td> <td style="text-align: right;">-0.355</td> </tr> <tr> <td>(U) FY2002 President's Budget Submit:</td> <td style="text-align: right;">41.305</td> <td style="text-align: right;">45.227</td> <td style="text-align: right;">41.804</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2000 net decrease of \$1.081 million consists of a \$.466 million decrease for a Small Business Innovative Research (SBIR) assessment, a \$.837 million decrease for reprioritization of requirements within the Navy and a \$.166 million decrease for a Congressional Recission; offset by \$.388 million increase for Below Threshold Reprogramming for Joint Modeling and Simulation System requirement and support of NAVAIR's Network Centric Warfare network development and improve range surveillance capabilities. FY2001 net increase of \$4.52 million consists of a \$.061 million decrease for reprioritization of requirements within the Navy, a \$.320 million decrease for a Congressional Reduction and a \$.099 million decrease for a Congressional Recission; offset by Congressional increases of \$3.000 million for Acquisition/Installation Refurbished SPS-48E shipboard air surveillance radar system and a \$2.000 million for Fleet Air Training. FY 2002 net decrease of \$.250 million consists of a \$.175 million decrease for reprioritization of requirements within the Navy, and a \$.075 million decrease for economic assumptions.</p> <p>(U) Schedule: Not Applicable.</p> <p>(U) Technical: Not Applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.</p> <p><u>Related RDT&E</u></p> <p>(U) PE 0605807F: Test and Evaluation (Air Force) (U) PE 0605864N: Test and Evaluation (Navy)</p> <p>(U) D. ACQUISITION STRATEGY: Not Applicable.</p> <p>(U) E. SCHEDULE PROFILE: Not Applicable.</p>				FY2000	FY2001	FY2002	(U) FY 2001 President's Budget:	42.386	40.707	42.159	(U) Adjustments from the President's Budget:	-1.081	4.52	-0.355	(U) FY2002 President's Budget Submit:	41.305	45.227	41.804
	FY2000	FY2001	FY2002															
(U) FY 2001 President's Budget:	42.386	40.707	42.159															
(U) Adjustments from the President's Budget:	-1.081	4.52	-0.355															
(U) FY2002 President's Budget Submit:	41.305	45.227	41.804															

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Exhibit R-2a, RD TEN Project Justification
(Exhibit R-2a, page 6 of 8)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0604759N Major T&E Investment			W2195 T&E Investment						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Network Centric Warfare Implement	WX	NAWCWD, Point Mugu, CA	2.850	3.100	10/00						5.950	
Tracking Hydrophone Replacement	WX	AUTEC, Newport, RI	17.242	1.457	10/00						18.699	
Tracking Mounts	WX	NAWCWD, Point Mugu, CA	11.363	1.103	10/00						12.466	
Range Telemetry Systems	WX	NAWCWD, Point Mugu, CA	8.526	0.800	10/00						9.326	
Air Surveillance Radar	WX	NAWCWD, Point Mugu, CA	3.252	0.700	10/00						3.952	
Slep FPS-16 (3&4)	WX	NAWCWD, Point Mugu, CA	2.600	1.620	10/00	1.720	10/01				5.940	
Radar Sys Improvements	WX	AUTEC, Newport, RI	0.200	0.200	01/01	2.900	10/01			1.300	4.600	
CATS-Radars	WX	NAWCAD, Pax River, MD	1.100	0.400	10/00	1.225	10/01				2.725	
Test Monitoring and processing	WX	NAWCAD, Pax River, MD	1.700	2.300	10/00	2.000	10/01			2.000	8.000	
Target Control System	WX	NAWCWD, Point Mugu, CA	1.138	0.535	10/00	0.325	10/01				1.998	
Off-Board Advanced Sys Stimulator	WX	AUTEC, Newport, RI	2.848	2.489	10/00	3.395	10/01			3.300	12.032	
Manned Flight Simulator Upgrades	WX	NAWCAD, Pax River, MD	0.800	3.850	10/00	1.300	10/01				5.950	
MRTFB Surveillance	WX	NAWCWD, Point Mugu, CA	0.160	1.300	10/00	1.000	10/01			6.000	8.460	
Dynamic Multi-spectral Avionics Measure	WX	NAWCAD, Pax River, MD	1.345	2.700	10/00	2.700	10/01			2.100	8.845	
CAIS Equipment	WX	NAWCAD, Pax River, MD	2.100	3.400	10/00	1.200	10/01				6.700	
Cable Plant Phase II	WX	NAWCWD, Point Mugu, CA	2.045	2.890	01/01	2.500	01/02				7.435	
Fiber Optic Network Connectivity	WX	NAWCAD, Pax River, MD	0.640	0.294	10/00						0.934	
ATEWES Generator Upgrade	WX	NAWCAD, Pax River, MD	0.686	0.804	10/00						1.490	
ARDS Receiver Upgrade	WX	NAWCWD, Point Mugu, CA	1.800	1.803	10/00	0.750	10/01				4.353	
RF to Fiber Transmission Interface	WX	NAWCAD, Pax River, MD	1.500	0.310	10/00						1.810	
Remote TM Stations	WX	NAWCWD, Point Mugu, CA	1.206	1.292	10/00	2.455	10/01			1.645	6.598	
Investment Items Less Than \$1M	WX	Various		3.983	10/00	6.661	10/01			Continuing	Continuing	
Underwater Range Data Comm	WX	AUTEC, Newport, RI	0.650	0.750	10/00	1.710	10/01			2.649	5.759	
JMASS	MP	USAF, WPAFB, OH	1.100	2.100	10/00	2.100	10/01			1.400	6.700	
Remarks:												

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
L2097 Manpower, Personnel, and Training	230	232	294
R0132 CNO Program Analysis and Evaluation	104	111	-
R0133 National Academy of Sciences/Naval Studies Board	1,965	1,801	2,108
R0147 Operational Strategic and Tactical Effectiveness Analysis	159	169	-
S2233 Naval Surface Warfare Studies	1,517	1,474	1,550
S2354 Expeditionary Warfare Studies	361	374	474
W2092 Naval Aviation Studies	1,778	1,836	2,253
TOTAL	6,114	5,997	6,679

(U) 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.

(U) 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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Budget Item Justification
(Exhibit R-2, Page 1 of 14)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) PROGRAM CHANGE FOR TOTAL PE:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
(U) FY 2001 President's Budget:	5,996	8,056	7,481
Program Adjustment			-796
Congressional Recission	-23	-43	
Congressional Reduction		-2016	
NWCF Adjustment			-15
Inflation Adjustment			+9
SBIR	-218		
Execution Adjustment	+359		
(U) FY 2002 President's Budget Submission:	6,114	5,997	6,679

(U) CHANGE SUMMARY EXPLANATION:

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

R-1 Line Item 154

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Budget Item Justification
(Exhibit R-2, Page 2 of 14)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
L2097 Studies and Analysis Support, Navy	230	232	294

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Chief of Naval Personnel has an ongoing need for direct analyses of Navy manpower and personnel (MP) policies and program planning. This project provides an essential management tool to: (a) assess the effectiveness of existing MP 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 trends, and to evolving strategic and geopolitical factors, (d) study the impact of MP programs on Navy accession, retention, and performance, and (e) develop, validate and/or refine a broad range of MP forecasting models. The program permits Navy to more effectively utilize Research and Development expertise to respond to emergent Manpower and Personnel Training issues.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U)(\$78) Conducted an Officer Career Path and Requirements Study of the Un-Restricted Line (URL) force structure.
- (U)(\$67) Developed a Performance Evaluation System for Personnel Accounting of Inventory and Navy Enlisted Classification (NEC) Reutilization.
- (U)(\$45) Conducted a Cost of Doing Business Study; assess proper accounting of personnel in Individuals Account.
- (U)(\$40) Designed a Recruiter Incentive System to Enhance Recruiter Productivity.

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Budget Item Justification
(Exhibit R-2, Page 3 of 14)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JULY 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROJECT NUMBER: L2097

PROGRAM ELEMENT TITLE: Studies and Analysis
Support, Navy

PROJECT TITLE: Manpower, Personnel,
and Training

2. (U) FY 2001 PLAN:

- (U) (\$33) Expand Navy Gender Specific Enlisted Accession Model.
- (U) (\$93) Navy Manning Plan for Officers (NMPO) Model.
- (U) (\$65) Evaluating Navy Counseling & Advocacy Programs: Relating Programs to Readiness and Retention.
- (U) (\$35) General Educational Development (GED) Screening Pilot Study (for Non-High School Diploma Graduate 1st term Attrition.
- (U) (\$6) Small Business Innovative Research (SBIR) Program.

3. (U) FY 2002 PLAN:

- (U) (\$64) Complete GED Screening Pilot Study begun in FY 2001. Collect and analyze information and data obtained from state GED files and from completed questionnaires at the MEPS. Identify and evaluate procedures to broaden recruiting base and to reduce 1st Attrition.
- (U) (\$90) Develop a requirements-based Selective Reenlistment Bonus (SRB) Model.
- (U) (\$50) Conduct a study of the cost, productivity and readiness impacts of family violence.
- (\$90) Assess reduced manning initiatives on new weapon systems in the systems acquisition process.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change For PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: R0133
PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy PROJECT TITLE: National Academy of Science/
Naval Studies Board

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2000	FY 2001	FY 2002
	ACTUAL	ESTIMATE	ESTIMATE
R0133 National Academy of Science/Naval Studies Board	1,965	1,801	2,108

A. (U) 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 requirement, 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) (ASN (RD&A)) and the CNO and staff, and written technical reports.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$685) Continued research efforts and investigations in areas of interest to the Navy. Continued to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- (U) (\$1,280) Produced investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A). Specifically, concluded the study entitled, "Network-Centric Naval Forces: A Transition Strategy for Enhancing Operational Capabilities." Additionally, two new studies were started, one on Theater Missile Defense and one on Mine Warfare.

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Budget Item Justification
(Exhibit R-2, Page 5 of 14)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: R0133
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: National Academy of Science/
Support, Navy Naval Studies Board

2. (U) FY 2001 PLAN:

- (U) (\$800) Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- (U) (\$963) Produce investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A). Specifically, two studies will be concluded, one on Theater Missile Defense and one on Mine Warfare. Additionally, at least one new study, on chemical/biological warfare, will be started.
- (U) (\$38) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

- (U) (\$800) Continue research efforts and investigations in areas of interest to the Navy. Continue to support annual Navy authorized activities of importance, such as the National Space Forum and the Weinblum Memorial Lecture Series.
- (U) (\$1,308) Produce investigations of significant importance to the Navy concerning technology of the future, selected from proposals received from CNO and ASN (RD&A). New studies will be authorized by CNO (N091 and N81) during the Spring/Summer of FY 2001.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change Total for PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) ACQUISITION STRATEGY: Not applicable.

E. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 154

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605152N

PROGRAM ELEMENT TITLE: Studies and Analysis Support, Navy

(U) COST: (Dollars in Millions)

Project Number & Title	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
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S2233 Naval Surface Warfare Studies

	1,517	1,474	1,550
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A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for analysis of the warfighting capability of Naval forces by examining specific selected numbers and mixes of surface combatants and other forces that are subjected to representative operational situations in a joint littoral environment. The U.S. strategic emphasis has shifted from global containment and warfighting to a global engagement and deference strategy with regional focus. As part of an overall effort at addressing future Naval force levels and capabilities, the Navy must assess the warfighting effectiveness of new operating concepts using different mixes of surface combatants operating in a littoral warfare environment and develop an investment strategy that supports the capabilities required. Required Operational Capabilities/Projected Operational Environment (ROC/POE) must be updated every two years or created for new ship classes. These ROC/POE's are vitally important in that mission requirements for ships drive equipment configurations, manning levels and associated shipboard accommodations, tailor ship and staff missions, capabilities, manning to new strategies, tactics, operational environments, and policies.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: S2233
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Surface
Support, Navy Warfare Studies

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$1,517) Continued analyses to identify force capabilities considering various force mixes. These studies addressed the warfighting and strategy requirements for effective, flexible and cost-effective Naval Surface Warfare Forces focused on the challenge of continuous operations in the littoral regions. These studies will support the Quadrennial Defense Review (QDR) which is a major DoD effort to review requirements, analyses, and assumptions that underpin force structure within DoD. Measures of Effectiveness were used in characterizing Naval Surface Warfare capabilities for theater air dominance and precision land attack undergirded by maritime dominance. The results were applied to campaign scenarios and operational situations to scope, focus and interpret the analyses. The results were applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces and directly support the DoN Assessment process. Revised ROC/POE instructions. Obligations initiated October 1999 and were completed September 2000.

2. (U) FY 2001 PLAN:

- (U) (\$1,445) Continue analyses to identify force capabilities considering various force mixes. These studies will address the warfighting and strategy requirements for effective, flexible and cost-effective Naval Surface Warfare Forces focused on the challenge of continuous operations in the littoral regions. These studies will support the Quadrennial Defense Review (QDR) which is a major DoD effort to review requirements, analyses, and assumptions that underpin force structure within DoD. Measures of Effectiveness will be used in characterizing Naval Surface Warfare capabilities for theater air dominance and precision land attack undergirded by maritime dominance. The results will be applied to campaign scenarios and operational situations to scope, focus and interpret the analyses. The results of these analyses will be applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces and directly support the DoN Assessment process. Revise ROC/POE instructions. Obligations initiated October 2000 will be complete in September 2001.
- (U) (\$29) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: S2233
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Surface
Support, Navy Warfare Studies

3. (U) FY 2002 PLAN:

- (U) (\$1,550) Continue analyses to identify force capabilities considering various force mixes. These studies will address the warfighting and strategy requirements for effective, flexible and cost-effective Naval Surface Warfare Forces focused on the challenge of continuous operations in the littoral regions. These studies will support the Quadrennial Defense Review (QDR) which is a major DoD effort to review requirements, analyses, and assumptions that underpin force structure within DoD. Measures of Effectiveness will be used in characterizing Naval Surface Warfare capabilities for theater air dominance and precision land attack undergirded by maritime dominance. The results will be applied to campaign scenarios and operational situations to scope, focus and interpret the analyses. The results of these analyses will be applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces and directly support the DoN Assessment process. Revise ROC/POE instructions. Obligations will initiate October 2001 and complete September 2002.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change Total For PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not Applicable

D. (U) ACQUISITION STRATEGY: Not Applicable

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: S2354
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Expeditionary Warfare Studies
Support, Navy

(U) COST: (Dollars in Millions)

Project Number & Title	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
S2354 Expeditionary Warfare Studies	361	374	474

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides for analysis of the warfighting capability of Expeditionary forces, with emphasis on the joint littoral environment, by examining specific selected numbers and mixes of amphibious combatants, mine warfare forces and other forces that are subjected to represent operational situations in a joint littoral environment. The U.S. strategic emphasis has shifted from global containment and warfighting to a global engagement and deference strategy with regional focus. As part of an overall effort at addressing future Naval force levels and capabilities, the Navy must assess the warfighting effectiveness of new operational concepts using different mixes of expeditionary combatants operating in a littoral warfare environment and develop an investment strategy that supports the capabilities required.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$361) Initiated efforts for dedicated analyses of Expeditionary Warfare Studies. Continued analysis to identify force capabilities considering various force mixes. These studies addressed the warfighting and national security policy and strategy requirements for effective, flexible and cost-efficient Naval Expeditionary Warfare Forces, including the numbers and mixes of expeditionary combatants, to include mine warfare forces and other forces that were subjected to represent operational situations in a joint littoral environment. Measures of Effectiveness were used in characterizing Naval Expeditionary Warfare applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces. Obligations initiated in October 1999 and will be complete in September 2000.

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DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: S2354
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Expeditionary Warfare Studies
Support, Navy

2. (U) FY 2001 PLANS:

- (U) (\$368) Continue analysis to identify force capabilities considering various force mixes. These studies will address the warfighting and national security policy and strategy requirements for effective, flexible and cost-efficient Naval Expeditionary Warfare Forces, including the numbers and mixes of expeditionary combatants, to include mine warfare forces and other forces that are subjected to represent operational situations in a joint littoral environment. Measures of Effectiveness will be used in characterizing Naval Expeditionary Warfare applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces. Obligations will initiate in October 2000 and complete in September 2001.
- (U) (\$6) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLANS:

- (U) (\$471) Continue analysis to identify force capabilities considering various force mixes. These studies will address the warfighting and national security policy and strategy requirements for effective, flexible and cost-efficient Naval Expeditionary Warfare Forces, including the numbers and mixes of expeditionary combatants, to include mine warfare forces and other forces that are subjected to represent operational situations in a joint littoral environment. Measures of Effectiveness will be used in characterizing Naval Expeditionary Warfare applied to strategic planning and investment strategies for future Joint Littoral Warfare Naval Forces. Obligations will initiate in October 2001 and complete in September 2002.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change Total For PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not Applicable

D. (U) ACQUISITION STRATEGY: Not Applicable

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: W2092
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Aviation Studies
Support, Navy

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 2000	FY 2001	FY 2002
	ACTUAL	ESTIMATE	ESTIMATE
W2092 Naval Aviation Studies			
	1,778	1,836	2,253

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports studies over a wide range of naval aviation issues that support the ongoing Joint Strike Assessment (JSA) guidelines. Results provide a basis for recommendations to the Chief of Naval Operations concerning major policy, planning, and acquisition program decisions. This effort is a management initiative, which will allow allocation of study resources in a timely manner according to priorities. This ongoing program will continue to leverage more detailed program specific analysis in order to gain insight in acquisition of various weapon systems and their impact on force structure, manning levels, operational readiness and Carrier Air Wing effectiveness. This program will also support various Analysis of Alternatives (AOA) Studies.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$216) Initiated a naval aviation developmental plan that will provide for the future operational capabilities required to support network centric warfare.
- (U) (\$499) Conducted the initial studies to explore the potential utilization of high speed weapons with initial operating capability in FY 2010 to FY 2015.
- (U) (\$500) Continued studies to support JSA issues for the current and follow-on cycle.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: W2092
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Aviation Studies
Support, Navy

- (U) (\$200) Began studies to evaluate concepts of operations for strike missions.
- (U) (\$363) Provided support for general aviation related AOAs and studies with NAVAIR and OPNAV.

2. (U) FY 2001 PLAN:

- (U) (\$250) Continue efforts to support operational analysis for network centric warfare.
- (U) (\$300) Continue studies to support JSA issues for the current and follow-on cycle.
- (U) (\$350) Develop techniques for analysis of naval aviation warfare requirements versus current system capabilities.
- (U) (\$300) Expand the studies to evaluate future concepts for strike concepts of operations.
- (U) (\$240) Continue the studies to investigate alternatives for advanced weapon initiatives.
- (U) (\$375) Provide support with general aviation related AOAs and studies with NAVAIR and OPNAV.
- (U) (\$ 21) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 68.

4. (U) FY 2002 PLAN:

- (U) (\$300) Continue a low level, multi-year effort to develop a consistent methodology to quantify and estimate future network centric warfare effectiveness.
- (U) (\$350) Continue studies to support JSA issues for POM-04.

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DATE: JUNE 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605152N PROJECT NUMBER: W2092
PROGRAM ELEMENT TITLE: Studies and Analysis PROJECT TITLE: Naval Aviation Studies
Support, Navy

- (U) (\$367) Resume limited Carrier Air Wing(CVW) capabilities analysis effort.
- (U) (\$380) Continue studies to evaluate concepts of operations for strike missions.
- (U) (\$400) Continue studies to explore alternatives for Advanced Weapons Initiatives.
- (U) (\$456) Provide support for general aviation related AOA's and studies within NAVAIR and OPNAV.

B. (U) PROGRAM CHANGE SUMMARY: See Program Change Total For PE

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable

D. (U) ACQUISITION STRATEGY: Not Applicable

E. (U) SCHEDULE PROFILE: Not Applicable

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: Center for Naval Analyses

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
C0031 Marine Corps Operations Analysis Group	4,343	4,315	4,370						CONT.	CONT.
R0148 Center for Naval Analyses, Navy	38,178	39,172	40,521	41,113					CONT.	CONT.
TOTAL	42,521	43,487	44,891	45,695					CONT.	CONT.

(U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The Center for Naval Analyses (CNA) is the Department of the Navy's only Federally Funded Research and Development Center. 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 1 Marine Corps category and 10 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, and budgets, the Navy and Marine Corps have a greater need for analyses that are both sophisticated and timely. CNA is highly qualified to meet that need.

(U) 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.

(U) PROGRAM CHANGE SUMMARY:

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROGRAM ELEMENT TITLE: Center for Naval Analyses

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
(U) FY 2001 President's Budget:	43,452	43,889	44,932
(U) Appropriated Value:			
(U) Adjustments from PRESBUDG:			
(U) Program Adjustments			-121
(U) FY 2000 Midyear Review Adjustments	-778		
(U) Congressional Recissions	-153	-402	
(U) Non-Pay Adjustments			+80
(U) FY 2002 President's Budget Submission:	42,521	43,487	44,891

(U) CHANGE SUMMARY EXPLANATION:

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROGRAM ELEMENT TITLE: Center for Naval Analyses

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
C0031	Marine Corps Operations and Analysis Group (MCOAG)	4,343	4,315	4,370					CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Marine Corps portion of the Department of the Navy's (DoNs) Center for Naval Analyses (CNA) Research Program. It 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 Federally Funded Research and Development Center (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 refocused effort maintains the number of field representatives for the Operational Forces commanders and established five specific areas of expertise for CNA to establish and maintain. The areas of expertise are (1) Logistics, (2) Manpower, (3) Programs and Resources, (4) Naval Integration, and (5) Operations. Scientific analyst support provides five full-time scientific analysts, one for each of the five focus areas. The program continues analytical support for field exercise, ad hoc, and quick response requirements.

(U) Justification for Budget Activity: This program is funded under RDT&E MANAGEMENT SUPPORT as it provides the USMC operations and installations the required analysis for research and development use.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: C0031

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Marine Corps Operations and
Analysis Group

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$478) Continued maintenance of the LOGISTICS Area of Expertise including the funding of one scientific analyst. Executed high-priority logistics related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$417) Continued maintenance of the MANPOWER Area of Expertise including the funding of one scientific analyst. Executed high-priority force structure and personnel related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$401) Continued maintenance of the PROGRAMS and RESOURCES Area of Expertise including the funding of one scientific analyst. Executed high-priority Quality Deficiency Reports, program, resource, and readiness related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$445) Continued maintenance of the OPERATIONS Area of Expertise including providing analysts for field exercises and the funding of one scientific analyst. Executed high-priority Joint and Marine Air Ground Task Force (MAGTF) operations and OMFTS implementation related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$545) Continued maintenance of the Naval Integration Area of Expertise including the funding of one scientific analyst. Executed high-priority quality deficiency report, Naval (From the Sea and OMFTS) and non-linearity aspects of combat related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$1,115) Funded staffing of six field representative billets at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, CG MCAGCC, and CG III MEF.
- (U) (\$942) Executed 5 to 8 "Quick Response" study projects (start to finish within 90 days); AD HOC support for the immediate analytical support requirements; and administrative support functions including: General Concept Development, CNA Self-Initiated Analysis Efforts, and Award Fee funding.

2. (U) FY 2001 PLAN:

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: C0031

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Marine Corps Operations and
Analysis Group

- (U) (\$495) Continues maintenance of the LOGISTICS Area of Expertise including the funding of one scientific analyst. Execute high-priority logistics related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
 - (U) (\$400) Continues maintenance of the MANPOWER Area of Expertise including the funding of one scientific analyst. Execute high-priority force structure and personnel related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
 - (U) (\$401) Continues maintenance of the PROGRAMS and RESOURCES Area of Expertise including the funding of one scientific analyst. Execute high-priority QDR, program, resource, and readiness related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
 - (U) (\$469) Continues maintenance of the OPERATIONS Area of Expertise including providing analysts for field exercises and the funding of one scientific analyst. Execute high-priority Joint and MAGTF operations and OMFTS implementation related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
 - (U) (\$545) Continues maintenance of the Naval Integration Area of Expertise including the funding of one scientific analyst. Execute high-priority QDR, Naval (From the Sea and OMFTS) and non-linearity aspects of combat related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
 - (U) (\$1,115) Funds the staffing of six field representative billets at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, MCAGCC, and CG III MEF.
 - (U) (\$890) Execute 5 to 8 "Quick Response" study projects (start to finish within 90 days); AD HOC support for the immediate analytical support requirements; and administrative support functions including: General Concept Development, CNA Self-Initiated Analysis Efforts, and Award Fee funding.
3. (U) FY 2002 PLAN:
- (U) (\$495) Continues maintenance of the LOGISTICS Area of Expertise including the funding of one scientific analyst. Execute high-priority logistics related study and analysis requirements included in the annual Marine Corps Studies Master Plan.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: C0031

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Marine Corps Operations and
Analysis Group

- (U) (\$429) Continues maintenance of the MANPOWER Area of Expertise including the funding of one scientific analyst. Execute high-priority force structure and personnel related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$401) Continues maintenance of the PROGRAMS and RESOURCES Area of Expertise including the funding of one scientific analyst. Execute high-priority Quality Deficiency Reports, program, resource, and readiness related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$406) Continues maintenance of the OPERATIONS Area of Expertise including providing analysts for field exercises and the funding of one scientific analyst. Executed high-priority Joint and MAGTF operations and OMFTS implementation related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$565) Continues maintenance of the Naval Integration Area of Expertise including the funding of one scientific analyst. Execute high-priority QDR, Naval (From the Sea and OMFTS) and non-linearity aspects of combat related study and analysis requirements included in the annual Marine Corps Studies Master Plan.
- (U) (\$1,135) Funds staffing of six field representative billets at COMMARFORPAC, COMMARFORLANT, CG I MEF, CG II MEF, MCAGCC and CG III MEF.
- (U) (\$939) Provides for 5 to 8 "Quick Response" study projects (start to finish within 90 days); AD HOC support for the immediate analytical support requirements; and administrative support functions including: General Concept Development, CNA Self-Initiated Analysis Efforts, and Award Fee funding.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E:

(U) PE 0605873M (Marine Corps Program Wide Support)

C. (U) SCHEDULE PROFILE: Not applicable.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: PROGRAM ELEMENT: 0605154N
PROGRAM ELEMENT TITLE: Center for Naval Analyses

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0148	Center for Naval Analyses, Navy 38,178	39,172	40,521						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports the Navy's portion of the Center for Naval Analyses (CNA) Research Program, which is primarily concentrated along 10 Navy categories of study called product areas. These product areas include the following: 1) Manpower, Medical and Training; 2) Policy and Operations; 3) Infrastructure and Readiness; 4) Space and Electronic Warfare/Command, Control, Communications, and Computers/Intelligence and Information and Modeling and Simulation; 5) Systems and Force Structure; 6) Research, Development and Acquisition; 7) Systems and Tactics; 8) Field Program; 9) Scientific Analyst Program; and 10) Quick Response Projects. CNA's analyses have resulted in substantial improvements in force structure, fleet effectiveness, and significant cost avoidance.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$38,178) Addressed issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Supported the CNA field program, which assigns analysts to over 33 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605154N

PROJECT NUMBER: R0148

PROGRAM ELEMENT TITLE: Center for Naval Analyses

PROJECT TITLE: Center for Naval Analysis,
Navy

2. (U) FY 2001 PLAN:

- (U) (\$39,172) Address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to over 33 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

3. (U) FY 2002 PLAN:

- (U) (\$40,521) Address issues of major importance to Navy leadership in the above research areas. CNA's Research Program will be continually updated to support the Navy efficiently and effectively. Support for the CNA field program, which assigns analysts to over 33 locations around the world and at sea, will continue to comprise approximately 20% of the funding.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E:

(U) PE 0605152N (Studies and Analysis Support)

C. (U) SCHEDULE PROFILE: Not applicable.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N
PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
R0151	2,948	2,715	2,914

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element supports all naval warfare task areas and provides technical and analytical support to the fleet operating forces to develop and evaluate tactics for newly evolving force structures, new and existing weapon system employment, and changing threat scenarios to improve and measure force readiness.

(U) 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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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

- (U) (\$227) Developed a methodology for Unmanned Aerial Vehicle (UAV) usage in support of Strike and Special warfare operations. Developed Tactics, Techniques and Procedures for employing Medium Altitude Endurance Unmanned Aerial Vehicles (MAE UAV) and Tactical UAV to enhance Reconnaissance/Surveillance/Target acquisition (RSTA) battle management and Electronic Combat functions in support of strike warfare and Special Operations Forces. Loss of ES-3 has elevated the requirement for investment in an airborne, tactical electronic surveillance (ES) capability.
- (U) (\$93) Evaluated small craft tactics in the littoral waters. Developed Tactics Techniques and Procedures using multiple weapons systems in dealing with high-speed small boat threat attacks.
- (U) (\$ 94) Developed a method of employing tactical oceanographic information. Consolidated cross community guidance and procedures into a single relevant tactical publication that provides a single point reference source in dealing with the littoral environment.
- (U) (\$109) Evaluated combined Maritime Patrol Aircraft, ARG/CVBG (Carrier Battle Group)tactics. Developed a series of tactics for using the modified Maritime Patrol Aircraft (MPA) in support of ARG/MEU Special Operations Command (SOC) operations. Built off of recent lessons learned in support of Battle Damage Assessment (BDA), Maritime Interdiction/Interception Operations (MIO), and gunfire missions.
- (U) (\$98) Updated/modified/developed Battle Group Anti Submarine Warfare (ASW) tactics. Developed and tested tactics to optimize CVBG effectiveness in countering specific rest of world diesel submarine attacks in tactically relevant littoral environments.
- (U) (\$102) Coordination of VQ/VPU (Special Mission P-3 squadrons) tactics with a CVBG. Developed coordinated tactics for use of special mission MPA aircraft in support of the CVBG. Due to the retirement of the ES-3, the special mission MPA was used to support the CVBG. Current tactics do not address this integration.
- (U) (\$107) Developed tactics for electronic attack protection of MCM and MEU forces. Identified and ranked

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N PROJECT NUMBER: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation PROJECT TITLE: Intertype Tactical Development and Evaluation

current shipboard and airborne systems that support electronic attack in the littoral environment. Developed a methodology in which these systems can support MCM and MEU forces in an escalating hostile littoral environment.

- (U) (\$106) Developed employment tactics for use of the E-2C EMDU. Developed Tactics Techniques and Procedures for employment of the E-2C Mission Computer Upgrade/Advanced Control Indicator Set (MCU/ACIS). Determine system detection and tracking overland performance and mission endurance.
- (U) (\$90) Developed S-3 depth bomb tactics. Developed Tactics Techniques and Procedures for employment of MK-80 series weapons against shallow water diesel submarine. Project required research and analysis of existing data on depth bomb performance.
- (U) (\$ 75) Developed employment tactics for using the Joint Direct Attack Munitions from Naval aircraft. Developed carrier air wing strike and target area tactics for interdiction strikes using the increased capabilities of Joint Direct Attack Munitions (JDAM) weapons.
- (U) (\$287) Updated/modified/developed tactics for combat search and rescue. Developed improved Tactics Techniques and Procedures to support Combat Search and Rescue (CSAR) missions that account for modern aircraft capability against modern threats such as mobile Surface to Air Missiles (SAMS), Man Portable Air Defense System (MANPADS), etc.
- (U) (\$240) Developed torpedo selection/employment for 5th Fleet Area of Operations (AOR). Similar to project 99-01; developed Tactics Techniques and Procedures for employment of MK-46/48/50 torpedoes against submarines using high fidelity, range dependent model for another high interest area of the world. Only lightweight torpedoes currently funded.
- (U) (\$ 97) Tactical integration of the phototelesis system into the CVBG.
- (U) (\$ 50) Tactics defending against littoral small craft against submarine

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N PROJECT NUMBER: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$150) Developed and evaluate the MCM tactics against the cluster dig mine type. Developed improved procedures in the location and sweeping of such mines
- (U) (\$174) Tactical employment of Apache helicopters in the PACFLT AOR and the specific coordination measures required to support mixed Army/Navy tactical employment of air assets.
- (U) (\$ 42) Program Support.

2. (U) FY 2001 PLAN:

- (U) (\$240) Develop the Tactics, Techniques and Procedures (TTP) to effectively employ various assets to accomplish Time Critical Strike.
- (U) (\$110) Explore, analyze, and construct baseline standardization for SSC/ACC (Surface Combatant Commander/ Air Combatant Commander)Coordination.
- (U) (\$205) Develop tactics, techniques, and procedures for decisive Suppression of Enemy Air Defenses (SEAD) without relying solely on enemy radar emissions
- (U) (\$200) Develop the procedures to tactically employ selected ASW Tactical Decision Aids (TDAs)to fully support the planning, execution, and performance assessment of the ASW search

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N PROJECT NUMBER: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$120) Develop a matrix for a number of foreign and US mines pertinent to current operations. The document will include all mine parameters relevant to Mine Warfare (MIW) operations (dedicated and organic systems).
- (U) (\$110) Establish the Tactics, Techniques and Procedures (TTP) to effectively employ the Cooperative Engagement Capability within the Composite Warfare concept.
- (U) (\$210) Establish the Tactics, Techniques and Procedures to actively defend Navy/Marine Corps information systems at the tactical level (CVBG/ARG) with the focus on Defensive-Information Assurance (D-IA) / Computer Network Attack (CNA), Computer Network Defense (CND) and Computer Network Exploitation (CNE).
- (U) (\$110) Develop and evaluate a tactic for amphibious littoral air defense.
- (U) (\$13) Evaluate existing ASW sensor capabilities to detect and localize a diesel submarine bottomed in shallow water and optimize the associated tactics.
- (U) (\$125) Establish Tactics, Techniques, and Procedures (TTP) for the incorporation of Psychological Operations (PSYOP) into the Rapid Response Planning Process (R2P2) in support of(ARG)-(MEU) operations
- (U) (\$190) Develop light weight torpedo (LWT) attack tactics which include target-specific weapons aimpoints and weapons presets. The project will evaluate the Probability of Hit (Phit) for the MK-46 and MK-50 in order to optimize LWT selection, and determine the number of LWT required for this target
- (U) (\$200) Analyze lethality of Hellfire against this database of targets based on the aimpoints/impact point.
- (U) (\$209) Develop and refine tactics to employ the AN/SQQ-89 with TRAFS to detect a threat representative torpedo and evaluate current torpedo evasion and countermeasure employment of AN/SQQ-89/TRAFS
- (U) (\$165) Establish Tactics, Techniques, and Procedures for development of a Jamming Control Authority (JCA) to provide directive Electronic Attack/Communications Electronic Attack cueing, targeting, and post mission effectiveness reports in support of airborne offensive strike operations.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N PROJECT NUMBER: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$285) Determine optimum sweep tactics for fields containing more than one mine type. These sweep tactics will provide the optimum sweep current pulse cycle when sweeping more than one mine type.
- (U) (\$ 69) Program Support.
- (U) (\$ 40) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.
- (U) (\$114) Develop tactics, techniques and procedures for employment of the F/A-18 as an aerial mining platform.

3. (U) FY 2002 PLAN:

- (U) (\$110) Development of Tactics Techniques and Procedures to employ the SIPRNET and associated IT21 equipment as method for managing the Force Over The horizon Coordinator (FOTC)Database.
- (U) (\$110) Establish Tactics, Techniques, and Procedures for development of a Battle Force / Battle Group Interface Control publication.
- (U) (\$285) Develop tactics, techniques, and procedures for protection of a High Value Unit (Carrier/Amphibious ship) with the NULKA self defense system.
- (U) (\$180) Targeting Process for Attacking Time Critical Targets using emergent target mensionation systems.
- (U) (\$110) Develop tactics, techniques, and procedures for defending against Small Boat Attacks using Swarm tactics with an Armed Helo.
- (U) (\$180) Develop tactics, techniques, and procedures defining the effectiveness of EA-6B Jamming on Anti-Ship Missile's and proper employment of such systems.
- (U) (\$110) Establish Tactics, Techniques, and Procedures for LHA/LHD Air Control Tactics in a MEF environment.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605155N PROJECT NUMBER: R0151
PROGRAM ELEMENT TITLE: Fleet Tactical Development and Evaluation PROJECT TITLE: Intertype Tactical Development and Evaluation

- (U) (\$160) Establish, and publish the Damage Curves for Mine Hunting Class 51 and MCM 1.
- (U) (\$110) Develop tactics, techniques, and procedures for doing Anti-Submarine Warfare Using the A-Comms communications system.
- (U) (\$180) Establish Tactics, Techniques, and Procedures for employment of the CIT system.
- (U) (\$200) Establish Tactics, Techniques, and Procedures for Torpedo Employment in a Korean geographic area in support of the current Op plan.
- (U) (\$225) Establish Tactics, Techniques, and Procedures for Mine Counter Measure Reconnaissance Tactics.
- (U) (\$110) Establish Tactics, Techniques, and Procedures for Helicopter Intercept of Low Slow Flyer.
- (U) (\$240) Develop tactics, techniques, and procedures for employment of the MHC Dyad Influence Sweeping system.
- (U) (\$150) Establish, and publish the tactics, techniques, and procedures for Preemptive Launch of IR Decoys in a hostile landing zone.
- (U) (\$150) Develop Tactics Techniques and Procedures to delineate Air Defense Command Relationship for CVBG Support ARG.
- (U) (\$110) Develop tactics, techniques, and procedures for employment of the P-3 in an Naval Surface Fires Supporting role
- (U) (\$150) Develop tactics, techniques, and procedures for employment of E-2C II as an Overland Surface Detection and Tracking asset.
- (U) (\$ 44) Program Support.

B. (U) PROGRAM CHANGE SUMMARY:

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DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605155N

PROJECT NUMBER: R0151

PROGRAM ELEMENT TITLE: Fleet Tactical Development and
Evaluation

PROJECT TITLE: Intertype Tactical
Development and Evaluation

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY2002</u>
(U) FY 2001 President's Budget:	3,100	2,917	2,912
(U) Inflation Adjustment			
(U) Program Adjustment	-17	-31	+2
(U) Execution Adjustment	-91	-145	
(U) Congressional Recission	-12	-26	
(U) NWCF Rate Adjustment			
(U) SBIR	-32		
(U) FY 2002 President's Budget Submission	2,948	2,715	2,914

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0835	Technical Information Services									
	891	940	951						CONT.	CONT.
R2296	Federal Laboratory Consortium									
	252	0	0						CONT.	CONT.
R2322	Acquisition Center of Excellence									
	8,904	0	0						CONT.	CONT.
R2969	Supply Chain Management									
	0	3,963	0						CONT.	CONT.
R2970	Commercialization of Advanced Technology Programs									
	0	5,945	0						CONT.	CONT.
Total	10,047	10,848	951						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Technical Information Services provides support to achieve affordability in the development of Navy systems and reduction of life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. The goals for project R0835 are met through the following:

- (U) Navy leverage of the industry independent research and development science and technology base by facilitation of voluntary Technical Information Meetings between Navy, DOD components, and the private sector.
- (U) Support for the Navy Acquisition Research and Development Center to provide the private sector with information on Navy research and development requirements and advanced acquisition information.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

- (U) Transfer of 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) through Cooperative Research and Development Agreements and Patent License Agreements through Offices of Research and Technology Applications.

- (U) Promotion of advanced information acquisition and distribution techniques (in conjunction with the Defense Technical Information Center) to disseminate research, development, and technology transfer efforts of Navy components, including the networking of Navy components' technology transfer databases (Scientific and Technical Information Program).

- (U) Support for controlled access to, and exchange of, scientific and technical information by Navy/DOD components and present/potential contractors (Navy Potential Contractor Program).

(U) This program also provides the DON interface to the Office of the Deputy UnderSecretary of Defense (Science & Technology), Office of Technology Transition for matters relating to policy and DOD reporting requirements for technology transfer.

(U) The Federal Laboratory Consortium (FLC) for Technology Transfer is an organization of Federal Research and Development Laboratories and Centers chartered by the "Stevenson-Wydler Technology Innovation Act of 1980" as amended by Public Law 99-502, the "Federal Technology Transfer Act of 1986." It was established to identify and mobilize the necessary resources to provide the environment, the organization, and the necessary technology transfer mechanisms required to facilitate the fullest possible use of federally sponsored R&D results by both public and private sector potential users. Funding of the FLC is a recurring requirement with the yearly funding level based on an amount equal to eight thousandths of one percent (0.008%) of each Federal department/agency Research and Development (R&D) budget.

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under RDT&E MANAGEMENT SUPPORT because it supports the operations required for general research and development use.

(U) PROGRAM CHANGE FOR TOTAL P.E.:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
(U) FY 2001 President's Budget:	6,659	949	952

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

(U) SBIR/STTR Transfer:	-123	-	-
(U) Federal Technology Transfers:	248	-	-
(U) Execution Adjustment:	3,289	-	-
(U) Minor Program Adjustments:	-	-	-2
(U) NWCF Rates	-	-	1
(U) Economic Assumption	-26	-101	-
(U) Congressional Plus ups	-	10,000	-
(U) FY 2002 PRESUDG Submission:	10,047	10,848	951

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

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Budget Item Justification
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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROGRAM ELEMENT TITLE: Technical Information Services

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0835 Technical Information Services	891	940	951						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program provides support to achieve affordability in the development of Navy systems and reduction of life-cycle costs through the facilitation of advanced technology associations between U.S. industry and the Navy. These goals are met through the following:

- (U) Navy leverage of the industry independent research and development science and technology base by facilitation of voluntary Technical Information Meetings between Navy, DOD components, and the private sector.
- (U) Support for the Navy Acquisition Research and Development Center (NARDIC) to provide the private sector with information on Navy research and development requirements and advanced acquisition information.
- (U) Transfer of 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) through Cooperative Research and Development Agreements and Patent License Agreements through Offices of Research and Technology Applications.
- (U) Promotion of advanced information acquisition and distribution techniques (in conjunction with the Defense Technical Information Center (DTIC)) to disseminate research, development, and technology transfer efforts of Navy

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

components, including the networking of Navy components' technology transfer databases (Scientific and Technical Information Program (STIP)).

- (U) Support for controlled access to, and exchange of, scientific and technical information by Navy/DOD components and present/potential contractors (Navy Potential Contractor Program (NPCP)).
- (U) This program also provides the DON interface to the Office of the Deputy UnderSecretary of Defense (Science & Technology), Office of Technology Transition for matters relating to policy and DOD reporting requirements for technology transfer.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$891) Maintained coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development efforts to meet Navy performance/affordability needs. Encouraged submission of technical data by the private sector to the DTIC database in order to help integrate defense production with the commercial industrial base. Supported DoD effort to migrate voluntary private sector technical submissions from CD-ROM medium to internet-based exchange. Supported the NARDIC as the primary outreach resource to the private sector, including development and maintenance of open and password-protected electronic bulletin boards residing on the World Wide Web. With Systems Commands, held the first Naval-Industry partnership conference to heighten industry awareness of Navy and Marine Corps Systems Commands technology and development needs to support the Naval short and long term operational requirements. The conference provides insight from Naval and Industry leadership and captures participants ideas for forming partnerships and alliances. Focus topics include connections with State Programs, Globalization, Export Controls, Incentives, Technology Insertion, and more. Supported and maintained the networked technology transfer database capability at the laboratory, Office of Naval Research, and DDR&E levels, which enables the tracking of technology transfer efforts. Supported a benchmarking study of Navy technology transfer practices at China Lake to identify best practices and recommend program improvements. In FY 2000, Navy laboratories entered 121 new Cooperative Research & Development Agreements in areas such as the following: fiber optics, weapons control and management, voice communications, coastal operations, malaria vaccines, and hearing loss sensitivity.

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

Support the Navy Offices of Research and Technology Applications (ORTA) through the National Technology Transfer Center (NTTC) Entrepreneurial Training Apprenticeship Program (ETAP) which provided minority students to work in the ORTA supporting technical information services and technology transfer activities.

2. (U) FY 2001 PLAN:

- (U) (\$921) Maintain coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development effort to meet Navy performance/affordability needs. Encourage submission of technical data by the private sector to the DTIC database in order to help integrate defense production with the commercial industrial base. Support the NARDIC as the primary outreach resource to the private sector, including maintenance of open and password-protected electronic bulletin boards residing on the World Wide Web. Support workshops on topics identified in FY 2000 partnership conference to heighten industry awareness of Navy and Marine Corps Systems Commands technology and development needs to support the Naval short and long term operational requirements. Conduct the 2nd Annual R&D Partnership Conference in August 2001 to focus on technology transition. Implement pilot projects to expand Navy and Marine Corps partnership efforts to leverage Navy, corporate, and university technologies. Coordinate with the Naval Science Assistance Program, to improve communication of fleet operational problems to commercial industry. Support and maintain the networked technology transfer database capability at the laboratory, ONR, and DoD levels, which enables the tracking of technology transfer efforts. Support the Navy ORTA through the NTTC ETAP, which provides minority students to work in the ORTA supporting technical information services and technology transfer activities.
- (U) (\$19) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

- (U) (\$951) Maintain Coordination efforts with Systems Commands, Program Executive Offices, Direct Reporting Program Managers, and Navy laboratories and warfare centers to leverage industry research and development effort to meet Navy performance/affordability needs. Encourage submission of technical data by the private sector to the DTIC database in order to help integrate defense production with the commercial industrial base. Support the

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

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BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605804N

PROJECT NUMBER: R0835

PROGRAM ELEMENT TITLE: Technical Information

PROJECT TITLE: Technical Information Services

NARDIC as the primary outreach resource to the private sector, including maintenance of open and password-protected electronic bulletin boards residing on the World Wide Web. Coordinate with the Naval Science Assistance Program to improve communication of fleet operational problems to commercial industry. Implement pilot projects to expand Navy and Marine Corps partnership efforts to leverage Navy, corporate, and university technologies. Support and maintain the networked technology transfer database capability at the laboratory, ONR, and DoD levels, which enables the tracking of technology transfer efforts.

- B. (U) PROGRAM CHANGE SUMMARY: See total program change summary for P.E.
- C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.
- D. (U) RELATED RDT&E: Not applicable.
- E. (U) SCHEDULE PROFILE: Not applicable

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EXHIBIT R-2, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N
PROGRAM ELEMENT TITLE: Management, Technical and International Support

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 BUDGET	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
Q3039 CHENG	0	0	3,006						CONT.	CONT.
R0149 International Cooperative RDT&E	1,760	1,943	2,018						CONT.	CONT.
R1767 Naval War College/Center for Naval Warfare Studies	2,247	2,540	3,084						CONT.	CONT.
X2221 Assessment Program	12,638	12,998	13,520						CONT.	CONT.
W2347 Test and Evaluation Modeling and Simulation	1	0	0							.001
TOTAL:	16,646	17,481	21,628						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This Program Element (PE) provides management and technical support for several national and international projects:

(U) Project Q3039 The ASN (RDA) Chief Engineer (RDA CHENG) provides senior leadership and focus within the acquisition structure on integration and interoperability across all Navy and Marine Corps PEOs, DRPMs, PMs and SYSCOMS. RDA CHENG is the senior technical authority within the acquisition community for the overall architecture and integration and interoperability of current and future combat, weapons, and command, control, communications, computer and intelligence (C4I) systems used by the DoN. These include Navy and Marine Corps fighting units (ships, aircraft, submarines, land craft and amphibious vehicles, land-based systems, and spacecraft) and the integrating C4ISR systems that form naval warfare systems. This program assures that component systems are engineered and implemented to operate coherently with other

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EXHIBIT R-2, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROGRAM ELEMENT TITLE: Management, Technical and International Support

systems as part of a larger force by capturing systems relationships and promulgating them in the form of system and technical architectures, standards, protocols, and other related processes.

This program includes: leading the functional design for combat and C4I system functions with respect to the overall warfare operational architectures; approval of system level interface specifications for all referenced systems; assessing and approving interface changes that impact interoperability prior to fleet introduction; assuring that individual programs adhere to the resulting configuration; providing centralized Naval input to OUSD (S&T) on matters related to Software Intensive Systems; and recommending investment decisions and program priorities to ASN (RDA) and the appropriate service chief concerning fielding systems in balance with their legacy and planned future counterparts.

Additionally, this program includes the Naval Collaborative Engineering Environment (NCEE) development to enable efficient and interactive integration and interoperability engineering design and implementation throughout the Naval acquisition community. The NCEE enables family-of-systems collaboration and distributed engineering by networking Department of the Navy laboratory capabilities and test facilities to support information sharing and decision analysis, interactive analysis of system design alternatives, and data management and configuration control of approved integration and interoperability force architecture and system engineering products.

(U) Project R0149 provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs.

(U) Project R1767 provides funding for Naval War College (NWC) research activities, which serve as a focal point, stimulus, and major source of strategic and campaign thought within the Navy. These efforts generate strategy and campaign alternatives, provide for evaluation through war-gaming methodologies, and provide recommendations to the Chief of Naval Operations (CNO) and fleet commanders regarding the formulation and execution of strategy.

(U) Project X2221 provides analytical and management support for the Planning/Assessment process. This project supports the development of annual Integrated Warfare Architectures (IWARS)/Chief of Naval Operations Program Assessment Memorandum (CPAM)/Joint Warfighting Capability assessments which provide the

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EXHIBIT R-2, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROGRAM ELEMENT TITLE: Management, Technical and International Support

analytical underpinnings and basis for programmatic decisions made by the Navy's top leadership regarding integration of Navy warfare/support requirements.

(U) Project W2347 This project has been reduced based on higher Navy reprioritization requirements in FY2001 and outyears. This project enhances the Test and Evaluation (T&E) efforts of the Navy by providing policy, coordination, and technical support for the Modeling and Simulation (M&S) program. The mission is to promote and standardize modeling and simulation for interoperability and re-use within and between programs and across the Research Development Test and Evaluation community.) Test and Evaluation Modeling and Simulation (TEMS) is required to reduce the cost, schedule, and risk of acquisition programs by supporting the early integration of M&S capabilities into the T&E process.

(U) PROGRAM CHANGE SUMMARY: FY 2000: SBIR Assessment (-\$316K), Federal Technology (-\$13K), Mid-Year Review Adjustment (+\$323K), Miscellaneous Navy Adjustment (-\$426K), Section 8055 Congressional Proportionate Rescission (-\$76K); FY2001: Section 8086 .7% Pro-Rated Reduction (\$-124K), Government Wide Rescission (-\$39K).

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EXHIBIT R-2A, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: Q3039

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT TITLE: CHENG

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 BUDGET	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
Q3039 CHENG	0	0	3,006						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The ASN (RDA) Chief Engineer (RDA CHENG) provides senior leadership and focus within the acquisition structure on integration and interoperability across all Navy and Marine Corps PEOs, DRPMs, PMs and SYSCOMS. RDA CHENG is the senior technical authority within the acquisition community for the overall architecture and integration and interoperability of current and future combat, weapons, and command, control, communications, computer and intelligence (C4I) systems used by the DoN. These include Navy and Marine Corps fighting units (ships, aircraft, submarines, land craft and amphibious vehicles, land-based systems, and spacecraft) and the integrating C4ISR systems that form naval warfare systems. This program assures that component systems are engineered and implemented to operate coherently with other systems as part of a larger force by capturing systems relationships and promulgating them in the form of system and technical architectures, standards, protocols, and other related processes.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS: N/A

2. (U) FY 2001 PLANS: N/A

3. (U) FY 2002 PLAN:

- (U) (\$1,400) Architecture Development-Develop architecture assessments and benchmarks for system architecture products developed in FY 00 and 01. These assessments and benchmarks will be part of the overall Naval process to implement interoperability and will be input to assessments of alternatives that will enable a viable investment strategy for procuring Naval Systems.

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EXHIBIT R-2A, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: Q3039

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT TITLE: CHENG

- (U) (\$1,000) Large Scale Systems Engineering Processes-Initiate development of the Knowledge Base required to support interoperability and integration risk assessment and operational analysis of acquisition programs that support the Naval Fires portion of the Power Projection mission area. This Knowledge Base will include a working definition of Interoperability metrics and the operational analysis processes to relate these metrics and the operational analysis processes to relate these metrics to warfighting costs and operational performance.
- (U) (\$606) Naval Collaborative Engineering Environment (NCEE)-Integrate the architecting and systems engineering tools with distributed modeling and simulation capabilities across the labs. Integrate access to key data bases required to perform architecture development and systems analysis.

B. (U) PROGRAM CHANGE SUMMARY: See Total Program Change Summary for PE.

C. (U) OTHER PROGRAM FUNDING SUMMARY: (Dollars in Thousands)

TITLE	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
O&M, N	9,432	19,622	13,743					

D. (U) ACQUISITION STRATEGY: Not Applicable

E. (U) SCHEDULE PROFILE: Not Applicable.

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EXHIBIT R-3, FY 2002 RDT&E, N PROJECT COST ANALYSIS

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROGRAM ELEMENT TITLE: Management, Technical and International Support

DATE: June 2001

PROJECT NUMBER: Q3039

PROJECT TITLE: CHENG

Exhibit R-3 Cost Analysis (page 1)									Date: May 2001			
APPROPRIATION/BUDGET ACTIVITY 1319/BA 6				PROGRAM ELEMENT: 0605853N					PROJECT NAME AND NUMBER: CHENG/Q3039			
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY01 Cost	FY01 Award Date	FY02 Cost	FY02 Award Date	FY03 Cost	FY03 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Architecture Definition	WR	NSWC/DD	0	0		356	10/01			Cont	Cont	Cont
Architecture Definition	RCP	CNO/C N A	0	0		250	11/01			Cont	Cont	Cont
Architecture Definition	MIPR	MIT/LL	0	0		250	11/01			Cont	Cont	Cont
Architecture Definition	Contract	JHU/APL	0	0		350	11/01			Cont	Cont	Cont
Architecture Definition	Contract	SAIC	0	0		100	11/01			Cont	Cont	Cont
Architecture Definition	Contract	LOGICON	0	0		100	11/01			Cont	Cont	Cont
Large Scale Engineering	Contract	JHU/APL	0	0		300	11/01					
Large Scale Engineering	WR	NAWC/CL	0	0		300	10/01					
Large Scale Engineering	WR	NSWC/DD	0	0		200	10/01					
Large Scale Engineering	RCP	CNO/C N A	0	0		200	11/01					
Naval Collaborative Eng Eviron	WR	NSWC/DD	0	0		120	10/01					
Naval Collaborative Eng Eviron	WR	NUWC/N	0	0		120	10/01					
Naval Collaborative Eng Eviron	WR	NAWC/CL	0	0		120	10/01					
Naval Collaborative Eng Eviron	Contract	JHU/APL	0	0		120	11/01					
Naval Collaborative Eng Eviron	WR	SPAWAR SSC – Charleston	0	0		120	10/01					
Subtotal Product Development			0	0		3,006				Cont	Cont	Cont
Remarks :												
Total Cost			0	0		3,006				Cont	Cont	Cont

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: R0149

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT TITLE: international Coop RDT&E

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 BUDGET	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0149 International Coop RDT&E	1,760	1,943	2,018						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides program management, execution, and support to implement a broad range of cooperative naval research and development (R&D) initiatives with allied and friendly nations. Potential cooperative programs are pursued to fulfill established operational requirements, enhance U.S./allied interoperability and standardization, obtain unique foreign technologies, and reduce U.S. developmental and production costs. Such efforts result in:

- (U) Development and negotiation of approximately 25 International RDT&E Agreements annually with allied and friendly nations.
- (U) Execution of over 300-information exchange annexes.
- (U) Participation in armaments cooperation fora including the Conference of NATO Armaments Directors groups (e.g., the NATO Naval Armaments Group), Senior National Representative (SNR) meetings, the Technical Cooperative Program and Scientific Committee National Representatives meetings.
- (U) Participation in the Engineering and Scientist Exchange Program (ESEP).

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT NUMBER: R0149

PROJECT TITLE: international Coop RDT&E

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$364) Continued to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects.
- (U) (\$692) Continued to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate, as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.
- (U) (\$601) Continued to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provided support to Acquisition IPTs in evaluating international cooperative alternatives in development of DON programs as well as support to OSD ICOGs regarding DON requirements and initiatives.
- (U) (\$103) Increased the level of Navy participation in the ESEP at approximately two scientists/engineers. Continued to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

2. (U) FY 2001 PLAN:

- (U) (\$478) Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects.
- (U) (\$646) Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.
- (U) (\$644) Continue to update and maintain the DoN data bases for drafting, negotiating, managing and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DON programs as well as support to OSD ICOGs regarding DON requirements and initiatives.
- (U) (\$146) Increase the level of Navy participation in the ESEP at approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.
- (U) (\$29) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: R0149

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT TITLE: international Coop RDT&E

- (U) (\$494) Continue to support DoN participation at SNR Conferences with allies for harmonization of requirements and identification of potential collaborative R&D projects.
- (U) (\$665) Continue to support DoN participation in U.S./allied data exchange conferences to identify foreign technologies and R&D projects in which the Navy may desire to collaborate as well as on-going efforts to initiate/revise/terminate DEAs to target new technologies and expand, where appropriate, to include exchanges with FSU countries.
- (U) (\$647) Continue to update and maintain the DoN databases for drafting, negotiating, managing, and tracking of proposed IAs for "high leverage/high payoff" R&D technology base cooperative projects with key allies and friendly nations. Provide support to Acquisition IPTs in evaluating international cooperative alternatives in development of DoN programs as well as support to OSD ICOGS regarding DoN requirements and initiatives.
- (U) (\$212) Maintain a level of Navy participation in the ESEP at approximately four scientists/engineers. Continue to conduct post-assignment analysis of scientists/engineers to better target assignments with emerging technologies and programs at foreign research establishments.

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E:

(U) PE 0603790D (Nunn Armaments Cooperation)

(U) PE 0605130D (Foreign Comparative Testing)

(U) PE 0603790N (NATO Cooperative Research and Development)

C. (U) SCHEDULE PROFILE: Not applicable

UNCLASSIFIED

EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: R1767

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT TITLE: Naval War College- Center
For Naval Warfare Studies

3. (U) FY 2002 PLAN:

- (U) (\$1,731) Conduct strategic studies in response to SECNAV, CNO, UNIFIED, and Fleet CINC tasking in such areas as maritime strategy, decision support, and direct fleet support.
- (U) (\$1,235) Conduct major war games culminating in annual Global War game, including maintenance of legacy Enhanced Naval Wargaming System, preparation for implementation of successor Joint Simulation System-Maritime, and implementation of distributed gaming capability for war games and Fleet Battle Experiments.
- (U) (\$118) Provide for selected NWC students to conduct advanced research projects.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable.

C. (U) SCHEDULE PROFILE: Not applicable.

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: X2221

PROGRAM ELEMENT TITLE: Management, Technical and International Support

PROJECT TITLE: Assessment Program

(U) COST (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 BUDGET	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO Complete	TOTAL PROGRAM
X2221 Assessment Program	12,638	12,998	13,520						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Project X2221, Assessment Program, provides analytical and management support to the Planning segment of the Navy Planning, Programming and Budgeting System (PPBS). This project supports the development of annual Integrated Warfare Architectures (IWARs) and Chief of Naval Operations Program Analysis Memoranda (CPAM) assessments, which provide analytical underpinnings/basis for programmatic decisions of the Navy's top leadership regarding the integration of all Navy warfare and support requirements. This program provides the Navy input to the Vice Chairman Joint Chiefs of Staff (VCJCS) led Joint Warfighting Capability Assessment (JWCA) process. Assessment program 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.

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: X2221

PROGRAM ELEMENT TITLE: Management, Technical and International Support PROJECT TITLE: Assessment Program

(U) PROGRAM ACCOMPLISHMENTS AND PLAN:

(U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$ 213) Developed updated and maintained detailed level Navy Standard scenarios based on Defense Planning Guidance.
- (U) (\$8,994) Developed Integrated Warfare Architectures (IWARs) and performed assessments and developed the Chief of Naval Operations Program Assessment Memorandum (CPAM). Areas of focus included Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provided Navy input to Joint Warfighting Capabilities Assessment (JWCA) process.
- (U) (\$2,016) Continued to develop and accredit IWAR and CPAM tools and improve analytic methodology.
- (U) (\$1,415) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Developed new tools that utilize models in the standard simulation and database architecture. Coordinated/supported Joint Analytical Model Improvement Program (JAMIP).

1. (U) FY 2001 PLAN:

- (U) (\$212) Develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance.
- (U) (\$9,032) Develop Integrated Warfare Architectures (IWARs) and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Warfighting Capabilities Assessment (JWCA) process.
- (U) (\$2,062) Continue to develop and accredit IWAR and CPAM tool and improve analytic methodology.
- (U) (\$1,692) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Develop new tools that utilize

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROJECT NUMBER: X2221

PROGRAM ELEMENT TITLE: Management, Technical and International Support PROJECT TITLE: Assessment Program

models in the standard simulation and database architecture. Coordinate/support Joint Analytical Model Improvement Program (JAMIP).

3. (U) FY 2002 PLAN:

- (U) (\$218) Develop, update and maintain detailed level Navy Standard scenarios based on Defense Planning Guidance. Develop of Alternative Scenarios in Support of QDR, Joint Studies, and Navy Resource Analyses.
- (U) (\$9,435) Continued Integrated Warfare Architectures (IWARs) support and perform assessments and develop the Chief of Naval Operations Program Analysis Memoranda (CPAM). Areas of focus include Air Dominance; Deterrence; Force Structure; Infrastructure; Manpower and Personnel; Training and Education; Power Projection; Readiness; Sea Dominance; Sensor Management/Information Superiority; Sustainment; Technology. Provide Navy input to Joint Warfighting Capabilities Assessment (JWCA) and Joint Requirement Oversight Council (JROC) processes.
- (U) (\$2,124) Continue to develop and accredit IWAR and CPAM tool and improve analytic methodology. Continued support for Alternatives of Analysis (AOA) Support and Oversight. Support for the Chairman's Program Recommendation (CPR) and Chairman's Program Assessment (CPA).
- (U) (\$1,743) Using the standard simulation and database architecture developed by Navy Modeling and Simulation to re-host legacy models into the new framework, vastly improving the utility of these tools to the assessment process. Continue to develop new tools that utilize models in the standard simulation and database architecture. Coordinate/support Joint Analytical Model Improvement Program (JAMIP).

B. (U) Other Program Funding Summary: Not Applicable

C. (U) Acquisition Strategy: Not Applicable

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EXHIBIT R-2a, RDT&E, N FY 2002 BUDGET ITEM JUSTIFICATION (PROJECT)

DATE: June 20001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605853N

PROGRAM ELEMENT TITLE: Management, Technical & International Support

PROJECT NUMBER W2347
PROJECT TITLE: Test & Evaluation
Modeling & Simulations

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 Actual	FY 2001 BUDGET	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
W2347 Test and Evaluation Modeling and Simulation	0	1	0							1

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project funding has been reduced based on higher Navy reprioritization requirements in FY2001 and out years. This project enhances the Test and Evaluation (T&E) efforts of the Navy by providing policy, coordination, and technical support for the Modeling and Simulation (M&S) program. The mission is to promote and standardize modeling and simulation for interoperability and re-use within and between programs and across the Research Development Test and Evaluation community. This also provides funds to incrementally establish the Joint Synthetic Test and Evaluation Battle space (JSTEB) Joint Operational Requirements document. Test and Evaluation Modeling and Simulation (TEMS) is required to reduce the cost, schedule, and risk of acquisition programs by supporting the early integration of M&S capabilities into the T&E process.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

(U) FY 2000 ACCOMPLISHMENTS:

(U) (\$1) Provide minimum technical support to the Navy acquisition community using T&E modeling and simulation resources.

B. (U) OTHER PROGRAM FUNDS SUMMARY: Not available

Related RDT&E

(U) P.E. 0604759N: Major T&E Investment

(U) P.E. 0605864N: Test and Evaluation Support

C (U) ACQUISITION STRATEGY: Not Applicable

D. (U) SCHEDULE PROFILE: Not Applicable

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE
R0135 ONR Science and Technology Management	50,552	48,748	50,792
R0137 ONR S&T Instrumentation Modernization	1,246	1,250	1,078
R2353 DFAS Billings	3,053	2,879	2,955
TOTAL	54,851	52,877	54,825

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element covers Office of Naval Research (ONR) expenses including salaries, utilities, printing, supplies, materials, information technology (IT), general support equipment and other day-to-day costs. The vast majority of these items represent fixed costs associated with scientists and engineers supporting the Navy's Science and Technology Program. The Defense Finance and Accounting Service (DFAS) Billing project provides funds for accounting services provided to Research and Development (R&D) activities.

(U) 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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Budget Item Justification
(Exhibit R-2, page 1 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

B. (U) PROGRAM CHANGE FOR TOTAL P.E.:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
(U) FY 2001 President's Budget:	52,751	53,380	55,436
- Appropriated Value:			
- Execution Adjustment	2,337		
- Program Adjustment			- 261
- SBIR	- 31		
- Congressional Recission	- 206	- 485	
- Transit Subsidy			172
- NMCI Adjustments		- 18	- 536
- Non-Pay Inflation			14
FY 2002 President's Budget Submission:	54,851	52,877	54,825

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Budget Item Justification
(Exhibit R-2, page 2 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

(U) (COST): (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE
R0135 ONR Science and Technology Management	50,552	48,748	50,792

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project supports Office of Naval Research (ONR) leadership, management and direction for the Naval Science and Technology program. This project funds salaries, utilities, supplies, and other fixed costs at ONR Headquarters and field offices. ONR sponsors scientific advances which lead to future Naval capabilities, supporting the fleet's ability to operate from a position of technological superiority. Functions performed include (1) scientific and technical direction of the nationwide Category 6.1 basic research program with colleges, universities, non-profits and Navy 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 advanced technology development program (Category 6.3) 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; (5) program management and support to selected research programs of Ballistic Missile Defense Organization (BMDO) and Defense Advanced Research Projects Agency (DARPA); and (6) 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 (SBIR), Naval Research Advisory Committee, Navy Patent Program, Navy Historically Black Colleges and Universities Program, Navy Manufacturing Technology Program and the SSBN Survivability Program. In addition, this program supports ONR's Navy-wide

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Budget Item Justification
(Exhibit R-2, page 3 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R0135

PROGRAM ELEMENT TITLE: RDT&E,N Science & Technology
Management

PROJECT TITLE: ONR Science & Technology
Management

responsibilities in the negotiation and establishment of indirect cost rates for DoD-assigned universities and performance of contract administration for all DoD contacts/grants at all colleges and universities.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (50,552) The project continued to provide for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project were fixed costs, such as salaries, communications, etc. The project continued to provide support for the ONR headquarters and field offices. Specifically, it paid the salaries of scientific and engineering personnel who directed the execution of the Navy's basic research (Category 6.1), applied research (Category 6.2), and advanced technology development (Category 6.3) programs at the nation's universities/colleges, Navy laboratories and warfare centers, and private industry. In addition to its Navy Science and Technology mission, ONR provided important management and administrative support to BMDO and DARPA.

2. (U) FY 2001 PLAN:

- (U) (49,748) The project continues to provide for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project are fixed costs, such as salaries, communications, etc. The project continues to provide support for the ONR headquarters and field offices. Specifically, it pays the salaries of scientific and engineering personnel who direct the execution of the Navy's basic research (Category 6.1), applied research (Category 6.2), and advanced technology development (Category 6.3) programs at the nation's universities/colleges, Navy laboratories and warfare centers,

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Budget Item Justification
(Exhibit R-2, page 4 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R0135

PROGRAM ELEMENT TITLE: RDT&E,N Science & Technology
Management

PROJECT TITLE: ONR Science & Technology
Management

and private industry. In addition to its Navy Science and Technology mission, ONR provides important management and administrative support to BMDO and DARPA.

3. (U) FY 2002 PLAN:

- (U) (50,792) The project continues to provide for basic costs of the ONR headquarters and its field activities in support of the entire Navy Science and Technology program. Almost all the funds in this project are fixed costs, such as salaries, communications, etc. The project continues to provide support for the ONR headquarters and field offices. Specifically, it pays the salaries of scientific and engineering personnel who direct the execution of the Navy's basic research (Category 6.1), applied research (Category 6.2), and advanced technology development (Category 6.3) programs at the nation's universities/colleges, Navy laboratories and warfare centers, and private industry. In addition to its Navy Science and Technology mission, ONR provides important management and administrative support to BMDO and DARPA.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) ACQUISITION STRATEGY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

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Budget Item Justification
(Exhibit R-2, page 5 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science & Technology Management

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ESTIMATE	FY 20001 ESTIMATE	FY 2002 ESTIMATE
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R0137 ONR S&T Instrumentation Modernization	1,246	1,250	1,078
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A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project purchases information technology (IT) and general support equipment for the Office of Naval Research (ONR) headquarters and field offices.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (1,246) Purchased IT and general support equipment for ONR headquarters and field offices.

2. (U) FY 2001 PLAN:

- (U) (1,217) Purchase IT and general support equipment for ONR headquarters and field offices.
- (U) (33) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

- (U) (1,078) Purchase IT and general support equipment for ONR headquarters and field offices.

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Budget Item Justification
(Exhibit R-2, page 6 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R0137

PROGRAM ELEMENT TITLE: RDT&E,N Science &
Technology Management

PROJECT TITLE: ONR S&T Instrumentation
Modernization

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) ACQUISITION STRATEGY: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 161

Budget Item Justification
(Exhibit R-2, page 7 of 9)

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FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology Management

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE
R2353 DFAS Billings	3,053	2,879	2,955

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides funding for accounting services provided to Research and Development (R&D) activities by the Defense Finance and Accounting Service (DFAS).

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (3,053) Funded DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services included pay, transportation, commercial invoices, travel, and the maintenance of trial balances.

2. (U) FY 2001 PLAN:

- (U) (2,879) Funds DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include pay, transportation, commercial invoices, travel, and the maintenance of trial balances.

3. (U) FY 2002 PLAN:

R-1 Line Item 161

Budget Item Justification
(Exhibit R-2, page 8 of 9)

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605861N

PROJECT NUMBER: R2353

PROGRAM ELEMENT TITLE: RDT&E,N Science and Technology
Management

PROJECT TITLE: DFAS Billings

- (U) (2,955) Funds DFAS bill for transactions processed in support of Department of the Navy R&D activities. Specific services include pay, transportation, commercial invoices, travel, and the maintenance of trial balances.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not Applicable.

C. (U) ACQUISITION STRATEGY: Not Applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 161

Budget Item Justification
(Exhibit R-2, page 9 of 9)

UNCLASSIFIED

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FY 2001 / 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

2000
2000

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N

PROJECT NUMBER: M0104

PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ESTIMATE	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
M0104 RDT&E Medical Science and Technology Management and Instrumentation Modernization	9,218	11,935	11,601						

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element includes RDT&E funds for operating and miscellaneous support costs at RDT&E laboratories and other installations, facility and civilian personnel costs not directly chargeable to RDT&E projects. Also includes RDT&E funds for RDT&E laboratories and facilities for research, support, equipment, minor construction and other investment and materiel support costs not directly chargeable to RDT&E projects. Excludes military manpower and related costs, non-RDT&E base operating costs, and military construction costs which are included in other appropriate programs.

(U) PROGRAM ACCOMPLISHMENT AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$9,218) Provided operating and miscellaneous support costs at BUMED and its research laboratories. Support included (\$237) for Architectural and Engineering Design, (\$1,452) for Construction Projects, and (\$7,529) for operating and support costs.

2. (U) FY 2001 PLAN:

- (U) (\$11,935) Continue to provide operating and miscellaneous support costs at BUMED and its research laboratories. Continue to provide support for technologically advanced cutting edge research equipment for research and data acquisition, automated sampling and real time statistical analysis of biomedical research data utilizing data information systems integral with new equipment. Continue to provide replacement of obsolescent research equipment. Continue to provide support to physical facility areas needing major repair, minor construction, rehabilitation to meet mission requirements as well as meeting environmental compliance and pollution standards.

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FY 2001 / 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

2000
2000

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605862N

PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT NUMBER: M0104

PROJECT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

3. (U) FY 2002 PLAN:

- (U) (\$10,101) Continue to provide operating and miscellaneous support costs at BUMED and its research laboratories. Continue to provide support for technologically advanced equipment for research and data acquisition, automated sampling and real time statistical analysis of biomedical research data utilizing data information systems integral with new equipment. Continue to provide replacement of obsolescent research equipment. Continue to provide support to physical facility areas needing major repairs, replacement, minor construction, rehabilitation to meet mission requirements and environmental compliance and pollution standards.
- (U) (\$1,500) Funding is required for emergent antiterrorism and force protection requirements in order to mitigate recently recognized force protection vulnerabilities.

B. (U) PROGRAM CHANGE SUMMARY:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>
(U) President's Budget:	9,258	12,045	9,827				
(U) Adjustments from FY 2001 PRESBUDG:	-40	-110	1,774				
(U) FY 2001 / 2002 President's Submission	9,218	11,935	11,601				

(U) CHANGE SUMMARY EXPLANATION:

(U) Funding:

(U) FY 2000: decrease of (-4) for SBIR adjustment.
decrease of (-36) for Section 8055: Proportionate Reduction

(U) FY 2001: decrease of (-84) for Section 8086: .7% Pro-Rate Reduction, decrease of (-26) for government-wide recession

(U) FY 2002: decrease of (-12) miscellaneous adjustments, increase of (200) for decrease DNA Malaria Vaccine
increase of (77) for Extend Trans Subsidy Outside N, increase of (6) Fuel Inflation, increase of (3) Non-Pay Inflation Base, (1,500) Force Protection Requirements.

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FY 2001 / 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

2000

2000

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605862N

PROJECT NUMBER: M0104

PROGRAM ELEMENT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

PROJECT TITLE: RDT&E Medical Science and
Technology Management and
Instrumentation Modernization

(U) Schedule: Not applicable.

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(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable

D. (U) SCHEDULE PROFILE: Not applicable.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0605863N - RDT&E,N Ship and Aircraft Support					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost		72.181	75.341	71.735						Continuing	Continuing
S0354 RDT&E Ships Support		15.845	15.604	10.204						Continuing	Continuing
S2924 RDT&E Self-Defense Test Ship		0.000	0.000	3.301						Continuing	Continuing
W0568 RDT&E Aircraft Flight Hours		26.689	28.719	29.391						Continuing	Continuing
W0569 RDT&E Aircraft Support		29.647	31.018	28.839						Continuing	Continuing
Quantity of RDT&E Articles	Not Applicable										
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This continuing program provides support for ships and platforms 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, modification, repair, Aviation Depot Level Repairables, Special Flight Test Instrumentation Pool equipment, overhaul of ships and aircraft, as well as organizational, intermediate, and depot maintenance of ships and aircraft in the Navy RDT&E inventory.</p> <p>(U) 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.</p>											

R-1 SHOPPING LIST - Item No. 163

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Exhibit R-2, RDT&E Budget Item Justification
(Exhibit R-2, page 1 of 20)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		15.845	15.604	10.204						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

(U) S0354, RDT&E Ships Support. This project provides for operation and maintenance of platforms used as Sea Based Test Sites in support of the Navy Research, Development, Test and Evaluation (RDT&E) program. These are the USS DOLPHIN (AGSS-555) and the Self-Defense Test Ship (SDTS). Testing aboard these platforms reduces the number of fleet units required to support RDT&E efforts. In the case of the SDTS, it provides the capability of testing self-defense weapons systems to within their minimum ranges. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs, and supporting modifications. Most costs are fixed and are associated with simply having these platforms in the inventory. A lesser portion of the costs varies with the tempo and type of ship operations and provides for systems improvements and replacement planning. The nature of the operation is determined by the overall Navy/DoD R&D testing program.

(U) USS DOLPHIN will support software upgrades testing of the MK50 and MK48 Advanced Capability (ADCAP) torpedoes, the New SSN (Fast Attack Submarine, Virginia Class) (NSSN) Material Qualification Program, ONR Littoral Warfare Advanced Development (LWAD) Program, Improved Extended Echo Ranging (IEER), Advanced Extended Echo Ranging (AEER), Advanced Deployable System (ADS), Submarine Mast Detection Radar (SMDR). Laser Airborne System - Hyperspectral (LASH), Airborne Low Frequency Sonar (ALFS), Tripartied Technology Cooperation Program (TTCP) and the Advanced Sea/Air/Land (SEAL) Delivery Program. Mobile Inshore Warfare Unit Arrays and the Seabased Weapons and Tactics School (SWATS) are also frequently supported by USS DOLPHIN. USS DOLPHIN provides support for numerous undersea surveillance, sonar, weapons, communications and imaging programs.

(U) The current and projected Anti-Ship Cruise Missile (ASCM) threats require self-defense weapons systems capable of adequately countering ASCMs into the year 2001 and beyond. The National Defense Authorizations Act for FY87, section 910, "Testing of Certain Weapons Systems and Munitions," requires live-fire lethality testing of manned weapons systems. Operational and safety constraints limit realistic live-fire lethality testing with U.S. Navy ships and thus drive the requirement for having an afloat, unmanned, remotely controlled SDTS. SDTS plans call for testing PHALANX, High Frequency Surface Wave Radar Advanced Technology Demonstration (ATD), the Rolling Airframe Missile (RAM) and future short range Anti-Air Warfare systems against realistic threat presentation in an at-sea environment.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$13.262) USS DOLPHIN supported DT&E and OT&E testing of the LWAD, IEER, AEER, ALFS, and ADS programs. USS DOLPHIN began a DoD Resource Enhancement Program (REP) upgrade to allow the submarine to bottom, added an advanced countermeasure system and certified the platform for heavy weight torpedo exercises. This upgrade was funded by REP and was required to meet Navy operational test deficiencies. DOLPHIN supported the Long Range Mine Reconnaissance System (LMRS) concept development efforts and Advanced Deployed System (ASDS) system upgrades. USS DOLPHIN continued to support near ocean bottom operations, torpedo exercises, fleet exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. USS DOLPHIN conducted periodic phased maintenance to maintain certification and procured material to support continued operations. Restricted availability (RAV) began fourth quarter FY2000.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605863N - RDT&E Ship and Aircraft Support	S0354 - RDT&E Ships Support
<p>- (U) (\$2.583) Ex-DECATUR/SDTS conducted live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. Live fire testing included the RAM Helo Anti-Surface mode, and the ESSM. NAVSURFWARCENDIV Port Hueneme CA planned, scheduled, and performed combat systems operations and maintenance on board Self-Defense Test Ship (SDTS).</p> <p>2. FY 2001 PLANS:</p> <p>- (U) (\$13.388) USS DOLPHIN will complete RAV 3-5 by the end of April 2001. DOD REP modifications will be completed and tested at sea. USS DOLPHIN plans on supporting DT&E and OT&E testing of the LWAD, MK56 lightweight torpedo, AEER, ALFS, and ADS programs. USS DOLPHIN will continue to support near ocean bottom operations, torpedo exercises, fleet exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. In addition, USS DOLPHIN will conduct periodic phased maintenance to maintain certification and procure material to support continued operations.</p> <p>- (U) (\$2.216) Ex-DECATUR/SDTS will conduct live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. NAVSURFWARCENDIV Port Hueneme CA plans, schedules, and performs combat systems operations and maintenance on board Self-Defense Test Ship (SDTS).</p> <p>3. FY 2002 PLANS:</p> <p>- (U) (\$10.204) USS DOLPHIN plans on supporting DT&E and OT&E testing of the LWAD, MK48 ADCAP and MK54 torpedoes, AEER, ALFS and ADS programs. Hardware testing of Virtual Fused Glass Hull (VFGH) will begin. DT&E testing of the RADIANT BRONZE project for Tactical Exploitation of National Capabilities (TENCAP) will continue. DOLPHIN will continue to support near ocean bottom operations, torpedo exercises and RDT&E programs modeling sonar propagation, testing sensors and communication systems. In addition, USS DOLPHIN conducts periodic phased maintenance to maintain certification and procures material to support continued operations. Restricted Availability (RAV) 1-6 begins JULY 02.</p>		

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 3 of 20)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: right;">FY2000</th> <th style="text-align: right;">FY2001</th> <th style="text-align: right;">FY2002</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: right;">15.884</td> <td style="text-align: right;">15.748</td> <td style="text-align: right;">13.096</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: right;">0.039</td> <td style="text-align: right;">-0.144</td> <td style="text-align: right;">-2.892</td> </tr> <tr> <td>(U) FY 2002 President's Budget</td> <td style="text-align: right;">15.845</td> <td style="text-align: right;">15.604</td> <td style="text-align: right;">10.204</td> </tr> </tbody> </table> <p style="margin-top: 20px;">CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2000 net decrease of \$.039 million consists of a \$.150 million minor reprogramming , a \$0.73 million decrease for Small Business Innovative Research assessment, a \$.062 million decrease for Congression Rescission, and a \$.054 million decrease for reprioritization of requirements within the Navy. The FY2001 net decrease of \$.144 million consists of a decrease of \$.110 million for a Congressional Reduction and a decrease of \$0.034 million for a Congressional Rescission. The FY 2002 net decrease of \$2.892 million consists of a \$3.110 million decrease for separate CLI for Self-Defense Test Ship (SDTS), a \$.012 million decrease for reprioritization of requirements within the Navy; offset by a \$.033 million increase for Program Support; and a \$.197 million increase for economic assumptions.</p> <p>(U) Schedule: Not applicable.</p> <p>(U) Technical: Not applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>(U) D. ACQUISITION STRATEGY: Not applicable.</p> <p>(U) E. SCHEDULE PROFILE: Not applicable.</p>				FY2000	FY2001	FY2002	(U) FY 2001 President's Budget:	15.884	15.748	13.096	(U) Adjustments from the President's Budget:	0.039	-0.144	-2.892	(U) FY 2002 President's Budget	15.845	15.604	10.204
	FY2000	FY2001	FY2002															
(U) FY 2001 President's Budget:	15.884	15.748	13.096															
(U) Adjustments from the President's Budget:	0.039	-0.144	-2.892															
(U) FY 2002 President's Budget	15.845	15.604	10.204															

R-1 SHOPPING LIST - Item No. 163

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support			S0354 - RDT&E Ships Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
RAV	WR	Portsmouth Naval Shipyard	26.786	8.031	10/00	6.189	10/01			Continuing	Continuing	
PY Support	WR	Portsmouth Naval Shipyard	5.282	2.520	10/00	1.995	10/01			Continuing	Continuing	
SDTS	WR	Port Hueneme	8.904	2.223	10/00					Continuing	Continuing	
Maintenance/Home Porting	WR/RCP	SPAWAR	4.488	1.275	10/00	1.097	10/01			Continuing	Continuing	
Misc (Less than \$1M -aggregate)	WR	Various	6.206	1.555	10/00	0.923	10/01			Continuing	Continuing	
Subtotal Product Development			51.666	15.604		10.204				Continuing	Continuing	
<p>Remarks: This program has existed since 1968. The program management responsibilities were transferred to this office June 1997. Detailed execution data is not available prior to that date. The total prior year costs reflect execution data from FY97 through FY00.</p> <p>The Self-Defense Test Ship (SDTS) program was incorporated under CLI S2924 in FY02.</p>												
Subtotal Support			0.000	0.000		0.000				0.000	0.000	
<p>Remarks:</p>												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support				PROJECT NUMBER AND NAME S0354 - RDT&E Ships Support					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E			0.000	0.000		0.000				0.000	0.000	
Remarks:												
Subtotal Management			0.000	0.000		0.000				0.000	0.000	
Remarks:												
Total Cost			51.666	15.604		10.204				Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 163

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 6 of 20)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0605863N - RDT&E,N Ship and Aircraft Support					S2924 - RDT&E Self-Defense Test Ship					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		0.000	0.000	3.301						Continuing	Continuing
RDT&E Articles Qty											
<p>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</p> <p>(U) This project provides for the maintenance of Hull Mechanical and Electrical (HM&E) 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 of testing self-defense weapon systems within their minimum range. A major cost of this project is regularly scheduled ship maintenance. The remainder of the funds are used for purchase of supplies and equipment, fuel and petroleum products, repairs and supporting services. Most costs are fixed and are associated with simply having this platform in the inventory.</p> <p>(U) Current and projected Anti-Ship Cruise Missile (ASCM) threats require self-defense weapons systems capable of adequately countering ASCMs into the year 2001 and beyond. The National Defense Authorization Act for FY87, section 910, "Testing of Certain Weapons Systems and Munitions," requires live-fire lethality testing of manned weapons systems. Operational and safety constraints limit realistic live-fire lethality testing with U.S. Navy ships and thus drive the requirement for having an afloat, unmanned, remotely controlled SDTS. SDTS plans call for testing PHALANX, Evolved Sea Sparrow Missile (ESSM), High Frequency Surface Wave Radar Advanced Technology Demonstration (ATD), the Rolling Airframe Missile (RAM), and future short-range Anti-Air Warfare systems against realistic threat presentation in an at-sea environment.</p> <p>1. FY 2002 PLANS:</p> <p>- (U) (\$3.301) SDTS will conduct live fire operations at NAVAIRWARCENWPNDIV Point Mugu, CA. Life fire testing will include the RAM Helo Anti-Surface mode and the ESSM. NAVSURFWARCENDIV Port Hueneme CA will plan, schedule, and perform HM&E maintenance onboard SDTS in support of Long Pulse High Power Microwaves (HPM) System testing.</p>											

R-1 SHOPPING LIST - Item No. 163

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME S2924 - RDT&E Self-Defense Test Ship	
(U) B. PROGRAM CHANGE SUMMARY:			
	FY2000	FY2001	FY2002
(U) FY 2001 President's Budget:	0.000	0.000	3.294
(U) Adjustments from the President's Budget:	0.000	0.000	0.007
(U) FY 2002 President's Budget:	0.000	0.000	3.301
CHANGE SUMMARY EXPLANATION:			
(U) Funding: The FY 2002 net increase of \$.007 million consists of an increase of \$.011 million for Program Support and a \$.004 million decrease for reprioritization of requirements within the Navy.			
(U) Schedule: Not applicable.			
(U) Technical: Not applicable.			
(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.			
(U) D. ACQUISITION STRATEGY: Not applicable.			
(U) E. SCHEDULE PROFILE: Not applicable.			

R-1 SHOPPING LIST - Item No. 163

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Exhibit R-3a, RDTEN Project Justification
(Exhibit R-3a, page 8 of 20)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support			S2924 - RDT&E Self-Defense Test Ship (STDS)						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Subtotal Product Development												
Remarks:												
Subtotal Support												
Remarks:												

UNCLASSIFIED

CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)										DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support				PROJECT NUMBER AND NAME S2924 - RDT&E Self-Defense Test Ship (SDTS)					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Developmental Test & Evaluation	WR	PHD NSWC, CA				3.096	10/01			Continuing	Continuing	
Subtotal T&E						3.096				Continuing	Continuing	
Remarks: FY01 costs were incorporated under CLI S0354.												
Program Management Support	C/CPFF	Anteon Corp				0.205	10/01			Continuing	Continuing	
Subtotal Management						0.205				Continuing	Continuing	
Remarks:												
Total Cost			0.000	0.000		3.301				Continuing	Continuing	
Remarks:												

R-1 SHOPPING LIST - Item No. 163

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		26.689	28.719	29.468						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

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 (POL). 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 (NAVAIR/NSWC/ONR) flight activities. Annual flight simulator training for Naval Air Warfare Center (NAWC) activities, as well as pilot/Naval Flight Officer (NFO) Standardization and Instrument check flights for Navy personnel assigned to Defense Logistics Agency (DLA) activities are also supported.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$26.569) Met approximately 75% of post-maintenance test flights, aircrew training, and proficiency flight hour requirements. Provided organizational and intermediate-level maintenance, supply and POL in support of RDT&E aircraft operations.

- (U) (\$.120) Supported pilot/NFO check flights for Defense Logistics Agency (DLA) activities.

2. FY 2001 PLANS:

- (U) (\$28.598) Meet 75% of post-maintenance test flights, aircrew training, and proficiency flight hour requirements. Provide organizational and intermediate-level maintenance, supply and POL in support of RDT&E aircraft operations.

- (U) (\$.121) Support pilot/NFO training and check flights for Defense Logistics Agency (DLA) activities.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours
<p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS: Continued</p> <p>3. FY 2002 PLANS:</p> <ul style="list-style-type: none">- (U) (\$29.343) Meet post-maintenance test flights, aircrew training, and proficiency flight hour requirements. Provide organizational and intermediate-level maintenance, supply and POL in support of RDT&E aircraft operations.- (U) (\$.125) Support pilot/NFO training and check flights for Defense Logistics Agency (DLA) activities.		

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 12 of 20)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: right;">FY2000</th> <th style="text-align: right;">FY2001</th> <th style="text-align: right;">FY2002</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: right;">28.364</td> <td style="text-align: right;">29.028</td> <td style="text-align: right;">30.625</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: right;">-1.675</td> <td style="text-align: right;">-0.309</td> <td style="text-align: right;">-1.157</td> </tr> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">26.689</td> <td style="text-align: right;">28.719</td> <td style="text-align: right;">29.468</td> </tr> </tbody> </table> <p style="margin-top: 20px;">CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2000 net decrease of \$1.675 million consists of a \$.564 million decrease for reprioritization of requirements within the Navy, a \$1.000 million decrease to Project W0569 - Aircraft Support and a \$.111 million decrease for a Congressional Rescission. The FY 2001 net decrease of \$.309 million consists of a \$.043 million decrease for reprioritization of requirements within the Navy, a \$.203 decrease for a Congressional Reduction, and a \$.063M decrease for a Congressional Rescission. The FY 2002 net decrease of \$1.157 million consists of a \$.388 million decrease for the transfer of funds to Program Element 0605864N (MRTFB) to support the Pacific Missile Range Facility (PMRF) Project Unit W2921, a \$.184 million decrease for Separate CLI for Self-Defense Test Ship (SDTS), a \$.459 million decrease for economic assumptions, and a \$.126 million decrease for reprioritization of requirements within the Navy.</p> <p>(U) Schedule: Not applicable.</p> <p>(U) Technical: Not applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>(U) D. ACQUISITION STRATEGY: Not applicable.</p> <p>(U) E. SCHEDULE PROFILE: Not applicable.</p>				FY2000	FY2001	FY2002	(U) FY 2001 President's Budget:	28.364	29.028	30.625	(U) Adjustments from the President's Budget:	-1.675	-0.309	-1.157	(U) FY 2002 President's Budget:	26.689	28.719	29.468
	FY2000	FY2001	FY2002															
(U) FY 2001 President's Budget:	28.364	29.028	30.625															
(U) Adjustments from the President's Budget:	-1.675	-0.309	-1.157															
(U) FY 2002 President's Budget:	26.689	28.719	29.468															

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support			PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Flight Hours	WX	NAWCAD, Pax River MD	75.694	16.657	10/00	17.091	10/01			Continuing	Continuing	
Flight Hours	WX	NAWCWD, Pt Mugu CA	50.641	9.793	10/00	10.049	10/01			Continuing	Continuing	
Flight Hours	WX	NSWC, Panama City FL	11.363	0.431	10/00	0.442	10/01			Continuing	Continuing	
Flight Hours	WX	NRL, Pax River MD	20.632	1.723	10/00	1.768	10/01			Continuing	Continuing	
DLA Flight Hours	WX/WR	Various	0.427	0.115	10/00	0.118	10/01			Continuing	Continuing	
Miscellaneous	WX/WR	Various	6.338								6.338	
Subtotal Product Development			165.095	28.719		29.468				Continuing	Continuing	
Remarks:												
Subtotal Support												
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support			PROJECT NUMBER AND NAME W0568 - RDT&E Aircraft Flight Hours						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks:												
Subtotal Management												
Remarks:												
Total Cost			165.095	28.719		29.468				Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E,N Ship and Aircraft Support				PROJECT NUMBER AND NAME W0569 - RDT&E,N Aircraft Support					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		29.647	31.018	28.897						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

RDT&E Aircraft Support. This continuing project funds costs associated with Navy Research, Development, Test and Evaluation (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 (AVDLRs), which are spare and replacement aircraft parts and components. In FY 1998, AVDLR costs were reclassified as direct (customer-funded) costs, and a portion of the AVDLR funding to support customer programs were redistributed to customers. The remainder of AVDLR funding was retained in the account to support overhead maintenance related flight operations, aircrew training, and proficiency flight hours. This project also funds airframe Standard Depot Level Maintenance (SDLM), in-service repairs, modifications, emergency repairs, and engine repair, as well as aircraft material condition and field inspections. Additionally, it funds Individual Material Readiness List (IMRL) tools and support equipment, modification of in-service aircraft, and other systems for application to and compatibility with RDT&E requirements. Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money, is also supported.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$17.729) The following programs were supported as planned while the Navy continued to develop the transition from Aircraft Service Period Adjustment (ASPA)/SDLM to the Planned Depot Maintenance (PDM) program: SDLM, IMRL, engine, and in-service repairs support and modifications of aircraft in the RDT&E inventory. Accomplished required Depot-Level Maintenance deferred to FY00. Operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities continued.

- (U) (\$9.799) AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland, NAVAIRWARCENWPNDIV Point Mugu, California, Naval Research Laboratory, Patuxent River, Maryland, and Coastal Systems Station, Panama City, Florida was provided for approximately 75% of overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours.

- (U) (\$2.119) Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money was also supported at NAVAIRWARCENACDIV Patuxent River, Maryland.

2. FY 2001 PLANS:

- (U) (\$16.289) Continue the transition from ASPA/SDLM to the PDM program, while sustaining the following programs: IMRL, engine, in-service repairs support and modifications of aircraft in the RDT&E inventory. Operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities will continue.

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EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N / BA-6	0605863N - RDT&E Ship and Aircraft Support	W0569 - RDT&E Aircraft Support
<p>- (U) (\$10.388) AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland, NAVAIRWARCENWPNDIV Point Mugu, California, Naval Research Laboratory, Patuxent River, Maryland, and Coastal Systems Station, Panama City, Florida will be provided for overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours.</p> <p>- (U) (\$3.000) Planned Depot Maintenance (PDM) for Big Crow effort which is a national test, training and operational electronic warfare (EW) aircraft asset managed by the Army. The Big Crow is comprised of multi-spectral, multi-functional EW capabilities that emulate most known threat environments.</p> <p>- (U) (\$1.238) Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money will be supported at NAVAIRWARCENACDIV Patuxent River, Maryland.</p> <p>- (U) (\$.103) Portion of extramural program reserved for Small Business Innovation Research (SBIR) assessment in accordance with 15 USC 68.</p> <p>3. FY 2002 PLANS:</p> <p>- (U) (\$16.692) Continue the transition from ASPA/SDLM to the PDM program, while sustaining the following programs: IMRL, engine, in-service repairs support and modifications of aircraft in the RDT&E inventory. Operation and implementation of maintenance and material management programs at Naval Air Warfare Center activities will continue.</p> <p>- (U) (\$10.930) AVDLR support for NAVAIRWARCENACDIV Patuxent River, Maryland, NAVAIRWARCENWPNDIV Point Mugu, California, Naval Research Laboratory, Patuxent River, Maryland, and Coastal Systems Station, Panama City, Florida will be provided for overhead flight hours, with RDT&E projects funding those AVDLR costs associated with project flight hours.</p> <p>- (U) (\$1.275) Special Flight Test Instrumentation Pool (SFTIP) equipment, shared by programs to reduce or eliminate procurement lead times and save money will be supported at NAVAIRWARCENACDIV Patuxent River, Maryland.</p>		

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 17 of 20)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605863N - RDT&E Ship and Aircraft Support	PROJECT NUMBER AND NAME W0569 - RDT&E Aircraft Support																
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <thead> <tr> <th style="text-align: left;"></th> <th style="text-align: right;">FY2000</th> <th style="text-align: right;">FY2001</th> <th style="text-align: right;">FY2002</th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: right;">28.523</td> <td style="text-align: right;">31.352</td> <td style="text-align: right;">28.462</td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: right;">1.124</td> <td style="text-align: right;">-0.334</td> <td style="text-align: right;">0.435</td> </tr> <tr> <td>(U) FY 2002 President's Budget:</td> <td style="text-align: right;">29.647</td> <td style="text-align: right;">31.018</td> <td style="text-align: right;">28.897</td> </tr> </tbody> </table> <p style="margin-top: 20px;">CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2000 net increase of \$1.124 million consists of a \$1.000 million increase for aircraft depot maintenance realignment from Project Unit W0568 - RDT&E,N Aircraft Flight Hours, a \$.125 million increase reprogramming for Intergovernmental Personnel Act (IPA), a \$.016 million increase for reprioritization of requirements in the Navy, a \$.103 million increase for additional aircraft rework, offset by a \$.112 million decrease for a Congressional Rescission, and a \$.008 million decrease for Small Business Innovation Research (SBIR) assessment. The FY 2001 net decrease of \$.334 million consists of a \$.047 decrease for reprioritization of requirements within the Navy, and a \$.219 decrease for Congressional Reduction and a \$.068 million decrease for Congressional Rescission. The FY 2002 net increase of \$.435 million consists of a \$1.215 million increase for Aircraft Depot Maintenance Realignment, and a \$.054 million increase for program support; offset by a \$.655 million decrease for economic assumptions, and a \$.179 million decrease for reprioritization of requirements within the Navy.</p> <p>(U) Schedule: Not applicable.</p> <p>(U) Technical: Not applicable.</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY: Not applicable.</p> <p>(U) D. ACQUISITION STRATEGY: Not applicable.</p> <p>(U) E. SCHEDULE PROFILE: Not applicable.</p>				FY2000	FY2001	FY2002	(U) FY 2001 President's Budget:	28.523	31.352	28.462	(U) Adjustments from the President's Budget:	1.124	-0.334	0.435	(U) FY 2002 President's Budget:	29.647	31.018	28.897
	FY2000	FY2001	FY2002															
(U) FY 2001 President's Budget:	28.523	31.352	28.462															
(U) Adjustments from the President's Budget:	1.124	-0.334	0.435															
(U) FY 2002 President's Budget:	29.647	31.018	28.897															

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605863N - RDT&E Ship and Aircraft Support			W0569 - RDT&E Aircraft Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
AVDLR	WX	Various	256.152	10.388	10/00	11.257	10/01			Continuing	Continuing	
Aircraft Rework (SDLM, PDM, IMC)	WX/MIPR	Various	75.085	13.425	10/00	10.257	10/01			Continuing	Continuing	
Engines	WX/MIPR	Various	37.441	2.975	10/00	2.936	10/01			Continuing	Continuing	
In-Service Repairs	WX	Various	13.603	1.772	10/00	1.881	10/01			Continuing	Continuing	
SFTIP	WX	NAWCAD Pax Riv MD	16.448	1.238	10/00	1.275	10/01			Continuing	Continuing	
Misc (Less than \$1M)	WX	Various	16.227	0.397	10/00	0.454	10/01			Continuing	Continuing	
Subtotal Product Development			414.956	30.195		28.060				Continuing	Continuing	
Remarks:												
Subtotal Support												
Remarks:												

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 2)								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6			PROGRAM ELEMENT 0605863N - RDT&E Ship and Aircraft Support			PROJECT NUMBER AND NAME W0569 - RDT&E Aircraft Support						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Subtotal T&E												
Remarks:												
Misc	WX/RX	Various		0.563	10/00	0.522	10/01			Continuing	Continuing	
Travel	WX	Various		0.260	10/00	0.315	10/01			Continuing	Continuing	
Subtotal Management				0.823		0.837				Continuing	Continuing	
Remarks:												
Total Cost			414.956	31.018		28.897				Continuing	Continuing	
Remarks:												

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RESEARCH DEVELOPMENT TEST & EVALUATION, NAVY / BA-6						R-1 ITEM NOMENCLATURE 0605864N Test and Evaluation Support					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost		264.958	270.214	277.414						Continuing	Continuing
W0541 Atlantic Undersea Test and Evaluation Center		46.046	47.109	48.583						Continuing	Continuing
W0566 NAVAIR Environmental Compliance		4.693	4.440	4.009						Continuing	Continuing
W0653 Naval Air Warfare Center Weapons Division		124.120	123.499	118.204						Continuing	Continuing
W0654 Naval Air Warfare Center Aircraft Division		90.099	93.184	84.979						Continuing	Continuing
W2921 Pacific Missile Range Facility**		0.000	1.982	2.100						Continuing	Continuing
W2922 Maintenance and Repair		0.000	0.000	19.539						Continuing	Continuing
Quantity of RDT&E Articles	Not Applicable										
**W2921 CONGRESSIONAL ADD IN FY01 IS BEING EXECUTED UNDER W2971.											
(U) 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 (NAVUNSEAWARCEN DET AUTE), Andros Island, Bahamas; the Naval Air Systems Command MRTFB Environmental Compliance Program; Naval Air Warfare Center Weapons Division (NAVAIRWARCENWPNDIV), Point Mugu and China Lake, CA; Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD; T&E related capabilities at the Pacific Missile Range Facility, Barking Sands, HI (beginning in FY02); and Maintenance and Repair at NAVAIRWARCENWPNDIV and NAVAIRWARCENACDIV (beginning in FY02). The Test and Evaluation (T&E) activities make up the Navy portion of the Department of Defense's Major Range and Test Facility Base (MRTFB). These activities are chartered to perform T&E for the development and acquisition of technologically 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.											
(U) 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, RDTE Budget Item Justification
(Exhibit R-2, page 1 of 22)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support				PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center						
COST (\$ in Millions)		Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			46.046	47.109	48.583						Continuing	Continuing
RDT&E Articles Qty												

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides continuing maintenance and operations support for the Atlantic Undersea Test and Evaluation Center (AUTEC), a Test and Evaluation (T&E) facility for collecting selected underwater, surface and air tracking data on test participants. NAVUNSEAWARCEN DET AUTEC, Andros Island, Bahamas, includes the Weapons Range, Shallow Water Range and Minefield, NATO Naval Forces Sensor & Weapon Accuracy Check Site, Weapons Acoustic Measurement Capability, and an Ocean Haul Down Facility for flow noise testing on large, buoyant bodies. The Weapons Range provides three-dimensional (undersea, surface, and air) precision tracking capability in support of Anti-Submarine Warfare Development trials. The Shallow Water Range and Minefield provide similar three-dimensional tracking capability in water depths between 200 and 2,000 feet, plus a variety of moored and tethered mine-shaped targets. The NATO Fleet Operational Readiness Accuracy Check Site (FORACS) provides the capability to accurately calibrate and align electronic, optical, acoustic, and navigational systems installed on submarines, surface ships and helicopters. AUTEC also has a portable, 3-D tracking capability, the Buoyed Acoustic Real-Time Tracking System (BARTS). The NAVUNSEAWARCEN DET AUTEC at West Palm Beach, Florida provides technical expertise in tracking systems, liaison and test planning with range users, test scheduling, and logistic support.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$24.182) Continued to maintain and operate core Major Range Test and Facility Base capabilities to meet customers' test workload. Continued to operate and maintain the physical plant, essential technical test support instrumentation and the marine craft required to perform AUTEC's mission. Replenished spares inventory to minimum levels. Provided maintenance and repair efforts to perform high priority items deferred from previous years. Performed contract oversight and administration support on the AUTEC maintenance and operations support contract.

- (U) (\$10.255) Continued rental payments to the Bahamian government for use of land and ocean in Bahamas. FY2000 increase based on latest negotiated United States/Government of the Commonwealth of the Bahamas (US/GCOB) agreement.

- (U) (\$11.609) Continued civilian pay; travel; transportation; utilities/leases/rentals; communications; aircraft/ship/miscellaneous petroleum, oil, lubricants (POL); supplies; general and administrative efforts; and, lease payments to the General Services Administrative (GSA) for facilities at West Palm Beach, FL required to maintain and operate AUTEC resources and capabilities.

2. FY 2001 PLANS:

- (U) (\$24.922) Continue to maintain and operate core test support resources, instrumentation systems, and marine craft required to perform AUTEC's mission. Replenish spares inventory to minimum levels. Provide maintenance and repair efforts to perform high priority items deferred from previous years. Perform contract oversight and administrative support on the AUTEC maintenance and operations support contract.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	June 2001
<p>- (U) (\$10.275) Continue rental payments to the Bahamian government for use of land and ocean in the Bahamas. FY01 increase based on latest negotiated US/GCOB agreement.</p> <p>- (U) (\$11.585) Continue civilian pay; travel; transportation; utilities/leases/rentals;communications; aircraft/ship/miscellaneouspetroleum, oil, lubricants (POL); supplies; general and administrative efforts; and, lease payments to the General Services Adminstrative (GSA) for facilities at West Palm Beach, FL required to maintain and operate AUTEK resources and capabilities.</p> <p>- (U) (\$.327) Portion of extramural program reserved for Small Business Innovation Research (SBIR) assessment in accordance with 15 USC 68.</p> <p>3. FY 2002 PLANS:</p> <p>- (U) (\$25,684) Continue to maintain and operate core test support resources, instrumentation systems, and marine craft required to perform AUTEK's mission. Replenish spares inventory to minimum levels. Provide maintenance and repair efforts to perform high priority items deferred from previous years. Perform contract oversight and administrative support on the AUTEK maintenance and operations support contract.</p> <p>- (U) (\$10.850) Continue rental payments to the Bahamian government for use of land and ocean in the Bahamas. FY02 amount based on latest negotiated US/GCOB agreement.</p> <p>- (U) (\$12.049) Continue civilian pay; travel; transportation; utilities/leases/rentals;communications; aircraft/ship/miscellaneouspetroleum, oil, lubricants (POL); supplies; general and administrative efforts; and, lease payments to the General Services Adminstrative (GSA) for facilities at West Palm Beach, FL required to maintain and operate AUTEK resources and capabilities.</p>		

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 3 of 22)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0541 Atlantic Undersea Test and Evaluation Center					
(U) B. PROGRAM CHANGE SUMMARY:										
		<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>						
(U) FY 2001 President's Budget:		45.961	47.549	48.841						
(U) Adjustments from the President's Budget:		0.085	-0.440	-0.258						
(U) FY 2002 President's Budget Submit:		46.046	47.109	48.583						
CHANGE SUMMARY EXPLANATION:										
<p>(U) Funding: The FY 2000 net decrease of \$.85 million consists of a \$.180 million decrease for a Congressional Recission offset by a \$.265 increase for deferred maintenance and repair items. The FY2001 net decrease of \$.440 million consists of a \$.333 million decrease for a Congressional Reduction; a \$.004 million decrease for reprioritization of requirements within the Navy, and a \$.103 million decrease for Congression Recission. The FY 2002 net decrease of \$.160 million consists of a \$.445 million decrease for reprioritization of requirements within the Navy and a decrease of \$.015 million decrease for economic assumptions offset by a \$.300 million increase for Maintenance and Repair realignment.</p>										
(U) Schedule: Not Applicable										
(U) Technical: Not Applicable										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable										
(U) P.E. 0604759, Major Test and Evaluation Investment										
(U) D. ACQUISITION STRATEGY: N/A										
(U) E. SCHEDULE PROFILE: N/A										

R-1 SHOPPING LIST - Item No. 164

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support					PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance					
COST (\$ in Millions)	Prior Year Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		4.693	4.440	4.009						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:
 This continuing project supports environmental compliance, conservation and pollution prevention related efforts at the Navy Major Range Test Facility Bases (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.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:
 - (U) (\$4.693) Closed a fuel tank and began a Underground Storage Tank (UST) remediation at AUTEC. Continued the removal and disposal of PCB contaminated items at China Lake and Patuxent River. Continued UST remediations at Patuxent River. Initiated upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Replaced refrigeration systems at China Lake's SKYTOP test area. Continued comprehensive air pollution meterology studies at Point Mugu.

2. FY 2001 PLANS:
 - (U) (\$4.440) Continue UST remediations at Patuxent River. Continue the removal and disposal of PCB contaminated items at China Lake and Patuxent River. Continue upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continue refrigeration system replacement at China Lake's SKYTOP test area. Continue comprehensive air pollution meterology studies at Point Mugu.

3. FY 2002 PLANS:
 - (U) (\$4.009) Continue UST remediations at Patuxent River. Conduct a UST closure/change in service at Patuxent River. Continue the removal and disposal of PCB contaminated items at China Lake and Patuxent River. Continue upgrade of an oily waste/waste oil (OW/WO) management/recycle facility at Patuxent River. Continue refrigeration system replacement at China Lake's SKYTOP test area. Continue comprehensive air pollution meterology studies at Point Mugu.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0566 NAVAIR Environmental Compliance					
(U) B. PROGRAM CHANGE SUMMARY:										
		<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>						
(U) FY 2001 President's Budget:		4.856	4.488	4.343						
(U) Adjustments from the President's Budget:		-0.163	-0.048	-0.334						
(U) FY 2002 President's Budget Submit:		4.693	4.44	4.009						
CHANGE SUMMARY EXPLANATION:										
<p>(U) Funding: The FY 2000 decrease of \$.163 million consists of a \$.144 million decrease for reprioritization of requirements within the Navy and a \$.019 million decrease for a Congressional Recission. The FY 2001 decrease of \$.048 million consists of \$.007 million decrease for a reprioritization of requirements within the Navy, a \$.031 million decrease for a Congressional Reduction and a \$.010 million decrease for Congressional Recission. The FY 2002 net decrease of \$.335 million consists of a \$.300 million decrease for the transfer of funds to Program Element 0605864N (MRTFB) to support the Maintenance and Repair at AUTEC Project Unit (W0541), a \$.018 million decrease for reprioritization of requirements within the Navy, and a \$.017 million decrease for economic assumptions.</p> <p>(U) Schedule: Not Applicable.</p> <p>(U) Technical: Not Applicable.</p>										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable										
P.E. 0604759N, Major Test and Evaluation Investment										
(U) D. ACQUISITION STRATEGY: N/A										
(U) E. SCHEDULE PROFILE: N/A										

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Exhibit R-2a, RDTE Project Justification
(Exhibit R-2a, page 7 of 22)

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CLASSIFICATION:

Exhibit R-3 Cost Analysis (page 1)							DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N / BA-6			0605864N Test and Evaluation Support			W0566 NAVAIR Environmental Compliance						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date			Cost to Complete	Total Cost	Target Value of Contract
Environmental Efforts	WX	AUTEC, Bahamas	4.107	0.650	10/00	0.531	10/01			Continuing	Continuing	
Environmental Efforts	WX	NAWCAD Patuxent River, MD	15.636	1.130	10/00	1.317	10/01			Continuing	Continuing	
Environmental Efforts	WX	NAWCWD China Lake, CA	15.033	1.901	10/00	1.510	10/01			Continuing	Continuing	
Environmental Efforts	WX	NAWCWD Point Mugu, CA	13.322	0.759	10/00	0.651	10/01			Continuing	Continuing	
Total Support			48.098	4.440		4.009				Continuing	Continuing	
Remarks: This project unit has no Product development, T&E or Management costs												

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support				PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division						
COST (\$ in Millions)		Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost			124.120	123.499	118.204						Continuing	Continuing
RDT&E Articles Qty												

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project provides continuing maintenance and operational support for the NAVAIRWARCENWPNDIV Pacific Ranges consisting of China Lake Ranges and the Point Mugu Sea Range. 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, a neighboring deep draft port facility at Port Hueneme, and airfield and test instrumentation at San Nicolas Island to perform its Test and Evaluation (T&E) mission. The Point Mugu Sea Range has unique sea, mountain, and instrumented offshore islands, as well as the interconnectivity needed to support large complex operations. The China Lake air/ground ranges contain unique terrain features and are instrumented for both low level and high altitude missile and weapon system testing. The Electronic Combat Range (ECR) at China Lake provides outdoor free space development and operational testing of airborne electronic warfare (EW) systems and tactics against shipboard and land based air defense systems over a land range of 700 square miles. 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 full scale aerial target launch capability. Other test capabilities include a static Radar Cross Section (RCS) measurement facility; propulsion, warhead, environmental, rocket motor, and other missile component test facilities; parachute/weapon recovery system test facilities; and gun ranges. This project also supports the R-2508 Air Space Control System and other costs not chargeable to the customer.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$65.802) Operated core MRTFB capabilities required to meet acquisition program and fleet test workload. Supported indirect civilian salary and contractor costs required to manage, operate, and maintain Pacific Ranges' Sea, Air, Ground, Electronic Combat, Ordnance test facilities, operational target vehicle launch functions and test wing aircraft maintenance. Supported San Nicolas Island (SNI) T&E related costs. Funded increased SNI maintenance and operation contracts for barges and personnel/equipment shuttle services. Completed transfer of SNI operations to the MRTFB. Reimbursed the Pacific Fleet for support services at Point Mugu and SNI.
- (U) (\$4.631) Continued to support priority equipment calibration, materials, supplies, technical equipment and spare parts for core range and target instrumentation and equipment systems.
- (U) (\$3.821) Provided transportation, printing, communications, annual leases for offshore island and remote location instrumentation sites, Host Tenant Agreement costs, critical training necessary to manage and sustain MRTFB operations and critical travel funding required to attend mission related meetings.
- (U) (\$8,234) Continued to provide MRTFB Real Property Maintenance Activities (RPMA) funding for mission critical emergency call services, and system maintenance. Initiated a limited phased-in preventive maintenance plan for SNI and other major repairs and minor construction to meet customer requirements.
- (U) (\$4.500) Continued essential support for maintaining R-2508 Air Space Control System and DC-130 target air launch capabilities.
- (U) (\$37.132) Continued to provide for annual utility costs, facility service contracts, workers' compensation costs for MRTFB employees and contribution to Command's General and Administrative (G&A) expenses for comptroller, contracting, personnel, and other support services. Reimbursed the Pacific Fleet for utilities and support services at Point Mugu.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division
<p>2. FY 2001 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$67.439) Operate core MRTFB capabilities required to meet acquisition program and fleet test workload. Support essential components of indirect civilian salary and contractor costs required to manage, operate, and maintain Pacific Ranges' Sea, Air, Ground, Electronic Combat, Ordnance test facilities, operational target vehicle launch functions and aircraft maintenance. Support SNI T&E related costs. Fund SNI maintenance and operation contracts for barges and personnel/equipment shuttle services. Reimburse the Pacific Fleet for support services at Point Mugu and SNI. - (U) (\$4.104) Continue to support priority equipment calibration, materials, supplies, technical equipment and spare parts for core range and target instrumentation and equipment systems. - (U) (\$3.694) Provide transportation, printing, communications, annual leases for offshore island and remote location instrumentation sites, Host Tenant Agreement costs, travel and critical training necessary to manage and sustain MRTFB operations. - (U) (\$7.824) Continue MRTFB RPMA funding for mission emergency call services and system maintenance. Funding supports a limited preventive maintenance plan for SNI and a portion of the major repairs and minor construction to meet customer requirements. - (U) (\$4.993) Continue essential support for maintaining R-2508 Air Space Control System and DC-130 target air launch capabilities. - (U) (\$35.445) Continue to provide for annual utility costs, facility service contracts, workers' compensation costs for MRTFB employees, and contribution to Command's General and Administrative (G&A) expenses for comptroller, contracting, personnel, and other support services. Reimburse the Pacific Fleet for utilities and support services at Point Mugu & SNI. <p>3. FY 2002 PLANS:</p> <ul style="list-style-type: none"> - (U) (\$68,808) Operate core MRTFB capabilities required to meet acquisition program and fleet test workload. Support essential components of indirect civilian salary and contractor costs required to manage and operate Pacific Ranges' Sea, Air, Ground, Electronic Combat, Ordnance test facilities, operational target vehicle launch functions and aircraft maintenance. Support SNI T&E related costs. Fund SNI maintenance and operation contract for barges and personnel/equipment shuttle services. Reimburse the Pacific Fleet for support services at Point Mugu and SNI. - (U) (\$6.598) Continue to support priority equipment calibration, materials, supplies, technical equipment and spare parts for core range and target instrumentation and equipment systems.. - (U) (\$4.353) Provide transportation, printing, communications, annual leases for offshore island and remote location instrumentation sites, Host Tenant Agreement costs, travel and critical training necessary to manage and sustain MRTFB operations. - (U) (\$3.120) Continue essential support for maintaining R-2508 Air Space Control System and DC-130 target air launch capabilities. - (U) (\$35.325) Continue to provide for annual utility costs, facility service contracts, workers' compensation costs for MRTFB employees, and contribution to Command's General and Administrative (G&A) expenses for comptroller, contracting, personnel, and other support services. Reimburse the Pacific Fleet for utilities and support services at Point Mugu & SNI. 		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6		PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support			PROJECT NUMBER AND NAME W0653 Naval Air Warfare Center Weapons Division					
(U) B. PROGRAM CHANGE SUMMARY:										
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>							
(U) FY 2001 President's Budget:	121.442	125.077	130.604							
(U) Adjustments from the President's Budget:	2.678	-1.578	-12.400							
(U) FY 2002 President's Budget Submit:	124.120	123.499	118.204							
CHANGE SUMMARY EXPLANATION:										
<p>(U) Funding: The FY 2000 net increase of \$2.678 million consists of a \$3.400 million increase for deferred maintenance and repair items offset by a \$.246 million decrease for a reprioritization of requirements within the Navy and a \$.476 million decrease for a Congressional Recission. FY 2001 net decrease of \$1.578 million consists of \$.876 million decrease for Congressional Reduction, a \$.430 decrease for reprioritization of requirements within the Navy, and a \$.272 million decrease for a Congressional Recission. The FY 2002 net decrease of \$11.969 million consists of \$1.975 million decrease for the transfer of funds to Program Element 0605864N (MRTFB) for establishment of the Pacific Missile Range Facility (PMRF) Project Unit W2921, a \$9.153 million decrease for the transfer of funds to Program Element 0605864N (MRTFB) for the establishment of the Maintenance and Repair Project Unit W2922, a \$1.497 decrease for reprioritization of requirements within the Navy offset by a \$.656 million increase for economic assumptions.</p>										
(U) Schedule: Not Applicable										
(U) Technical: Not Applicable										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable										
Related RDT&E:										
(U) P.E. 0604759N, Major Test and Evaluation Investment										
(U) P.E. 0604256N, Threat Simulator Development										
(U) P.E. 0604258N, Threat Systems Development										
(U) P.E. 0605863N, RDT&E Ship and Aircraft Support										
(U) D. ACQUISITION STRATEGY: Not Applicable										
(U) E. SCHEDULE PROFILE: Not Applicable										

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support					PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		90.099	93.184	84.979						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides funds for the maintenance and operation of the NAVAIRWARCENACDIV's capabilities to conduct test and evaluation and provide fleet support for air platforms. NAVAIRWARCENACDIV has extensive airfield, flight test ranges, aircraft systems test facilities and simulation laboratories to support aircraft RDT&E. 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 T&E Group, Patuxent River, performs development test and evaluation and supports 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 not chargeable to customers.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$21.421) Continued to operate and maintain mission core/essential Major Range Test Facility Base (MRTFB) capabilities to meet customers' test workload. Funds civilian labor required to manage, operate, and maintain the MRTFB.
- (U) (\$8.087) Continued to provide essential travel, transportation, collateral equipment, and supplies required to support the continued operations of the MRTFB.
- (U) (\$23.305) Continued to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.
- (U) (\$11.178) Continued to provide Major Repair & critical maintenance to sustain MRTFB facilities.
- (U) (\$22.161) Reimbursed the Command for essential General and Administrative (G&A) support services, (e.g., comptroller, contracting, personnel, and other services).
- (U) (\$3.947) Continued to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.

2. FY 2001 PLANS:

- (U) (\$23.827) Operate and maintain mission essential/core MRTFB capabilities to meet customer test workload. Funds civilian labor required to manage, operate, and maintain the MRTFB.
- (U) (\$5.977) Continue to provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.

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Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 13 of 22)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE:
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	June 2001
2. FY 2001 PLANS (continued): <ul style="list-style-type: none">- (U) (\$24.772) Continue to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.- (U) (\$11.064) Provide continued Major Repair & critical maintenance to sustain MRTFB facilities.- (U) (\$23.416) Reimburse the Command for essential General and Administrative (G&A) support services, (e.g., comptroller, contracting, personnel, and other services).- (U) (\$4.128) Continue to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.		
3. FY 2002 PLANS: <ul style="list-style-type: none">- (U) (\$26.140) Operate and manage mission essential/core MRTFB capabilities to meet customer test workload. Funds civilian labor required to manage and operate the MRTFB.- (U) (\$6.195) Continue to provide travel, transportation, collateral equipment, and supplies required to support continued operations of the MRTFB.- (U) (\$24.640) Continue to provide communications, purchased equipment maintenance, printing and reproduction, and purchased service contracts necessary to manage and sustain MRTFB operations.- (U) (\$23.720) Reimburse the Command for essential General and Administrative (G&A) support services, (e.g., comptroller, contracting, personnel, and other services).- (U) (\$4.284) Continue to provide mission essential annual utility costs, equipment rentals, and land, building and facility leases.		

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification			DATE: June 2001							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W0654 Naval Air Warfare Center Aircraft Division								
(U) B. PROGRAM CHANGE SUMMARY:										
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>							
(U) FY 2001 President's Budget:	89.733	93.213	96.202							
(U) Adjustments from the President's Budget:	0.366	-0.029	-11.223							
(U) FY 2002 President's Budget Submit:	90.099	93.184	84.979							
(U) CHANGE SUMMARY EXPLANATION:										
<p>(U) Funding: FY2000 net increase of \$.366 million consists of an increase of \$.718 million for deferred maintenance and repair items offset by \$.352 million decrease for a Congressional Recission. FY2001 decrease of \$.029 million consists of a \$.203 million decrease for a Congressional Recission, and a \$.653 million decrease for Congression Reduction offset by a \$.827 million increase for reprioritization of requirements within the Navy. FY2002 net decrease of \$10.724 million consists of a \$10.130 million decrease for the transfer of funds to Project Element 0605864N (MRTFB) to support the Maintenance and Repair Project Unit W2922, a \$971 million decrease for Aircraft Depot Maintenance Realignment, and a \$2.983 million decrease for economic assumptions offset by a \$2.840 million increase for reprioritization of requirements within the Navy, and a \$520 million increase for a Maintenance and Repair realignment.</p>										
(U) Schedule: Not Applicable										
(U) Technical: Not Applicable										
(U) C. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>
Not Applicable										
Related RDT&E:										
(U) P.E. 0604759, Major Test and Evaluation Investment										
(U) D. ACQUISITION STRATEGY: Not Applicable										
(U) E. SCHEDULE PROFILE: Not Applicable										

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Exhibit R-2a, RDTEEN Project Justification
(Exhibit R-2a, page 15 of 22)

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME					
RDT&E, N / BA-6	0605864N Test and Evaluation Support					W2921 Pacific Missile Range Facility					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		0.000	1.982	2.100						Continuing	Continuing
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project provides continuing maintenance and operations support for Test & Evaluation (T&E) related capabilities at the Pacific Missile Range Facility (PMRF). These capabilities have been approved for inclusion in the Navy's Major Range and Test Facility Base (MRTFB) starting in FY02. Located on Kauai, HI, PMRF's T&E capabilities include precision radar and telemetry assets, the Mobile Aerial Target Support System (MATSS), the Stabilized High-accuracy Optical Tracking System (SHOTS), and the Mobile Telemetry Receiver Systems (MRTS).

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$0) - Not applicable.

2. FY 2001 PLANS:

- (U) (\$.786) Operate and maintain core MRTFB test support assets, instrumentation systems, and marine craft to perform the PMRF T&E mission.
- (U) (\$.625) Fund civilian labor required to manage, operate, and maintain the MRTFB.
- (U) (\$.085) Provide essential travel, transportation, and training to support the operations of the MRTFB.
- (U) (\$.486) Fund final integration efforts of MRTFB related systems.

3. FY 2002 PLANS:

- (U) (\$1.388) Operate and maintain core MRTFB test support assets, instrumentation systems, and marine craft to perform the PMRF T&E mission.
- (U) (\$.626) Fund civilian labor required to manage, operate, and maintain the MRTFB.
- (U) (\$.086) Provide essential travel, transportation, and training to support the operations of the MRTFB.

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Exhibit R-2a, RDTEN Project Justification
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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																																																	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W2921 Pacific Missile Range Facility																																																	
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY2000</u></th> <th style="text-align: center;"><u>FY2001</u></th> <th style="text-align: center;"><u>FY2002</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td></td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">1.982</td> <td style="text-align: center;">2.100</td> </tr> <tr> <td>(U) FY 2002 President's Budget Submit:</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">1.982</td> <td style="text-align: center;">2.100</td> </tr> </tbody> </table> <p>CHANGE SUMMARY EXPLANATION:</p> <p>(U) Funding: The FY 2001 net increase of \$1.982 million consists of \$2.000 million increase to establish the Pacific Missile Range Facility (PMRF) Project Unit W2971 to fund MRTFB related capabilities offset by a \$.004 million decrease for a Congressional Recission, and a \$.014 million decrease for a Congressional Reduction. The FY 2002 net increase of \$2.100 million consists of \$2.100 million increase to establish the Pacific Missile Range Facility (PMRF) Project Unit W2921 to fund MRFTB related capabilities and a \$.008 increase for economic assumptions offset by a \$.008 decrease for repriorization of requirements within the Navy.</p> <p>(U) Schedule: Not Applicable</p> <p>(U) Technical: Not Applicable</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="margin-left: 40px; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Line Item No. & Name</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>FY 2006</u></th> <th style="text-align: center;"><u>FY 2007</u></th> <th style="text-align: center;"><u>To Complete</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>Not Applicable</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>Related RDT&E: 0604759N, Major T&E Investments</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table> <p>(U) D. ACQUISITION STRATEGY: N/A</p> <p>(U) E. SCHEDULE PROFILE: N/A</p>				<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	(U) FY 2001 President's Budget:	0.000	0.000		(U) Adjustments from the President's Budget:	0.000	1.982	2.100	(U) FY 2002 President's Budget Submit:	0.000	1.982	2.100	<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>	Not Applicable											Related RDT&E: 0604759N, Major T&E Investments										
	<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>																																																
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Not Applicable																																																			
Related RDT&E: 0604759N, Major T&E Investments																																																			

R-1 SHOPPING LIST - Item No. 164

UNCLASSIFIED

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification								DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support					PROJECT NUMBER AND NAME W2922 Maintenance and Repair					
COST (\$ in Millions)	Prior Years Cost	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		0.000	0.000	19.539						Continuing	Continuing
RDT&E Articles Qty											

(U) 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 (W0653) and the Naval Air Warfare Center Aircraft Division (W0654). Funds mission critical emergency services, reoccurring maintenance and repair, major repair projects, and associated minor construction. In addition it addresses priority items on the Backlog of Maintenance and Repair (BMAR) list.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 2000 ACCOMPLISHMENTS:

- (U) (\$0) - N/A

2. FY 2001 PLANS:

- (U) (\$0) - N/A

3. FY 2002 PLANS:

- (U) (\$19.535) Supports mission critical emergency services, reoccurring maintenance and repair, major repair, and associated minor construction efforts at the Naval Air Warfare Center Weapons Division (W0653) and Naval Air Warfare Center Aircraft Division (W0654). Funds priority projects included on the backlog of maintenance and repair (BMAR) list and exigent projects.

R-1 SHOPPING LIST - Item No. 164

UNCLASSIFIED

Exhibit R-2a, RDTEN Project Justification
(Exhibit R-2a, page 20 of 22)

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001																																																	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N / BA-6	PROGRAM ELEMENT NUMBER AND NAME 0605864N Test and Evaluation Support	PROJECT NUMBER AND NAME W2922 Maintenance and Repair																																																	
<p>(U) B. PROGRAM CHANGE SUMMARY:</p> <table style="margin-left: 40px; border: none;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>FY2000</u></th> <th style="text-align: center;"><u>FY2001</u></th> <th style="text-align: center;"><u>FY2002</u></th> </tr> </thead> <tbody> <tr> <td>(U) FY 2001 President's Budget:</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td></td> </tr> <tr> <td>(U) Adjustments from the President's Budget:</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">19.539</td> </tr> <tr> <td>(U) FY 2002 President's Budget Submit:</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">0.000</td> <td style="text-align: center;">19.539</td> </tr> </tbody> </table> <p style="margin-left: 40px;">CHANGE SUMMARY EXPLANATION:</p> <p style="margin-left: 40px;">(U) Funding: The FY 2002 net increase of \$19.535 million consists of a \$19.671 million increase to establish the Maintenance and Repair Project Unit W2922 within Program Element 0605864N (MRTFB) offset by a \$.097 million decrease for economic assumptions and a \$.039 decrease for reprioritization of requirements within the Navy.</p> <p style="margin-left: 40px;">(U) Schedule: Not Applicable</p> <p style="margin-left: 40px;">(U) Technical: Not Applicable</p> <p>(U) C. OTHER PROGRAM FUNDING SUMMARY:</p> <table style="margin-left: 40px; border: none;"> <thead> <tr> <th style="text-align: left;"><u>Line Item No. & Name</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>FY 2004</u></th> <th style="text-align: center;"><u>FY 2005</u></th> <th style="text-align: center;"><u>FY 2006</u></th> <th style="text-align: center;"><u>FY 2007</u></th> <th style="text-align: center;"><u>To Complete</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td colspan="11">Not Applicable</td> </tr> <tr> <td colspan="11">Related RDT&E: P.E. 0604759N, Major Test and Evaluation Investment</td> </tr> </tbody> </table> <p>(U) D. ACQUISITION STRATEGY: N/A</p> <p>(U) E. SCHEDULE PROFILE: N/A</p>				<u>FY2000</u>	<u>FY2001</u>	<u>FY2002</u>	(U) FY 2001 President's Budget:	0.000	0.000		(U) Adjustments from the President's Budget:	0.000	0.000	19.539	(U) FY 2002 President's Budget Submit:	0.000	0.000	19.539	<u>Line Item No. & Name</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>To Complete</u>	<u>Total Cost</u>	Not Applicable											Related RDT&E: P.E. 0604759N, Major Test and Evaluation Investment										
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Related RDT&E: P.E. 0604759N, Major Test and Evaluation Investment																																																			

R-1 SHOPPING LIST - Item No. 164

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0831	Operational Test & Evaluation Force Support									
	9,344	8,874	11,149						CONT.	CONT.
R2923	Navy JT&E Support									
	-	-	500						CONT.	CONT.
Total	9,344	8,874	11,649						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR's compliance with requirements established by Title 10 Law and directives from the Secretary of Defense and the Secretary of the Navy to carry out independent operational testing and evaluation. This funding is used for planning, conduct (including early operational tester involvement as part of acquisition reform), and reporting of the results of operational test and evaluation of weapon systems projects and for tactics validation for the use of those systems. Funding is also provided for Navy support of the OSD-sponsored Joint Test and Evaluation (JT&E) program.

(U) 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.

(U) PROGRAM CHANGE SUMMARY FOR TOTAL PE:

R-1 Line Item 165

Budget Item Justification
(Exhibit R-2, page 1 of 6)

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605865N

PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

B. (U) PROGRAM CHANGE SUMMARY:

	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>
(U) FY 2001 President's Budget:	9,121	8,957	9,158
(U) Appropriated Value:			
(U) Adjustments from PRESBUDG:			
(U) SBIR Adjustment	-21		
(U) Midyear Review Adjustment	-181		
(U) Program Adjustment			1,985
(U) NMCI Adjustment			-15
(U) Execution Adjustment	+461		
(U) Economic Adjustments			21
(U) Congressional Recission	-36	-83	
(U) FY 2002 President's Budget:	9,344	8,874	11,149

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 165

Budget Item Justification
(Exhibit R-2, page 2 of 6)

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6 PROGRAM ELEMENT: 0605865N
PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0831 Operational Test & Evaluation Force Support	9,344	8,874	11,149						CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides Commander, Operational Test and Evaluation Force (COMOPTEVFOR) general support funding. This funding ensures COMOPTEVFOR's compliance with requirements established by Title 10 Law and directives from the Secretary of Defense and the Secretary of the Navy to carry out independent operational testing and evaluation. This funding is used for planning, conduct (including early operational tester involvement as part of acquisition reform), and reporting of the results of operational test and evaluation of weapon systems projects and for tactics validation for the use of those systems.

(U) 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.

R-1 Line Item 165

Budget Item Justification
(Exhibit R-2, page 3 of 6)

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605865N

PROJECT NUMBER: R0831

PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

PROJECT TITLE: Operational Test & Evaluation
Force Support

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$7,007) Operationally tested and evaluated CNO projects commensurate with authorized funding level.
- (U) (\$2,337) Maintained level of effort associated with the DOD 5000 acquisition guidance which required increased COMOPTEVFOR involvement in early operational assessments, developmental testing, advanced concept technology demonstrations, and advanced technology demonstrations.

2. (U) FY 2001 PLAN:

- (U) (\$6,625) Operationally test and evaluate CNO projects commensurate with authorized funding level.
- (U) (\$2,224) 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.
- (U) (\$25) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

- (U) (\$8,740) Operationally test and evaluate CNO projects commensurate with authorized funding level.
- (U) (\$2,409) 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.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 165

Budget Item Justification
(Exhibit R-2, page 4 of 6)

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605865N

Project Number: R2923

PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

Project Title: Navy JT&E Support

(U) COST: (Dollars in Thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R2923	Navy JT&E Support	-	-	500					CONT.	CONT.

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program element provides funding for Navy support of the OSD-sponsored Joint Test and Evaluation (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 Secretary of Defense to carry out the JT&E program. The funding is used for planning, conduct, and reporting of the results of T&E-focused JT&E projects to assess the interoperability of systems in joint operations and explore potential solutions to identified problems, to evaluate and provide 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 this critical joint arena.

(U) 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.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

R-1 Line Item 165

Budget Item Justification
(Exhibit R-2, page 5 of 6)

UNCLASSIFIED

UNCLASSIFIED

FY 2002 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

DATE: June 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605865N

Project Number: R2923

PROGRAM ELEMENT TITLE: Operational Test and
Evaluation Capability

Project Title: Navy JT&E Support

1. (U) FY 2000 ACCOMPLISHMENTS: Not applicable
2. (U) FY 2001 PLAN: Not applicable.
3. (U) FY 2002 PLAN:
 - (U)(\$500) Support Joint Test & Evaluation (JT&E) projects as directed by the JT&E Senior Advisory Council.

B. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

C. (U) SCHEDULE PROFILE: Not applicable.

R-1 Line Item 165

Budget Item Justification
(Exhibit R-2, page 6 of 6)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2, FY 2002 RDT&E,N Budget Item Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROGRAM ELEMENT TITLE: Navy Space and Electronic Warfare (SEW) Support

(U) COST: (Dollars in Thousands)

PROJECT

NUMBER	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TO	TOTAL
TITLE	ACTUAL	ESTIMATE	COMPLETE	PROGRAM						
R0739 Navy C4I Top Level Requirements	727	1,529	1,573							
X0706 EMI Reduction and Radio Frequency Management	1,228	1,703	1,860							
Total	1,955	3,232	3,433							

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Project R0739 Navy C4I Top Level Requirements - Analyzes fleet requirements and research and development technology to develop top level plans for operating Navy Communications, Command and Control Computers, and Intelligence (C4I) and space systems in the Space and Electronic Warfare (SEW) mission area.

Project X0706 Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management - Develops advanced technology to identify and reduce EMI sources from Navy systems and platforms.

(U) 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.

B. (U) PROGRAM CHANGE FOR TOTAL P.E.: See Individual Projects.

R-1 Shopping List - Item No. 166-1 of 166-7

Budget Item Justification
(Exhibit R-2, page 1 of 7)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2002 RDT&E,N Project Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: R0739

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: Navy C4I Top Level Requirements

(U) COST: (Dollars in thousands)

PROJECT NUMBER & TITLE	FY 2000 ACTUAL	FY 2001 ESTIMATE	FY 2002 ESTIMATE	FY 2003 ESTIMATE	FY 2004 ESTIMATE	FY 2005 ESTIMATE	FY 2006 ESTIMATE	FY 2007 ESTIMATE	TO COMPLETE	TOTAL PROGRAM
R0739 Navy Command, Control, Communications, Computers and Intelligence (C4I) Top Level Requirements	727	1,529	1,573							

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides analysis of fleet requirements and research and development technology to develop top level plans for operating Navy Communications, Command, Control, Communication and Computer Integration (C⁴I) and space systems in the Space and Electronic Warfare mission area.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$125) Developed and maintained a cadre of personnel with specified education and focused experience as information warfare warriors. Built on the success of previous efforts with tracking system, ensure personnel distribution of Information Warfare professionals matched to their abilities.
- (U) (\$110) Investigated the feasibility of developing a platform-independent, external mount airborne pod for tactical Signal intelligence (SIGINT) data collection that is Joint Airborne SIGINT Architecture compliant.
- (U) (\$170) Developed an acceptable useful methodology and process for incorporating desired operational capabilities and results of Fleet Battle Experiments into N6 objectives.
- (U) (\$222) Researched and analyzed the scaleable effects of shipboard radio frequency emitters installed on Aegis cruisers on space-based systems.

R-1 Shopping List - Item No. 166-2 of 166-7

Budget Item Justification
(Exhibit R-2, page 2 of 7)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2002 RDT&E,N Project Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: R0739

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: Navy C4I Top Level Requirements

- (U) (\$100) Developed a study group to review Extensible Markup Language (XML) technology and produce options for how to best implement XML as a "smart pull" process to establish a truly "seamless" method of transferring and exchanging data to a variety of systems.

2. (U) FY 2001 PLAN:

- (U) (\$507) Investigate potential benefit of and leveraging capability from continual reduction in chip development prices for DoN.
- (U) (\$465) Support architectural analysis for web-based interaction DON-wide, including considerations to ensure maintenance of appropriate security. Product would be a comprehensive architecture displaying this security, the interfaces, and the functions.
- (U) (\$528) Identify requirements to improve Graphic User Interfaces by using tools to enhance intuitive understanding (i.e., icons and pull down menus) while providing all required capabilities for DON missions/administrative functions.
- (U) (\$29) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

- (U) (\$1,573) Identify requirements, programs and actions which contribute to the development of Navy Space and Electronic Warfare issues and conduct analyses or solutions to problems for current and future scientific projects.

B. (U) PROGRAM CHANGE SUMMARY:

	<u>FY 2000</u>	<u>FY 2001</u>
(U) FY 2001 President's Budget:	780	1,543
(U) Appropriated Value:		
(U) Adjustments from Presidents Budget:		

R-1 Shopping List - Item No. 166-3 of 166-7

Budget Item Justification
(Exhibit R-2, page 3 of 7)

UNCLASSIFIED

EXHIBIT R-2a, FY 2002 RDT&E,N Project Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6	PROGRAM ELEMENT: 0605866N	PROJECT NUMBER: R0739
	PROGRAM ELEMENT TITLE: SEW Support	PROJECT TITLE: Navy C4I Top Level Requirements
(U) FY 2000 SBIR Adjustment	-15	
(U) FY 2000 Midyear Review Adjustment	-30	
(U) Congressional Recission	-8	-14
(U) PBD 604 Non-Pay Adjustment		
(U) NWCF Rate Adjustment		
(U) Program Adjustment		
(U) FY 2002 PRESIDENT'S BUDGET Submission:	727	1,529

(U) Schedule: Not applicable.

(U) Technical: Not applicable.

C. (U) OTHER PROGRAM FUNDING SUMMARY: Not applicable.

(U) RELATED RDT&E: Not applicable.

D. (U) SCHEDULE PROFILE: Not applicable.

R-1 Shopping List - Item No. 166-4 of 166-7

Budget Item Justification
(Exhibit R-2, page 4 of 7)

UNCLASSIFIED

UNCLASSIFIED

EXHIBIT R-2a, FY 2002 RDT&E,N Project Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: X0706

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: EMI Reduction and Radio
Frequency Management

(U) COST: (Dollars in Thousands)

PROJECT

NUMBER	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TO	TOTAL
TITLE	ACTUAL	ESTIMATE	COMPLETE	PROGRAM						
X0706 EMI Reduction and Radio Frequency Management	1,228	1,703	1,860							

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Electromagnetic Interference (EMI) Reduction and Radio Frequency (RF) Management. This project develops tools to identify and reduce EMI sources from Navy systems and platforms. There are several tools under development to identify and reduce EMI through proper use of the electromagnetic spectrum. The Automated Spectrum Planning, Engineering, Coordination, and Tracking System (ASPECTS) is a communications planning and frequency management tool that is used to plan communication links and analyze, allocate, and assign communication and radar frequencies for fleet operations. The Battle Force (BF) EMI Evaluation System (BEES) is an EMI evaluation tool that is used to develop BF Electromagnetic Environmental Effects (E3) criteria inter-platform EM compatibility (EMC) during operations and exercises. Research includes EMI models for phased arrays, development of new communications and planning techniques to avoid EMI, and development of guidance to harmonize commercial EMI practices.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS:

- (U) (\$710) ASPECTS: Completed development of software plan to integrate the CPM into the Element Management System (EMS) to make the communication plan available for automated C4ISR systems to adapt to the electromagnetic environment. Continue ASPECTS and EMCAP software updates.
- (U) (\$333) BEES: A common operating system version of the analysis software can be run on BEES networked and stand alone machines

R-1 Shopping List - Item No. 166-5 of 166-7

Project Justification
(Exhibit R-2a, page 5 of 7)

UNCLASSIFIED

EXHIBIT R-2a, FY 2002 RDT&E,N Project Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: X0706

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: EMI Reduction and Radio
Frequency Management

- (U) (\$185) Criteria and Test Procedures: Continue to investigate industrial standards (foreign and domestic) for conversion to military standards. Develop new communications planning techniques to avoid EMI.

2. (U) FY 2001 PLAN:

- (U) (\$941) ASPECTS: Develop interfaces for real time use of spectrum into communications and other C4ISR equipment based on the Navy operational EME to find available spectrum automatically to reduce incidences of interference to and from systems.
- (U) (\$464) BEES: Development of generic C4ISR system models. Concentrate development on user utility to run on as many computer platforms and networks as feasible.
- (U) (\$298) Criteria and Test Procedures: Continue to investigate industrial standards (foreign and domestic) for conversion to military standards. Continue to incorporate new communications planning techniques, including phased array antennas.

3. (U) FY 2002 PLAN:

- (U) (\$1,022) CPM and EMCAP: Develop web based applications that tie into not only Navy C4ISR systems but into commercial communication systems being used by the Navy and ensure their operational use is not a source or victim of interference to find available spectrum automatically.
- (U) (\$502) C4I Topside EMC: Due to congested topside environment, develop enhancements to antennas to reduce incidences of interference, and in addition develop models to analyze those enhancements to be repeatable on other platform types.
- (U) (\$336) C4I EMC Criteria : Incorporate commercial systems practices and standards into EMC C4I criteria. Continue to incorporate new communications and radar planning techniques, including phased array antennas.

R-1 Shopping List - Item No. 166-6 of 166-7

Project Justification
(Exhibit R-2a, page 6 of 7)

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EXHIBIT R-2a, FY 2002 RDT&E,N Project Justification

DATE: JUNE 2001

BUDGET ACTIVITY: 6

PROGRAM ELEMENT: 0605866N

PROJECT NUMBER: X0706

PROGRAM ELEMENT TITLE: SEW Support

PROJECT TITLE: EMI Reduction and Radio
Frequency Management

B. (U) PROGRAM CHANGE SUMMARY:

FY 2000: SBIR Assessment (-\$36K), Miscellaneous Navy Adjustments (-\$377K), Section 8055 Congressional Proportionate Rescission (-\$6K).

FY 2001: Section 8086 .7% Pro-Rata Reduction (-\$12K), Government-Wide Rescission PL 106-554, Sec. 1 (-\$4K).

C. (U) OTHER PROGRAM FUNDING SUMMARY:

(U) PE 0702827N, AGSAG 4B7N	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY2006	FY2007
	2,791	764	1,273					

(U) Related RDT&E: Not applicable.

D. (U) ACQUISITION STRATEGY: Not applicable.

E. (U) SCHEDULE PROFILE: Not applicable.

R-1 Shopping List - Item No. 166-7 of 166-7

Project Justification
(Exhibit R-2a, page 7 of 7)

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification									Date: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E,N/6					R-1 ITEM NOMENCLATURE Space and Electronic Warfare Surveillance/ Reconnaissance Support 0605867N Link Crimson					
COST (\$ in Millions)	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	Cost to Complete	Total Cost
Total PE Cost	10.975	11.586	12.693						CONT	CONT
Link Crimson/Z1034	9.773	11.339	12.437						CONT	CONT
Space Management Support/R2007	1.202	.247	.256						CONT	CONT
Quantity of RDT&E Articles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
<p>A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: Established to exploit all National and Selected Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements. Additional detailed information is available at a higher level of classification.</p> <p>(U) Z1034: Established to exploit all National and Service sensor systems to improve tactical support to fleet operational commanders. Project also supports fleet exercises, which provide the venue for testing modifications to existing programs and being made aware of new requirements.</p> <p>(U) PROGRAM ACCOMPLISHMENTS AND PLANS:</p> <p>1. (U) FY 2000 PLAN:</p> <ul style="list-style-type: none"> • (U) (\$.294) Joint Exercises/Training • (U) (\$1.368) Support to TBMD • (U) (\$3.421) Support to Littoral/Expeditionary Warfare • (U) (\$3.713) Precision Strike/Mission Planning • (U) (\$.977) Improved Data Dissemination/Exploitation <p>2. (U) FY 2001 PLAN:</p> <ul style="list-style-type: none"> • (U) (\$.250) Joint Exercises/Training • (U) (\$2.388) Support to TBMD • (U) (\$1.946) Support to Littoral/Expeditionary Warfare • (U) (\$4.031) Precision Strike/Mission Planning • (U) (\$2.724) Improved Data Dissemination/Exploitation <p>3. (U) FY 2002 PLAN:</p> <ul style="list-style-type: none"> • (U) (\$.275) Joint Exercises/Training • (U) (\$2.638) Support to TBMD 										

- (U) (\$2.251) Support to Littoral/Expeditionary Warfare
- (U) (\$4.368) Precision Strike/Mission Planning
- (U) (\$2.905) Improved Data Dissemination/Exploitation

B. Program Change Summary:

	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>
PB01	10.528	12.535	12.766
FY01FMB	9.773	11.339	12.437
Delta	-755	-1.196	-329

A. (U) MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This project provides resources to the Naval Space Command (NAVSPACECOM) for the conduct of its support testing. NAVSPACECOM is tasked with providing space support to fleet units worldwide, while also planning and coordinating future support system analysis, requirements, architectural and feasibility studies, technical demonstrations and prototype system development for concepts to provide space support to the fleet warfighter.

(U) R2007: The project provides resources to the Naval Space Command (NAVSPACECOM) for the conduct of its support testing.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 PLAN:

- (U) (\$.205) Engineering and technical support to Space Based Infrared System (SBIRS) Low constellations
- (U) (\$.135) Developed Hyper-Spectral Imagery (HSI) processing techniques
- (U) (\$.205) Integrated Joint Tactical Ground Station (JTAGS) into Global Command & Control System (GCCS) product delivery
- (U) (\$.205) Demonstrated advanced processing for orbit analyst support
- (U) (\$.297) Studied advanced space communications techniques
- (U) (\$.155) Demonstrated National System data integration.

2. (U) FY 2001 PLAN:

- (U) (\$.243) Integrate Joint Tactical Ground Station (JTAGS) into Global Command & Control System product delivery. Study transition issues for Multi Mission Mobile Processor (SBIR) implementation
- (U) (\$.004) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

3. (U) FY 2002 PLAN:

- (U) (\$.256) Study transition issues for Multi Mission Mobile Processor (SBIR) implementation

B. PROGRAM CHANGE SUMMARY:

	FY00	FY01	FY02
PB01	1.584	250	255
FY01FMB	1.202	247	256
Delta	-382	-3	+1

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under Budget Activity 6 because it supports the operations and installations required for general research and development use.

B. Program Change Explanation:

(U) Funding: R2007: FY2000 adjustments are Program Adjustment (BTR) (-286), SBIR Adjustment (-24), Execution Adjustment (-66), Congressional Recession (-6). FY2001 adjustment is Congressional Recession (-3). FY002 Adjustment is NWCF Rates (+1). Z1034: FY2000 adjustments due to PY Expenditure Carryover (-1.580), FY01 President Budget Adjustments (-54), ASN (RDA) BTR #00-18 (-660), Section 8055 Pro-Rata Reduction (-41). FY2001 adjustments are FY01 Presidents Budget Adjustment (-91), Section 8086 .7% Pro-Rata Reduction (-80), Lower Priority TENCAP Project (-1.000), Government Wide Rescission (-25). FY2002 adjustments are FY01 Presidents Budget Adjustments (-137), Final POM-02 Adjustment (-15), N6 4% Reduction for High Priority IT Requirement (-200), NWCF Adjustment-NRL (+21), NWCF Adjustment-NAWC (-5), NWCF Adjustment-NSWC (-2), NWCF Adjustment-SPAWAR (+1), Non-Pay Adjustment (+20), NWCF Adjustment-NRL (-4), NWCF Adjustment-NAWC (-1), NWCF Adjustment-NSWC (-1), NWCF Adjustment-NCCO (-6).

C. Other Program Funding Summary N/A

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CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification							DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support				PROGRAM ELEMENT (PE) NAME AND NO. 0605873M Marine Corps Program Wide Support						
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Total PE Cost	29.923	17.727	9.614	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C0030 Marine Corps Studies and Analyses	7.445	5.779	5.177	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C0033 Marine Corps Operational Testing & Evaluation Activity	3.358	2.001	2.508	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C2330 Chemical Biological Consequence Management	19.120	9.947	0.958	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C2930 Phase 0 Activities	0.000	0.000	0.971	0.000	0.000	0.000	0.000	0.000	Cont	Cont
Quantity of RDT&E Articles										

(U) 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, supporting the Concepts Based Requirements Systems and Combat Development Process. In addition, the PE supports Marine Corps Operational Test and Evaluation (OT&E) Activities.

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

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: June 2001
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APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT (PE) NAME AND NO. 0605873M Marine Corps Program Wide Support
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B. PROGRAM CHANGE SUMMARY

	FY2000	FY2001	FY2002
(U) FY 2001 President's Budget:	10.936	8.091	8.136
(U) Adjustments from the President's Budget:			
(U) SBIR/STTR Transfer	-0.149		
(U) Execution Adjustment	-0.326		
(U) Minor Affordability Adjustment	-0.517	-0.164	-0.135
(U) Program Adjustment	19.979	9.800	1.613
(U) FY 2002 President's Budget:	29.923	17.727	9.614

CHANGE SUMMARY EXPLANATION:

- (U) Funding: See Above.
- (U) Schedule: Not Applicable.
- (U) Technical: Not Applicable.

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support				PROJECT NUMBER AND NAME C0030 Marine Corps Studies and Analyses					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	7.445	5.779	5.177	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project funds the general studies and analysis portion and provides the analytical foundation for the Marine Corps Studies System (MCSS). The project funds a variety of studies and analyses approved for execution in the annual Marine Corps Studies Master Plan (MCSMP) including mandated Mission Area Analyses (MAAs), Milestone I (Conceptual) Analysis of Alternatives (AoAs), technology assessments, force structure analysis, weapons systems analysis, concept development and analysis, cost benefit analysis, training assessments, feasibility analysis, scenario development, and other analyses in support of the Program Objective Memorandum (POM) initiatives. The MCSS also supports the front end of the Marine Corps' acquisition system, which supports the Concepts Based Requirements Process (CBRP) and the Combat Development Process (CDP). The MAA process is designed to provide quantitative and qualitative information to decision makers for basing decisions effecting improvements in operational concepts, doctrine, force structure, education, training, and procurement. The MCSS also provides analytical support for decision makers for the resolution of current problems and issues identified by the operating forces. Additionally, in FY00-01, experts to provide independent oversight to the DoD Non Lethal Weapons Program. The panel reviews all data concerning effects of non-lethal weapons on humans and provides recommendations for improvement of models and characterization methods. Beginning in FY01, the Marine Corps Studies System will begin using the Marine Corps Research University to conduct studies and analysis projects in the areas of "basic" and "applied" research and Advanced Technology Development. In FY 00-01, this project also holds funds for Phase 0 activities, which are designed to better-define emerging initiatives and "jump start" high priority programs and initiatives in Phase 0 of the Acquisition Process. In FY02 and beyond, Phase 0 activities will be moved to project C2930.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2000 Accomplishments:

- (U) \$ 1.093 Initiated and completed four new Mission Area Analyses: Landing Helicopter Assault (LHA) Replacement, Operational Maneuver From the Sea (OMFTS), Operational Reach, Rapid Response and initiate the Expeditionary Maneuver Warfare 21 MAA for completion in FY 2001.
- (U) \$ 1.449 Executed the high priority study and analysis projects approved in the FY 2000 MC Studies Master Plan: Advanced Amphibious Assault Vehicle (AAV) Historical Perspectives, 2001-2010 Casualty Rate, Chem-Bio First Responder at USMC installations, Operational employment of the MV-22 aircraft, Radio Frequency Propagation, Force Artillery, QDR Vignettes, and the Aviation Ordnance Inventory Adequacy Study.
- (U) \$ 1.176 Continued and completed ongoing FY 1999 study and analysis projects: Training Pipeline Flow, Anti-Armor Study Mix, Functional Assessment-Decision Making, Range Management, Aviation Logistics, War Material Requirements (Class V) Determination.
- (U) \$ 1.745 Conducted high priority Milestone 0/Phase 0 activities for AAV RAM/RS & AAVI, Alternative Power Source for Communications Equipment (APSCE), HIMARS, Advance Mine Detector, Medium Fleet Trailer Replacement, Share Data and Non-Lethal Weapons, completed the Combat Identification AoA, started the LVSR AoA.
- (U) \$ 1.982 Provided health effects research and modeling & simulation to answer questions raised by the Non-Lethal Weapons Human Effects Advisory Panel (HEAP).

(U) Total \$ 7.445

FY 2001 Planned Program

- (U) \$ 1.169 Initiates and complete the Sea Lines of Communication-2 MAA as well as initiate and complete three additional MAAs, which shall be titled in the 2nd quarter of FY01.
- (U) \$ 0.875 Continue and complete one FY 2000 AoA and initiate 2 new AoAs. Estimate one of the new AoAs will be completed in this fiscal year.
- (U) \$ 0.680 Continues and complete an estimated 3 to 4 ongoing FY 2000 study and analysis projects.

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N /BA-6 Management Support		0605873M Marine Corps Program Wide Support				C0030 Marine Corps Studies and Analyses			
<ul style="list-style-type: none"> • (U) \$ 1.352 Commences at least four high priority study and analysis projects approved in the FY 2001 MCSMP. • (U) \$ 0.991 Commences at least three study and analysis projects with the Marine Corps University. • (U) \$ 0.687 Provides for the conduct of high priority Milestone 0/Phase 0 activities for 7 to 8 emerging requirements. • (U) \$ 0.025 SBIR: Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638. 									
(U) Total \$ 5.779									
FY 2002 Planned Program									
<ul style="list-style-type: none"> • (U) \$ 1.164 Initiates and completes at least three Mission Area Analyses. MAAs are identified during the MAA review which occurs during mid FY 2001. • (U) \$ 0.822 Continue and complete one FY 2001 AoA and initiate 2 new AoAs. Estimate one of the new AoAs will be completed this fiscal year. • (U) \$ 0.680 Continue and complete an estimated 4 to 5 ongoing FY 2001 study and analysis projects. • (U) \$ 1.525 Start up of the high priority study and analysis projects approved in the FY 2002 MCSMP. • (U) \$ 0.986 Start two to three new studies at the Marine Corps Research University. 									
(U) Total \$ 5.177									
(U) PROJECT CHANGE SUMMARY		FY2000	FY2001	FY2002					
(U) FY 2001 President's Budget:		7.343	4.833	4.978					
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer		-0.101							
(U) Execution Adjustment		-0.198							
(U) Minor Affordability Adjustment		-0.026	-0.054	-0.082					
(U) Program Adjustment		0.427	1.000	0.281					
(U) FY 2002 President's Budget:		7.445	5.779	5.177					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY: Not Applicable.									
<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) Related RDT&E: PE 0605154N (Center for Naval Analyses (CNA), Project C0031 (Marine Corps Operations Analysis Group))									
(U) C. ACQUISITION STRATEGY: The Marine Corps Study System utilizes several contract types and vehicles to provide independent and objective analysis needed for the study system. Government labs, fixed firm price contract delivery orders, competitive bidding and combination of one or more studies into one requirement are typical strategies used on a routine basis to nurture the allocated resources. Use of Indefinite Quantity contracts also provide particularly effective economies, especially when utilized with firm, fixed price task orders. Best interest strategies are also employed when available IDIQ contracts may not be appropriate. Overall this combination of contractual and business approaches serves to "get a little more" from the allocated resources.									
(U) D. SCHEDULE PROFILE: Not Applicable									

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support				PROJECT NUMBER AND NAME C0033 Marine Corps Operational Testing & Evaluation Activity					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	3.358	2.001	2.508	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This program supports the Marine Corps Operational Test and Evaluation (OT&E) Activity (MCOTEA) representatives for Marine Corps OT&E and OT&Es performed by Fleet Marine Force Commanders and Technical Support Activities. This program also provides for OT&E of systems prior to procurement by the Marine Corps to include test planning, operational testing, and Independent Evaluation Report (IER) preparation.

PROGRAM ACCOMPLISHMENTS AND PLANS

(U) FY 2000 Accomplishments:

- (U) \$ 1.404 MCOTEA: Provided for organizational support and utilities.
- (U) \$ 0.849 MCOTEA: Provided for organizational salaries.
- (U) \$ 1.105 Additional program tests for operational functionality of embedded software in systems undergoing Milestone III approval for production evaluations.

(U) Total \$ 3.358

(U) FY 2001 Planned Program

- (U) \$ 1.071 MCOTEA: Providing for organizational support and utilities.
- (U) \$ 0.930 MCOTEA: Providing for organizational salaries.

(U) Total \$ 2.001

(U) FY 2002 Planned Program

- (U) \$ 0.805 MCOTEA: To provide for organizational support and utilities.
- (U) \$ 1.352 MCOTEA: To provide for organizational salaries.
- (U) \$ 0.351 MCOTEA: To provide organizational support, utilities, and salaries for the New Automation Information Systems (AIS) test branch.

(U) Total \$ 2.508

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CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification						DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support		PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support				PROJECT NUMBER AND NAME C0033 Marine Corps Operational Testing & Evaluation Activity			
(U) Project Change Summary		FY2000	FY2001	FY2002					
(U) FY 2001 President's Budget:		2.155	2.019	2.212					
(U) Adjustments from the President's Budget:									
(U) SBIR/STTR Transfer		-0.013							
(U) Execution Adjustment		-0.128							
(U) Minor Affordability Adjustment		-0.008	-0.018	-0.055					
(U) Program Adjustment		1.352		0.351					
(U) FY 2002 President's Budget:		3.358	2.001	2.508					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) B. OTHER PROGRAM FUNDING SUMMARY:									
<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) Not Applicable.									
(U) Related RDT&E: Not Applicable.									
(U) C. ACQUISITION STRATEGY: * An explanation of acquisition, management, and contracting strategies shall be provided for each project.									
(U) D. SCHEDULE PROFILE: Not Applicable.									

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support		PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Supp			PROJECT NUMBER AND NAME C2330 Chemical Biological Consequence Management					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost	19.120	9.947	0.958	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty										

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

This project includes improvements in all areas of the Chemical Biological Incident Response Force inclusive to its commodity areas of reconnaissance, decontamination, emergency medical support, communications and general support and force protection.

PROGRAM ACCOMPLISHMENTS AND PLANS

FY 2000 Accomplishments:

- (U) \$ 4.673 Began research to develop a seamless, viable, and Integrated Weapon of Mass Destruction (WMD) Consequence Management Information System (CMIS).
- (U) \$ 0.135 Began research to develop an Enzymatic Decontamination system that is deployable, easily maintained and utilizes enzymatic substances.
- (U) \$ 0.060 Began research for the development of the Level A Pass-Through for the Self Contained Breathing Apparatus to enable the Marine to stay in Level A suits while changing air cylinders.
- (U) \$ 0.075 Began Product Improvement of the Field Rugged Gas Chromatography/Mass Spectrometer (GC/MS).
- (U) \$ 1.461 Conducted an analysis of an Acquirer mapping of a candidate military site to establish contamination identification.
- (U) \$ 0.486 Continued research for the development of an Electro-Chemical Decontamination Solution that is an environmentally safe chemical/biological decontamination solution.
- (U) \$ 0.185 Continued research for the development of the Non-specific Immune Defense program to provide protection against disease caused by biological warfare agents.
- (U) \$ 2.922 Continued research and development of the Probable Cause Detector System Phase II optimization of technology components to applicable stimulants.
- (U) \$ 3.994 Continued research for the development of a Small Unit Biological Detector (SUBD) to evaluate the detection sensitivity of the components, integrate the components into an enclosure, and fabricate engineering prototypes for testing.
- (U) \$ 0.100 Continued research and development of General Purpose Filters that are compatible with the standard M40 Canister to provide improved Toxic Industrial Chemicals (TIC) protection.
- (U) \$ 4.673 Continued development and testing of a Chemical Biological Individual Sampler Thermo Electron Phase II.
- (U) \$ 0.356 Completed development and testing of NBC Hand-Held Portable Detector to provide a portable means of

(U) Total \$ 19.120

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification		DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Supp	PROJECT NUMBER AND NAME C2330 Chemical Biological Consequence Management	
FY 2001 Planned Program			
<ul style="list-style-type: none"> • (U) \$ 0.173 Begin research and development of an improved communications device to receive, manipulate and transmit data, video and voice communications. • (U) \$ 0.250 Begin and complete development of the NBC Simulated Training Kits. • (U) \$ 0.214 Complete Improvement of the Field Rugged GC/MS. • (U) \$ 0.200 Complete research and development of the Level A Pass-Thru for the Self-Contained Breathing Apparatus. • (U) \$ 0.300 Complete research, development and testing of the Electro-Chemical Decontamination Solution. • (U) \$ 0.091 Complete research and development of General Purpose Filters that are compatible with the standard M40 Canister to provide improved Toxic Industrial Chemicals (TIC) protection. • (U) \$ 1.982 Begin research, development of a 8G265 Chemical Warning Agent Network. • (U) \$ 6.737 Continue research and development of Consequence Management Information System (CMIS). 			
(U) Total \$ 9.947			
FY 2002 Planned Program			
<ul style="list-style-type: none"> • (U) \$ 0.308 Continue research and development of an improved communications device to receive, manipulate and transmit data, video and voice communications. • (U) \$ 0.100 Begin research and development of a Lightweight Deployable Decontamination System that is non-water • (U) \$ 0.350 Begin research and development of a Sensitive Equipment Decontamination System that is portable and has the ability to decontaminate sensitive equipment. • (U) \$ 0.200 Begin research and development of a Mass Casualty Decontamination System to conduct chemical and biological 			
(U) Total \$ 0.958			
	FY2000	FY2001	FY2002
(U) FY 2001 President's Budget:	1.438	1.239	0.946
(U) Adjustments from the President's Budget:			
(U) SBIR/STTR Transfer	-0.035		
(U) Execution Adjustment			
(U) Minor Affordability Adjustment	-0.483	-0.092	0.002
(U) Program Adjustment	18.200	8.800	0.010
(U) FY 2002 President's Budget:	19.120	9.947	0.958
CHANGE SUMMARY EXPLANATION:			
(U) Funding: See Above.			
(U) Schedule: Not Applicable.			
(U) Technical: Not Applicable.			

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support	PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Supp				PROJECT NUMBER AND NAME C2330 Chemical Biological Consequence Management						
(U) B. OTHER PROGRAM FUNDING SUMMARY:											
<u>Line Item No. & Name</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost	
(U) PMC Line (BLI# 652200) Field Medical**	7.796	1.897	1.353	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
** CBIRF, CBIRF MEU Kits & Small Unit Bio Detection are Procurement Programs contained within the PMC Field Medical Equipment funding line that are associated with Chemical Biological Consequence Management.											
(U) Related RDT&E: Not Applicable.											
(U) C. ACQUISITION STRATEGY: * CBIRF follows a modified Non-Developmental (NDI)/Commercial-Off-The-Shelf (COTS) Abbreviated Acquisition Program (AAP) Strategy. CBIRF research and development (R&D) efforts focus primarily on the assessment of the applicability of a COTS item to the CBIRF mission and operational environment. In addition, CBIRF R&D funds resource third party live agent testing of COTS equipment needed to validate its effectiveness in meeting CBIRF requirements. To be effective, the CBIRF R&D efforts must include a very active continuous market research element to beware of cutting edge technology and the shorter "technology" cycle to prevent CBIRF equipment from becoming obsolete. All three efforts are inter-related and directly lead to procurement decisions and expenditures on NDI/COTS equipment.											
(U) D. SCHEDULE PROFILE: Not Applicable.											

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-6 Management Support		PROGRAM ELEMENT NUMBER AND NAME 0605873M Marine Corps Program Wide Support				PROJECT NUMBER AND NAME C2930 Phase 0 Activities					
COST (\$ in Millions)		FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Program
Project Cost		0.000	0.000	0.971	0.000	0.000	0.000	0.000	0.000	Cont	Cont
RDT&E Articles Qty											

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:

Phase 0 Activities consist of a series of interrelated activities in Phase 0 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 System (PPBS) cycle, the Combat Development and Acquisition Management Systems, and prevent undue delays in pursuing priority requirements. The process supports CG, MCCDC and COMMARCORSYSCOM 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 Program Objective Memorandum (POM) process to focus on activities of evaluating, prioritizing and integrating rather than defining and resolving raw, immature requirements. Phase 0 activities literally “jump start” high priority programs of the acquisition process. Furthermore, since 70% of a program’s life cycle cost is determined during Phase 0, this initiative will put resources to work where the return on investment (payoff) is the greatest. Typical studies conducted with Phase 0 activities include but are not limited to Market Surveys, Business Case Analysis (BCA), Cost as an Independent analysis, Life Cycle Cost Estimates, Acquisition Strategies, Tailored Executive Analysis (TEA) in lieu of an Analysis of Alternatives. Also a recent initiative to have MARCORSYSCOM develop a BCA to help MCCDC frame the requirement in terms of a COTs solution will place increased demands on the funds in FY01 and beyond. In FY00 and FY01 these Phase 0 Activities were funded under C0030, Marine Corps Studies and Analysis, Program Element 0605873M, Marine Corps Program Wide Support.

PROGRAM ACCOMPLISHMENTS AND PLANS

(U) FY 2000 Accomplishments: Funded in C0030, Marine Corps Studies and Analysis

(U) FY 2001 Planned Program: Funded in C0030, Marine Corps Studies and Analysis

FY 2002 Planned Program

- (U) \$ 0.971 Provides for the conduct of high priority Milestone 0/Phase 0 activities for 7 to 8 emerging requirements. Funds 4-5 Business Case Analyses/Market Surveys and associated Acquisition Strategies, 3-4 Life Cycle Cost Estimates or cost analyses and 2 other analyses such as TEA.

(U) Total \$ 0.971

UNCLASSIFIED

CLASSIFICATION:

EXHIBIT R-2a, RDT&E Project Justification							DATE:			
							June 2001			
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME			
RDT&E, N /BA-6 Management Support		0605873M Marine Corps Program Wide Support					C2930 Phase 0 Activities			
(U) PROJECT CHANGE SUMMARY:		FY2000	FY2001	FY2002						
(U) FY 2001 President's Budget:		0.000	0.000	0.000						
(U) Adjustments from the President's Budget:										
(U) SBIR/STTR Transfer										
(U) Execution Adjustment										
(U) Minor Affordability Adjustment										
(U) Program Adjustment										
(U) FY 2002 President's Budget:		0.000	0.000	0.971						
CHANGE SUMMARY EXPLANATION:										
(U) Funding: See Above.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
(U) B. OTHER PROGRAM FUNDING SUMMARY:										
<u>Line Item No. & Name</u>		FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 To Compl	Total Cost
(U) Not Applicable										
(U) Related RDT&E: Not Applicable.										
(U) C. ACQUISITION STRATEGY: A variety of acquisition management and contracting strategies are employed. Support contractors and government laboratories are normally used to execute individual tasks. In one situation, a government laboratory may be the preferred organization to execute the task, while others may be more suited to a support contractor. The approach is tailored to the specific issue being addressed and the analytical requirements of that system/situation.										
(U) D. SCHEDULE PROFILE: Not Applicable.										