UNCLASSIFIED

EXHIB	BIT R-2, RDT&E E	Budget Item J	ustification				DATE:			
								Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NC	MENCLATUR	E			
RESEARCH DEVELOPMENT TEST & EVALU	1	Airborne Mine	e Countermeas	sures / 060437	3N					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE Cost	51.103	50.842	52.041						0.000	298.387
Airborne Mine Hunt Systems/ Q0529	15.140	17.804	8.747						0.000	173.763
ALMDS / Q2047	19.258	17.978	14.073						0.000	55.983
OASIS/ Q2427	3.750	7.112	11.635						0.000	28.217
AMNS / Q2473	12.955	7.948	17.586						0.000	40.424
Quantity of RDT&E Articles										

A. Mission Description and Budget Item Justification: This program develops airborne mine countermeasures systems that are required to counter known and projected mine threats. It provides a capability to locate pressure-combination and sweep resistant mines at greater coverage rates and by more rapidly deployable means. It also provides a non-acoustic mine detection and classification capability against floating and tethered mines using Light Detection and Ranging (LIDAR) techniques. Cable improvements will provide higher reliability, longer life and higher current capacity. This program is funded under ENGINEERING & MANUFACTURING DEVELOPMENT because it encompasses engineering and manufacturing development of new end-items and MH-60S integration prior to production approval decision.

B. Program Change Summary	FY 2000	FY 2001	FY 2002
FY 2001 President's Budget:	52.351	47.312	57.529
Appropriated Value:	52.642	51.312	
Adjustment to FY 2000/2001 Appropriated Value/			
FY 2001 President's Budget:	-1.539	-0.470	-5.488
FY 2002 President's Budget Submit :	51.103	50.842	52.041

Funding: FY00 reflects decreased funding due to SBIR (-\$.835M), proportionate Congressional rescission (-\$.206M), and general execution reductions (-\$.498M). FY01 reflects: SWIMS project, \$3.000M, Congressional increase for remote technical assistance support to deploying MCM ships; Mine Hunting project, \$1.000M, Congressional add for AQS-20 sonar data recording capability; and decreased funding of (-\$.359M) due to Congressional .7% Pro-rata reduction and (-\$.111M) Government-Wide rescission . FY02 reflects decreased funding for the ALMDS EMD effort (+\$4.1M), Restructure for OASIS (-\$1.9M), Re-host AMNS Software (+\$9.M), Restructure for RAMICS program (-\$9.8M), inflation adjustment (+\$.122M), low expenditure rate (-\$6.659M) and NWCF rate changes (-\$.351).

Schedule: The OASIS program was restructured which extends Milestone III, shifting from FY03 to FY04. The RAMICS program was restructured which extends Milestone III from FY05 to FY06.

Technical: N/A

R-1 SHOPPING LIST - Item No. 115 - 1 of 115 - 25

Exhibit R-2, RDT&E Budget Item Justification (Exhibit R-2, page 1 of 25)

UNCLASSIFIED

E	XHIBIT R-2a, RDT&	E Project Jus	stification				DATE:			
								Jι	ıne 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NAM	IE AND NUME	ER	PROJECT NA	AME AND NUI	MBER			
RDT&E, N , BA-5	Airborne I	Mine Count	ermeasure	s/0604373	N		Airb	orne Mine	Hunt Systems/	Q0529
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	15.140	17.804	8.747						Continuing	Continuing
RDT&E Articles Qty	2									

A Mission Description and Budget Item Justification

This project includes a sonar for mine detection, classification and identification. The Navy does not possess a capability to conduct high speed minefield reconnaissance to determine mine density and location. The AN/AQS-20/X is being developed to address the emergent requirement for mine identification and to integrate AMCM systems with a CH-60S platform. The AN/AQS-20/X will also be the minehunting sonar component for the Remote Minehunting System (RMS). The AN/AQS-20/X will be developed to meet the capabilities with the Organic MCM platforms. The Laser Line Scan System (LLSS) provides interim identification capability to the AQS-14A minehunting system.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 ACCOMPLISHMENTS

- (U) (\$2.306) LLSS Continued integration into the AN/AQS-14A and demonstrated the LLSS.
- (U) (\$5.454) AN/AQS-20/X Began MH-60S conversion of AQS-20/X.
- (U) (\$7.380) AN/AQS-20/X Continued ID sensor design and engineering, contract awarded, completed PDR.

2. (U) FY 2001 PLAN:

- (U) (\$10.518) AN/AQS-20/X Complete fabrication/integration of EDMs, delivery of one EDM.
- (U) (\$4.017) AN/AQS-20/X Complete Critical Design Review.
- (U) (\$1.055) LLSS Complete modification of the AQS-14.
- (U) (\$.909) LLSS Development of support equipment and publications.
- (U) (\$.991) AN/AQS-20/X Sonar Data Recording Capability (Cong Add)
- (U) (\$.314) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

R-1 SHOPPING LIST - Item 115 - 2 of 115 -25

Exhibit R-2a, RDT&E Project Justification (Exhibit R-2a, page 2 of 25)

UNCLASSIFIED

E	KHIBIT R-2a, RDT&E Project Justification		DATE:	
			June 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER	PROJECT NAME AND NUM	JMBER	
RDT&E, N , BA-5	Airborne Mine Countermeasures/0604	373N	Airborne Mine Hunt Systems/	Q0529
3. (U) FY 2002 PLAN: - (U) (\$2.805) AN/AQS-20/X — Complet	te delivery of EDMs, conduct Tow Test and Contrac	tor Demonstration		

- (U) (\$5.942) AN/AQS-20/X Conduct TECHEVAL/OPEVAL.

B. Other Program Funding Summary

				То	Total
	FY 2000	FY 2001	FY 2002	Complete	Cost
OPN 424800					
AQS-20	22.094	23.645	22.425	Continuing	Continuing
AN/AQS-14A LLSS	0.000	4.263	0.000	Continuing	Continuing
AQS-20/X	0.000	0.000	0.000	Continuing	Continuing

C. Acquisition Strategy: Procured two (2) RMS LRIP systems in FY00 to be provided to RMS program (63502N/Q0260) as GFE. Starting in FY01 procure six (6) LRIP MH-53E systems. FY00 RDT&E starts the evolution of the AQS-20 to the AN/AQS-20/X with ID capability and integrates it to the CH-60S and RMS platforms.

FY01 provides for procurement of four (4) systems AN/AQS-14A with LLSS.

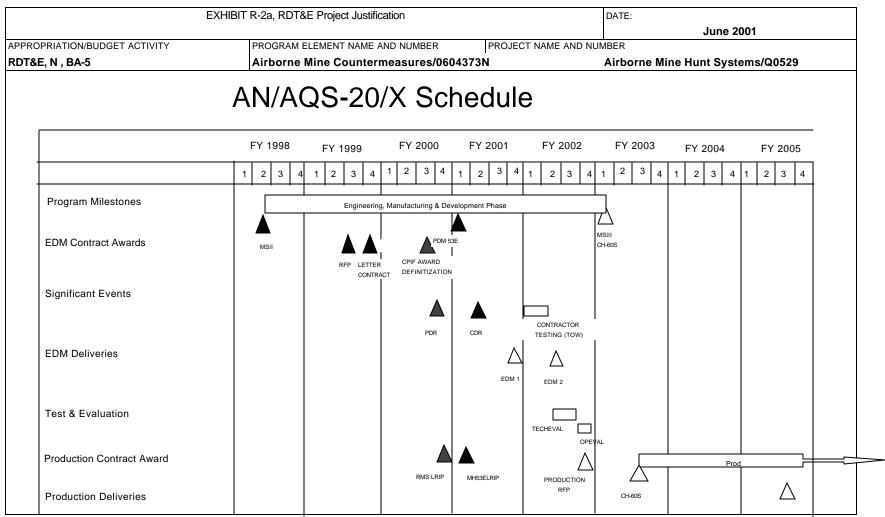
D. Schedule Profile: See attached.

R-1 SHOPPING LIST - Item No. 115 - 3 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 3 of 25)

UNCLASSIFIED

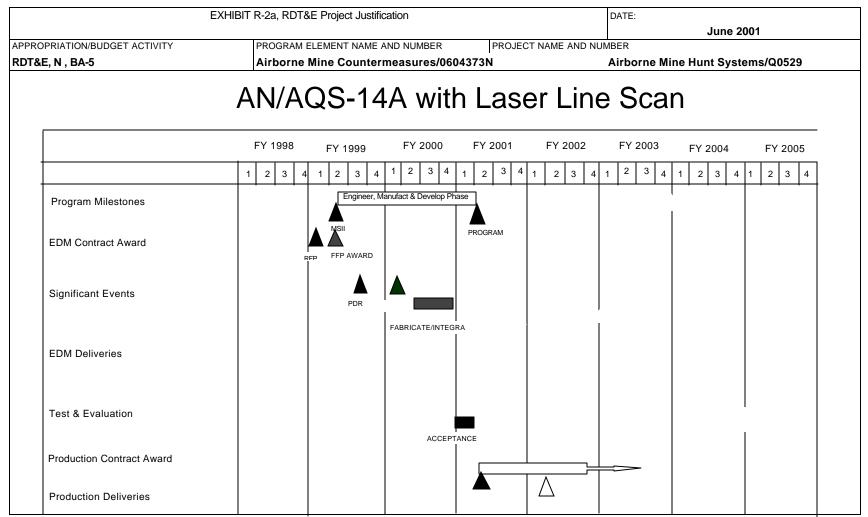


R-1 SHOPPING LIST - Item No. 115 - 4 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 4 of 25)

UNCLASSIFIED



R-1 SHOPPING LIST - Item No. 115 - 5 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 5 of 25)

UNCLASSIFIED

									DATE:				
Exhibit R-3 Cost Analysis (pag	ge 1)										June 200)1	
APPROPRIATION/BUDGET ACTIV			PROGRAM I	ELEMENT			PROJECT I	NAME AND N	UMBER				
RDT&E, N, BA-5			Airborne	Mine Coun	itermeasui	es/060437	3N			Airbor	ne Mine Hunt S	ystems/Q0529)
Cost Categories	Contract	Performing		Total		FY 00		FY 01		FY 02			
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Hardware/Software Development												0.000	
Hardware/Software Development	C/CPIF	Raytheon, R	(I	57.831	7.120	06/00	13.280	02/01				78.231	
Hardware/Software Development	C/FP	Lockheed, N	Υ	4.572								4.572	
Hardware/Software Development	WR	CSS Panam	a City, FL	2.666	2.300	10/99	0.407	10/00				5.373	
Hardware/Software Development	C/FFP	Northrup Gru	ımman, MD				1.073	12/00				1.073	
Subtotal Hardware/Software Development				65.069	9.420		14.760		0.000		0.000	89.249	
Engineering Services													
Engineering Services	WR	CSS Panama C	ity, FL	14.519	1.934	10/99	0.572	10/00				17.025	
Engineering Services	SS/CPIF	Raytheon, RI		1.500			0.991	03/01				2.491	
Engineering Services	VAR	Various		38.407								38.407	
Engineering Services	C/CPFF	Raytheon, RI			1.500	1/00						1.500	
Subtotal Engineering Services				54.426	3.434		1.563		0.000		0.000	59.423	
Remarks:													

R-1 SHOPPING LIST - Item No. 115 - 6 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 6 of 25)

UNCLASSIFIED

									DATE:				
Exhibit R-3 Cost Analysis (pag	je 2)								Jun	e 2001			
APPROPRIATION/BUDGET ACTIV	/ITY		PROGRAM	ELEMENT			PROJECT I	NAME AND NU	JMBER				
RDT&E, N , BA-5			Airborne	Mine Coun	termeasur	es/0604373	BN			Airborn	e Mine Hunt Sy	stems/Q0529	
Cost Categories	Contract	Performing		Total		FY 00		FY 01		FY 02	1		
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Valu
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Management Support													
Management Support	VAR	Various		8.601	0.390	10/99	0.393	10/00	0.148	10/01	Continuing	Continuing	
Travel				0.071	0.090		0.090		0.060		Continuing	Continuing	
Subtotal Management Support				8.672	0.480		0.483		0.208		Continuing	Continuing	
Remarks:													
Remarks: Test & Evaluation and ILS Function	ns	ı				T		T		T		T	
Test & Evaluation and ILS Function	ns WR	CSS Panam	a City	1.848					5.739	10/01	Continuing	Continuing	
Test & Evaluation and ILS Function T&E Functions		CSS Panam Raytheon	a City	1.848					5.739 2.800	10/01	Continuing Continuing	Continuing Continuing	
Test & Evaluation and ILS Function T&E Functions T&E Functions T&E Functions	WR C/CPIF VAR	Raytheon Various			0.200	10/99							
Test & Evaluation and ILS Function T&E Functions T&E Functions T&E Functions	WR C/CPIF	Raytheon		1.848	0.200 1.606	10/99 10/99	0.998	10/00			Continuing	Continuing	
	WR C/CPIF VAR	Raytheon Various					0.998	10/00			Continuing Continuing	Continuing Continuing	
Test & Evaluation and ILS Function T&E Functions T&E Functions T&E Functions ILS Functions	WR C/CPIF VAR	Raytheon Various		2.057	1.606			10/00	2.800		Continuing Continuing Continuing	Continuing Continuing Continuing	
Test & Evaluation and ILS Function T&E Functions T&E Functions T&E Functions ILS Functions Subtotal T&E and ILS Functions	WR C/CPIF VAR	Raytheon Various		2.057	1.606			10/00	2.800		Continuing Continuing Continuing	Continuing Continuing Continuing	
Test & Evaluation and ILS Function T&E Functions T&E Functions T&E Functions ILS Functions Subtotal T&E and ILS Functions	WR C/CPIF VAR	Raytheon Various		2.057	1.606			10/00	2.800		Continuing Continuing Continuing	Continuing Continuing Continuing	

R-1 SHOPPING LIST - Item No. 115 - 7 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 7 of 25)

UNCLASSIFIED

EX	XHIBIT R-2a, RDT&	E Project Jus	stification				DATE:			
								Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NAM	IE AND NUMB	BER	PROJECT NA	AME AND NU	MBER			
RDT&E, N , BA-5	Airborne N	Mine Count	ermeasure	s/0604373	N		Airborne L	aser Mine	Detection Syst	ems/Q2047
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	19.258	17.978	14.073						Continuing	Continuing
RDT&E Articles Qty		3								

A. Mission Description and Budget Item Justification

Airborne Laser Mine Detection Systems (ALMDS), AN/AES-1 is a light detection and ranging (LIDAR) system for rapid detection, classification, and localization of floating and near surface tethered mines. It will be deployed on the MH-60S as part of the OAMCM suite of systems.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

- 1. (U) FY 2000 ACCOMPLISHMENTS
- (U) (\$2.713) Achieved MSII.
- (U) (\$12.265 Awarded EDM contract and initiated hardware and software design/systems engineering.
- (U) (\$2.133) Began ILS.
- (U) (\$2.147) Started performance model baselining and platform integration analyses (combat system coordination).
- 2. (U) FY 2001 PLANS
- (U) (\$5.897) Complete preliminary design (conduct PDR) and final design (conduct CDR).
- (U) (\$8.437) Begin building EDMs and software coding.
- (U) (\$.650) Continue performance model baselining.
- (U) (\$1.516) Continue ILS.
- (U) (\$1.007) Complete platform integration analyses (combat system coordination).
- (U) (\$.471) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

R-1 SHOPPING LIST - Item No. 115 - 8 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 8 of 25)

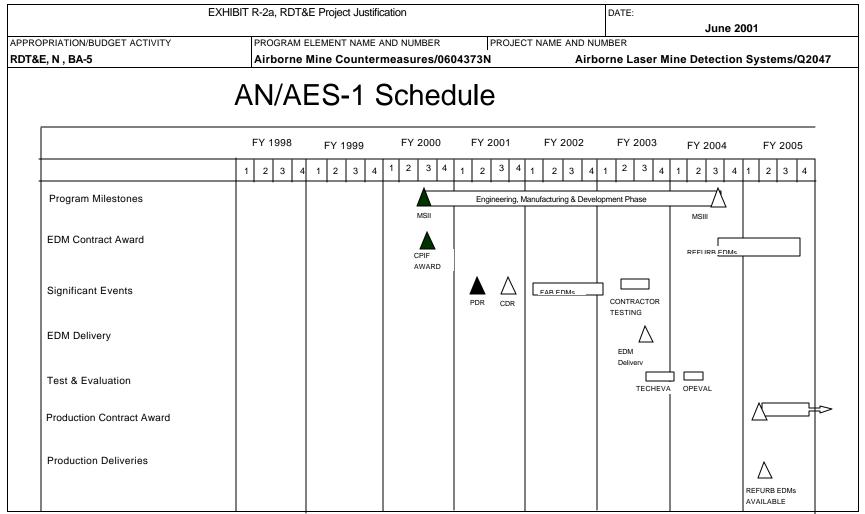
UNCLASSIFIED

	EXHIBIT R-2a, RDT&E	Project Justification		DATE:		
					June 20	001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT NAME AND NUMBER	PROJECT NAM	ME AND NUMBER		
RDT&E, N , BA-5	Airborne M	ine Countermeasures/06	04373N	Airborne La	aser Mine Dete	ction Systems/Q2047
 3. (U) FY 2002 PLANS - (U) (\$11.698) Continue building E - (U) (\$0.383) Complete performance - (U) (\$1.992) Continue ILS. 		g.				
B. Other Program Funding Summary						
					То	Total
	FY 2000 FY 2001	FY 2002			Complete	Cost
OPN 424800						
ALMDS	0 0	0			CONT.	CONT.
C. Acquisition Strategy: Milestone II w OPN funding to refurbish EDM system D. Schedule Profile: See attached.					In FY04 the El	MD program will use

R-1 SHOPPING LIST - Item No. 115 - 9 of 115 - 25

Exhibit R-2a, RDT&E Project Justification (Exhibit R-2a, page 9 of 25)

UNCLASSIFIED



R-1 SHOPPING LIST - Item No. 115 -10 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 10 of 25)

UNCLASSIFIED

									DATE:				
Exhibit R-3 Cost Analysis (pa	ige 1)										June 20	01	
APPROPRIATION/BUDGET ACT	IVITY		PROGRAM E	LEMENT			PROJECT	NAME AND N	JMBER				
RDT&E, N , BA-5			Airborne I	Mine Cour	ntermeasur	res/060437	3N		Ai	rborne Las	er Mine Detec	ction Systems	/Q2047
Cost Categories	Contract	Performing		Total		FY 00		FY 01		FY 02			
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY00	Award	FY01	Award	FY 02	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Hardware/Software Development	WR	CSS, Panam	a City	0.365	0.025	11/99	0.050	11/00	0.075	11/01	Cont.	Cont.	
Hardware/Software Development	RCP	CSS (Prime-	Northrop Grum)	7.869	04/00	7.718	11/00	4.063	11/01	Cont.	Cont.	
Hardware/Software Development	RCP	Metron			0.225	11/99	0.200	11/00	0.200	11/01	Cont.	Cont.	
Subtotal Hardware/Software Developmen	t			0.365	8.119		7.968		4.338		Cont.	Cont.	
	- 1	II.				II.	1	1		I .			
Engineering Services	WR	CSS, Panam	a City	3.701	1.257	11/99	1.007	11/00	1.220	11/01	Cont.	Cont.	
Engineering Services	WR	NRL Stennis		0.079	0.060	11/99	0.060	11/00	0.062	11/01	Cont.	Cont.	
Engineering Services	RCP	CSS (Prime-	Northrop Grum)	2.923	04/00	2.774	11/00	0.917	11/01	Cont.	Cont.	
Engineering Services	RCP	CSS, Panam	a City		0.075	11/99					Cont.	Cont.	
Engineering Services	RCP	Metron			0.480	11/99	0.165	11/00	0.140	11/01	Cont.	Cont.	
Engineering Services	RCP	NRL Stennis			0.330	11/99	0.200	11/00	0.180	11/01	Cont.	Cont.	
Engineering Services	VAR	VARIOUS			0.275	11/99	0.225	11/00	0.225	11/01	Cont.	Cont.	
Subtotal Engineering Services				3.780	5.400		4.431		2.744		Cont.	Cont.	
Remarks:													

R-1 SHOPPING LIST - Item No. 115 - 11 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 11 of 25)

UNCLASSIFIED

Exhibit R-3 Cost Analysis (page 1)									DATE:				
	<u> </u>						-				June 20	01	
APPROPRIATION/BUDGET ACT	IVITY		PROGRAM E	LEMENT			PROJECT I	NAME AND NU	JMBER				
RDT&E, N , BA-5			Airborne l	Mine Cour	ntermeasui	res/060437	3N		Aiı	borne Lase	er Mine Detec	tion Systems	/Q2047
Cost Categories	Contract	Performing	-	Total		FY 00		FY 01		FY 02			
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY00	Award	FY01	Award	FY 02	Award	Cost to	Total	Target Valu
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contrac
Management Support	WR	NRL Stennis		0.055								0.055	
Management Support	RCP	CSS (Prime-I	Northrop Grum	1)	0.893	04/00	0.807	11/00	0.870	11/01	Cont.	Cont.	
Management Support	RCP	Metron			0.110	11/99	0.135	11/00	0.160	11/01	Cont.	Cont.	
Management Support	RCP	NRL Stennis			0.100	11/99	0.220	11/00	0.220	11/01	Cont.	Cont.	
Management Support	VAR	Various		0.042	2.433	11/99	2.718	11/00	2.851	11/01	Cont.	Cont.	
Management Support		Travel		0.050	0.050	11/99	0.050	11/00	0.050	11/01	Cont.	Cont.	
Subtotal Management Support				0.147	3.586		3.930		4.151		Cont.	Cont.	
									<u>.</u>				
T&E Functions	WR	CSS, Panam		0.084	0.020	11/99					5.975	6.079	
T&E Functions	RCP	CSS (Prime-l	Northrop Grum	1)			0.133	11/00	0.848	11/01	Cont.	Cont.	
Subtotal T&E Functions				0.084	0.020		0.133		0.848		Cont.	Cont.	
Remarks:													
					1								
ILS Functions	WR	CSS, Panam		0.132	0.085	11/99	0.292	11/00	0.362	11/01	1.264	2.135	
ILS Functions ILS Functions	RCP	CSS (Prime-l	Northrop Grum		1.853	04/00	1.023	11/00	1.405	11/01	2.417	6.698	
ILS Functions ILS Functions ILS Functions	RCP RCP	CSS (Prime-I	Northrop Grum)	1.853 0.170	04/00 11/99	1.023 0.176	11/00 11/00	1.405 0.200	11/01 11/01	2.417 0.250	6.698 0.796	
	RCP	CSS (Prime-l	Northrop Grum		1.853	04/00	1.023	11/00	1.405	11/01	2.417	6.698	

R-1 SHOPPING LIST - Item No. 115 - 12 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 12 of 25)

UNCLASSIFIED

E	XHIBIT R-2a, RDT&	E Project Jus	stification				DATE:			
								Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NAM	IE AND NUMB	BER	PROJECT NA	AME AND NUI	MBER			
RDT&E, N , BA-5	Airborne N	Mine Count	ermeasure	s/0604373	Organic Airb	orne and Su	rface Influenc	e Sweep/Q24	127	
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	3.750	7.112	11.635							Cont.
RDT&E Articles Qty		3								

A. Mission Description and Budget Item Justification

The Organic Airborne & Surface Influence Sweep (OASIS), formerly SWIMS, will provide a self-contained, high speed, multi-influence mine sweep capability, towed by the organic CH60S helicopter and potential surface craft.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

1. (U) FY 2000 ACCOMPLISHMENTS

- (U) (\$3.133) Completed Analysis of Alternatives (AOA) and developed performance specifications for EDM contract, SOW, CDRLs.
- (U) (\$.300) Completed TEMP Development.
- (U) (\$.317) Completed Concept Feasibility Test and Evaluation.

2. (U) FY 2001 PLAN:

- (U) (\$.918) Conduct evaluation of EDM contract proposals.
- (U) (\$1.500) Award competitive EDM contract for engineering design and EDM fabrication.
- (U) (\$1.163) Monitor contractor performance, technical review of CDRLs and conduct PDR
- (U) (\$.475) Conduct technical studies, i.e., CH-60 interface, concept of employment shock analysis, C4I /MEDAL interface, and Environmental Analysis.
- (U) (\$2.972) Conduct remote technical assistance to MCM ship (Cong Add)
- (U) (\$.84) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

R-1 SHOPPING LIST - Item No. 115 - 13 of 115 - 25

Exhibit R-2a, RDT&E Project Justification (Exhibit R-2a, page 13 of 25)

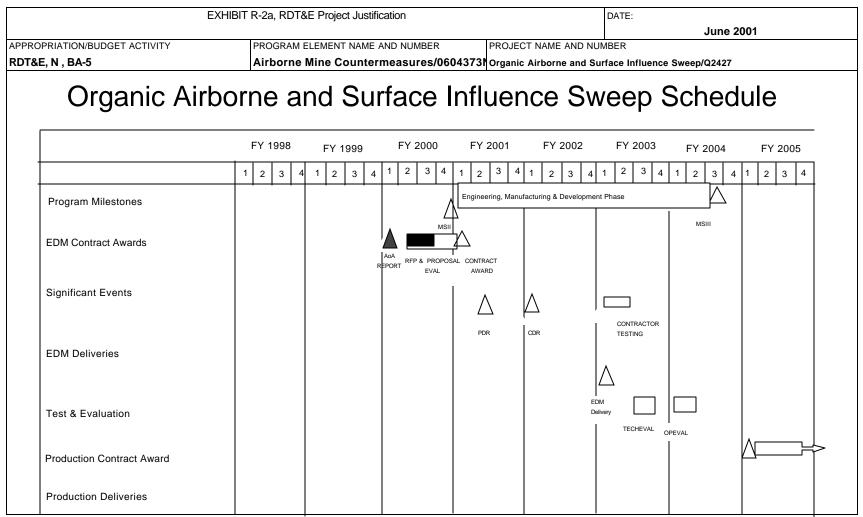
UNCLASSIFIED

EX	HIBIT R-2a, RDT&E Project Justification	DATE:		
	,		June 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER	PROJECT NAME AND NUMBER		
RDT&E, N , BA-5	Airborne Mine Countermeasures/0604373	Organic Airborne and Surface Influence S	weep/Q2427	
3. (U) FY 2002 PLAN - (U) (\$6.962) Continue EDM contract to c - (U) (\$4.673) Support platform integration	complete Design, Conduct CDR, Fabricate 3 EDM, and bin, prepare for Demo/DT Test Program.	egin to integrate EDMs into platform.		
B. Other Program Funding Summary FY OPN 424800	2000 FY 2001 FY 2002		To Complete	Total Cost
OASIS	0.000 0.000 0.000		CONT.	CONT.
	alysis of Alternatives in FY00, a CPIF EDM contract will livered in time to satisify the CH-60S FY05 intergration			

R-1 SHOPPING LIST - Item No. 115 - 14 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

UNCLASSIFIED



R-1 SHOPPING LIST - Item No. 115 - 15 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 15 of 25)

UNCLASSIFIED

									DATE:				
Exhibit R-3 Cost Analysis (pag	ge 1)										June 200)1	
APPROPRIATION/BUDGET ACTIV			PROGRAM E	LEMENT			PROJECT	NAME AND NU	IMBER				
RDT&E, N , BA-5			Airborne	Mine Cour	itermeasur	es/060437	3N		Organic Ai	rborne and S	urface Influence	Sweep/Q2427	
Cost Categories	Contract	Performing	l	Total		FY 00		FY 01		FY 02			
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Hardware/Software Development	C/CPFF	EDO Corp		1.722			0.000		0.000			1.722	
Hardware/Software Development	C/CPIF	TBD					1.500	07/01	6.962	10/01	Cont.	Cont.	
Hardware/Software Development	SS/CPFF	Aeptec Micro	systems Inc				2.972	12/00					
		Rockville, MI)										
Subtotal Hardware/Software Development				1.722	0.000		4.472		6.962		Cont.	Cont.	
Engineering Services													
Engineering Services	WR	CSS Panama			1.475	10/99	1.417	10/00	1.704	10/01	Cont.	Cont.	
Engineering Services	WR	NSWC Carde	rock MD	0.300			0.000		0.000			0.300	
Engineering Services	VAR	VARIOUS		0.300	0.809	10/99						1.109	
												_	
Subtotal Engineering Services				0.600	2.284		1.417		1.704		Cont.	Cont.	
Remarks:													

R-1 SHOPPING LIST - Item No. 115 - 16 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 16 of 25)

UNCLASSIFIED

Fullibit D. O. Coot Amaluaia (ma								DATE:					
Exhibit R-3 Cost Analysis (pa	age 2)									June 20	01		
APPROPRIATION/BUDGET ACT	IVITY	PROGRA	M ELEMENT			PROJECT	NAME AND N	JMBER					
RDT&E, N , BA-5		Airborn	e Mine Cour	ntermeasu	res/060437	BN		Organic Airborne and Surface Influence Sweep/Q2427					
Cost Categories	Contract	Performing	Total		FY 00		FY 01		FY 02				
Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Val	
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contrac	
Management Support													
Nanagement Support	WR	CSS Panama City, FL	2.762	0.000		0.000		0.000		Cont.	Cont.		
Management Support	VAR	Various	0.030	0.530	10/99	0.780	02/01	2.524	10/01	Cont.	Cont.		
Management Support		Travel	0.032	0.036		0.040		0.040		Cont.	Cont.		
Subtotal Management Support			2.824	0.566		0.820		2.564		Cont.	Cont.		
Test & Evaluation and ILS Functi	nns	1											
Test & Evaluation and ILS Functi	ons								10/01	Cont.			
		CSS Panama City FI	0.374	0.600	10/99	0.100	12/00	0.100	1 10/01		Cont		
Γ&E Functions	WR	CSS Panama City, FL	0.374	0.600	10/99	0.100	12/00	0.100	10/01		Cont.		
T&E Functions		CSS Panama City, FL Various	0.374 0.200	0.600	10/99	0.100	12/00	0.100	10/01	0.000	0.200		
Γ&E Functions Γ&E Functions	WR			0.600	10/99		12/00		10/01				
T&E Functions T&E Functions ILS Functions Subtotal T&E and ILS Fuctions	WR VAR	Various				0.000		0.000		0.000	0.200		
T&E Functions T&E Functions ILS Functions	WR VAR	Various	0.200	0.300		0.000		0.000		0.000 Cont.	0.200 Cont.		
T&E Functions T&E Functions ILS Functions Subtotal T&E and ILS Fuctions	WR VAR	Various	0.200	0.300		0.000		0.000		0.000 Cont.	0.200 Cont.		

R-1 SHOPPING LIST - Item No. 115 - 17 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 17 of 25)

UNCLASSIFIED

EXHIE	IT R-2a, RDT&	E Project Jus	stification				DATE:			
								Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT NAM	IE AND NUMB	ER	PROJECT NA	AME AND NU	MBER			
RDT&E, N, BA-5	Airborne I	Mine Count	ermeasure	s/0604373	N		Airborne	Mine Neutr	alization Syste	ms/Q2473
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	12.955	7.948	17.586							Cont.
RDT&E Articles Qty			2 -AMNS							

A. Mission Description and Budget Item Justification

There is currently no rapid airborne mine neutralization capability to support minehunting. The Airborne Mine Neutralization System (AMNS) research and development effort was restarted in FY97 in Project Q0529 P.E. 0604373N. AMNS will provide the MH-60S with the capability to neutralize bottom and moored mines using an airborne delivered, expendable mine neutralization device. The AMNS will first be tested on the MH-53E to prove out the neutralization effectiveness, then it will transition to the MH-60S for organic neutralization. The Rapid Airborne Mine Clearance System (RAMICS) program began in FY00 and will provide an effective rapid organic airborne laser detection, targeting, and super cavitating projectile destruction of shallow water mines off the MH-60S platform. The RAMICS will use a laser for fire control to direct placement of super cavitating rounds that cause the mine's explosive charge to ignite and burn.

(U) PROGRAM ACCOMPLISHMENTS AND PLANS

- 1. (U) FY 2000 Accomplishments
- (U) (\$5.241) AMNS Delivered prototype neutralizers and consoles and integrated aboard MH-53E.
- (U) (\$1.200) AMNS Initiate TECHEVAL testing for MH-53 interim capability.
- (U) (\$4.584) RAMICS Completed Advance Technology Demonstration (ATD) and Analysis of Alternatives (AOA) and initiated ORD, TEMP,
 Weapon Definition/Selection, and conduct munitions lethality testing.
- (U) (\$1.930) AMNS CH-60S Upgrade (Cong Add)
- 2. (U) FY 2001 Plan
- (U) (\$3.160) AMNS Initiate integration aboard MH-60S and fabricate additional systems to test and evaluate.
- (U) (\$4.679) RAMICS Continue Weapons System Definition/Selection, munitions testing and complete ORD.
- (U) (\$.109) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.

R-1 SHOPPING LIST - Item No. 115 - 18 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 18 of 25)

UNCLASSIFIED

EXHIBIT	R-2a, RDT&E Project Justification		DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NAME AND NUMBER	PROJECT NAME AND NUI	
RDT&E, N , BA-5	Airborne Mine Countermeasures/0604373	BN	Airborne Mine Neutralization Systems/Q2473

- 3. (U) FY 2002 Plan
- (U) (\$11.161) AMNS Complete design, develop software, and integrate aboard MH-60S for test and evaluation.
- (U) (\$ 1.800) AMNS Conduct OPEVAL
- (U) (\$4.625) RAMICS Obtain MS I/II, award EDM contract and initiate Design Phase including ILS and TDA engineering efforts.

B. Other Program Funding Summary

				То	Total
	FY 2000	FY 2001	FY 2002	Complete	Cost
OPN 424800					
AMNS	0	0.000	11.357	CONT.	CONT.
APN 0242000					
RAMICS	0	0	0	CONT.	CONT.

C. Acquisition Strategy: Full and open competition contract was awarded for AMNS MH-53E EMD program. Procurement for eight MH-53E systems FY02 - FY03 will be sole source to Lockheed Martin for MH-53E capability. Full and open competition is planned for the AMNS MH-60S EMD program. LRIP award planned for FY03 following Program Review for one MH-60S sytem. Full and open competition is planned for the AMNS MH-60S procurement in FY04 after Milestone III approval.

Following a Milestone I/II review in FY02, a full and open competition is planned for the RAMICS MH-60S EMD program. Full and open competition is planned for the RAMICS procurement in FY07.

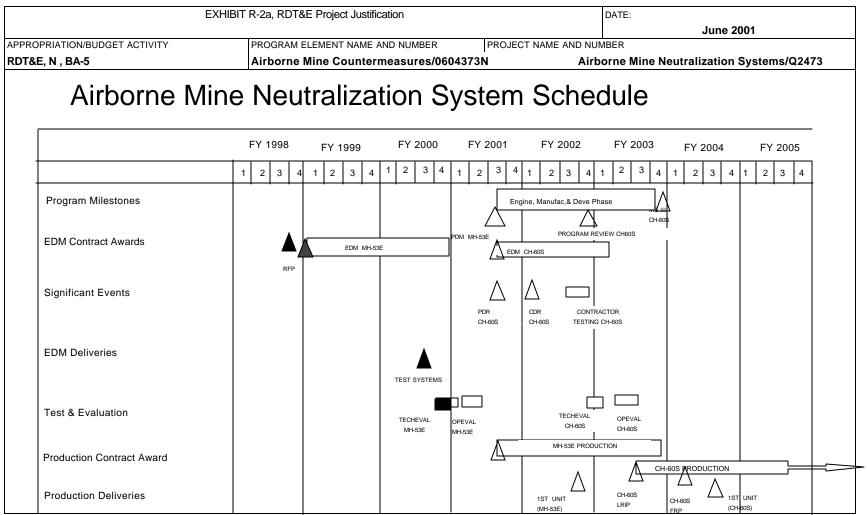
D. Schedule Profile: See attached.

R-1 SHOPPING LIST - Item No. 115 - 19 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 19 of 25)

UNCLASSIFIED

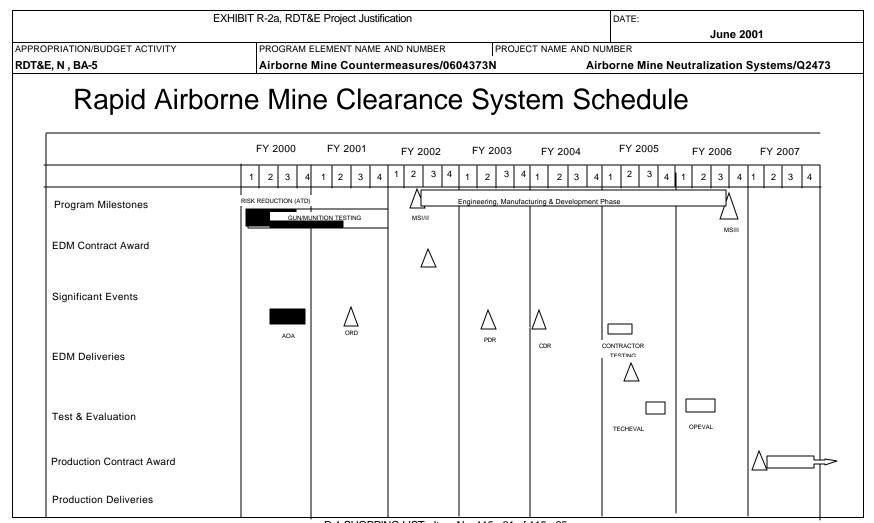


R-1 SHOPPING LIST - Item No. 115 - 20 of 115 - 25

Exhibit R-2a, RDT&E Project Justification

(Exhibit R-2a, page 20 of 25)

UNCLASSIFIED



R-1 SHOPPING LIST - Item No. 115 - 21 of 115 - 25

Exhibit R-2a, RDT&E Project Justification (Exhibit R-2a, page 21 of 25)

UNCLASSIFIED

									DATE:				
Exhibit R-3 Cost Analysis (pag	je 1)										June 200	1	
APPROPRIATION/BUDGET ACTIV			PROGRAM EL	EMENT			PROJECT I	NAME AND NU	MBER				
RDT&E, N , BA-5			Airborne M	line Count	termeasur	es/060437	3N		Α	irborne Mir	ne Neutralizatio	on Systems/Q2	2473
Cost Categories	Contract	Performing	-	Total		FY 00		FY 01		FY 02			T
(Tailor to WBS, or System/Item	Method	Activity &	ı	PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Hardware/Software Development													
Hardware/Software Development	C/FP	LOCKHEED		1.600	1.600	12/99						3.200	
Hardware/Software Development	VAR	VARIOUS			0.338	10/99	0.000		0.000			0.338	
Hardware/Software Development	C/CPIF	TBD					1.650	05/01	6.095	12/01	Continuing	Continuing	
Subtotal Hardware/Software Development				1.600	1.938		1.650		6.095		Continuing	Continuing	
Engineering Services													
Engineering Services	WR	CSS Panama C	ty, FL		2.418	10/99	1.278	10/00	1.684	10/01	Continuing	Continuing	
Engineering Services	WR	VARIOUS		0.335	0.000				0.000		Continuing	Continuing	
Subtotal Engineering Services				0.335	2.418		1.278		1.684		Continuing	Continuing	
Remarks: This is for AMNS only													

R-1 SHOPPING LIST - Item No. 115 - 22 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 22 of 25)

UNCLASSIFIED

							DATE:					
it R-3 Cost Analysis (pag	e 2)								June 2001	I		
OPRIATION/BUDGET ACTIV	ITY	PROGRAM ELEMENT			PROJECT I	NAME AND NU	JMBER					
E, N , BA-5		Airborne Mine Co	ountermeasur	res/0604373	3N		Airborne Mine Neutralization Systems/Q2473					
Categories	Contract Performing	Total		FY 00		FY 01		FY 02				
to WBS, or System/Item	Method Activity &	PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Valu	
ements)	& Type Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract	
ement Support												
ement Support	VAR Various		0.016	10/99	0.236	10/00	1.095	10/01	Continuing	Continuing		
ement Support	Travel		0.024		0.040		0.040		Continuing	Continuing		
									Continuing	Continuing		
otal Management Functions		0.00	0 0.040		0.276		1.135		Continuing	Continuing		
Evaluation and ILS Functio	<u> </u>			1	1	1			1	1		
Evaluation and its Functions		ma City, FL	3.363	10/99	0.000		2.477	10/01	Continuing	Continuing		
Evaluation Functions	C/CPIF TBD	ilia City, FL	3.303	10/99	0.000		2.411	10/01	Continuing	Continuing	+	
Evaluation Functions	VAR Various		0.300	10/99	0.000		0.300	10/01	Continuing	Continuing		
Evaluation Tunotiono	Validuo		0.000	10/00	0.000		0.000	10,01	Continuing	Continuing		
inctions	WR CSS Panai	ma City, FL	0.312	10/99	0.000		1.270	10/01	Continuing	Continuing		
otal T&E and ILS Functions		0.00	0 3.975		0.000		4.047		Continuing	Continuing		
Cost		1.93	5 8.371		3.204		12.961		Continuing	Continuing		
Cost arks: This is for AMNS only		1.93	5 8.371		3.20	4	4	4 12.961	4 12.961	4 12.961 Continuing	4 12.961 Continuing Continuing	

R-1 SHOPPING LIST - Item No. 115 - 23 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 23 of 25)

UNCLASSIFIED

									DATE:				
Exhibit R-3 Cost Analysis (pag	ge 1)										June 2001	ı	
APPROPRIATION/BUDGET ACTIV			PROGRAM I	ELEMENT			PROJECT	NAME AND NU	JMBER				
RDT&E, N , BA-5			Airborne	Mine Cour	ntermeasui	res/060437	3N		Α	irborne Mi	ne Neutralizatio	on Systems/Q2	2473
Cost Categories	Contract	Performing	ı	Total		FY 00		FY 01		FY 02		T	
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
Hardware/Software Development													
Hardware/Software Development	C/CPIF	TBD									Continuing	Continuing	
Hardware/Software Development	WR	CSS Panama	a City, FL		0.725	10/99					Continuing	Continuing	
Subtotal Hardware/Software Development				0.000	0.725		0.000		0.000		Continuing	Continuing	
Engineering Services													T
Engineering Services	WR	CSS Panama C	ity, FL		2.644	10/99	1.225	10/00	1.032	10/01	Continuing	Continuing	
Engineering Services	WR	VARIOUS			0.000		1.233	11/00	0.000		Continuing	Continuing	
Engineering Services	C/CPIF	TBD							3.000	04/02	Continuing	Continuing	
											Continuing	Continuing	
											Continuing	Continuing	
											Continuing	Continuing	
Subtotal Engineering Services				0.000	2.644		2.458		4.032		Continuing	Continuing	
Remarks: This is for RAMICS on	ily												

R-1 SHOPPING LIST - Item No. 115 - 24 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 24 of 25)

UNCLASSIFIED

									DATE:					
Exhibit R-3 Cost Analysis (pag	je 2)										June 2001	I		
APPROPRIATION/BUDGET ACTIV	/ITY		PROGRAM	ELEMENT			PROJECT N	NAME AND NU	IMBER					
RDT&E, N , BA-5			Airborne	Mine Cour	ntermeasur	es/0604373	BN		Airborne Mine Neutralization Systems/Q2473					
Cost Categories	Contract	Performing	- I	Total		FY 00		FY 01		FY 02				
(Tailor to WBS, or System/Item	Method	Activity &		PY s	FY 00	Award	FY 01	Award	FY 02	Award	Cost to	Total	Target Valu	
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contrac	
Management Support														
Management Support	VAR	Various			0.331	10/99	0.300	10/00	0.259	10/01	Continuing	Continuing		
Management Support		Travel			0.024		0.040		0.034		Continuing	Continuing		
											Continuing	Continuing		
Subtotal Management Functions				0.000	0.355		0.340		0.293		Continuing	Continuing		
Teet & Evaluation and II S Eupetion	20	T					1	1	T	1				
Test & Evaluation and ILS Function		CSS Panam	na City Fl		0.610	10/99	1 556	12/00	0,000		Continuing	Continuing		
Test & Evaluation Functions	WR	CSS Panam	na City, FL		0.610	10/99	1.556	12/00	0.000		Continuing	Continuing		
Test & Evaluation Functions Test & Evaluation Functions		TBD	na City, FL		0.610	10/99	1.556	12/00	0.000		Continuing	Continuing		
	WR C/CPIF		na City, FL		0.610	10/99	1.556	12/00	0.000					
Test & Evaluation Functions Test & Evaluation Functions Test & Evaluation Functions	WR C/CPIF	TBD			0.610	10/99	1.556	12/00	0.000	10/01	Continuing Continuing	Continuing Continuing		
Test & Evaluation Functions Test & Evaluation Functions Test & Evaluation Functions	WR C/CPIF VAR	TBD Various		0.000						10/01	Continuing Continuing Continuing	Continuing Continuing Continuing		
Test & Evaluation Functions Test & Evaluation Functions Test & Evaluation Functions ILS Functions	WR C/CPIF VAR	TBD Various		0.000	0.250		0.390		0.300	10/01	Continuing Continuing Continuing Continuing	Continuing Continuing Continuing Continuing		

R-1 SHOPPING LIST - Item No. 115 - 25 of 115 - 25

Exhibit R-3, Project Cost Analysis (Exhibit R-3, page 25 of 25)