			L. 001::-	J	
AMENDMENT OF SOLICITATION	I/MODIFICATION C	F CONTRACT	1. CONTRACT ID COI	PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NUMBER	3. EFFECTIVE DATE	4. REQUISITION/PURCHAS	4. REQUISITION/PURCHASEREQUISITION NUMBER 5. PROJECT		
39	07/08/2020	13008	09815	N/A	
6. ISSUED BY CODE	N00174	7. ADMINISTERED BY (If	f other than Item 6)	CODE \$2404A SCD C	
NSWC IHEODTD		DCMA Manas	sas		
4081 North Jackson Road			Carter Way, 2	nd Floor	
Indian Head, MD 20640-5116		Chantilly, VA 2	•	10 1 1001	
	and an all Co	<del></del>		T 05 00 10 TATIONAL WARE	
8. NAME AND ADDRESS OF CONTRACTOR (Number, str	eet, county , State and ZIP Coo	de)	(X) 9A. AMENDMEN	T OF SOLICITATION NUMBER	
CACI, INCFEDERAL			OD DATED (CEE	TEM (4)	
14370 Newbrook Drive			9B. DATED (SEE	IIEM 11)	
Chantilly, Virginia 20151		-	10A. MODIFICAT	ION OF CONTRACT/ORDER NUMBE	
, , , , , , , , , , , , , , , , , , ,			N00178-04	·D-4030/EH08	
			10B. DATED (SE	E ITEM 13)	
	ACILITY CODE 541008371  M ONLY APPLIES TO	AMENDMENTS OF SC	09/01/2016		
11. IHISTIE	OILL AFFLIES IU	CHILIADMICIA 19 OL 90			
The above numbered solicitation is amended as set for	orth in Item 14. The hour and d	late specified for receipt of Off	fers is extended.	is not extended.	
	SEE SE PPLIES ONLY TO MODE HE CONTRACT/ORDER RSUANT TO: (Specify author)	ECTION G  DIFICATIONS OF CON R NUMBER AS DESCR  ity) THE CHANGES SET FOR	TRACTS/ORDERS RIBED IN ITEM 14. RTH IN ITEM 14 ARE MA	DE IN THE CONTRACT ORDER	
appropriation data, etc. ) SET FORTH IN			,	, , , , , , , , , , , , , , , , , , ,	
C. THIS SUPPLEMENTAL AGREEMENT IS	S ENTERED INTO PURSUANT	TO AUTHORITY OF:			
D. OTHER (Specify type of modification and	l authority)				
52.232-22 Limitation of F	unds				
E. IMPORTANT: Contractor is not	is required to sign this of	document and return_	copies	to the issuing office.	
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Org	ganized by UCF section heading	gs, including solicitation/contra	act subject matter where t	easible.)	
(1)	,,	,,,	,	,	
055 04.05 0					
SEE PAGE 2					
Except as provided herein, all terms and conditions of the documents of the documents are conditions.	nent referenced in Item 9A or 10.	A , as heretofore changed, rem	ains unchanged and in full	force and effect.	
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF	CONTRACTING OFFI	CER (Type or print)	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF	AMERICA	16C. DATE SIGNE	
(Signature of person authorized to sign)		(Signatur	e of Contracting Officer)		

# **General Information**

The purpose of Modification 39 to Task Order EH08 under contract N00178-04-D-4030 is to establish and fund SLIN 7000-PX and extend the period of performance under this task order.

1. Section B – Supplies or Services establish SLIN 7000PX as follows:

Item	Labor Hours	Description	Start Date	End Date
7000PX				

2. Transfer ceiling from Labor Option SLIN 7000AA to fund 7000PX as follows:

	CHANGE	LABOR HOURS	EST. COST	FIXED FEE	CPFF
7000AA					
Ceiling/	FROM:				
Funding	BY:				
	TO:				

ITEM	CHANGE	LABOR HOURS	EST. COST	FIXED FEE	
7000PX/NM					
Ceiling/	FROM:				
Funding	BY:				
	TO:				

3. Update Section F, Period of Performance Establish CLIN/SLIN 7000PX and Extend CLIN/SLINs 7000AA and 9000AA follows:

CLIN/SLIN	Type Of Fund	Period of Performance
7000PX/NM	FY20 RDTE	

#### From:

#### T<u>o:</u>

7000AA

- 4. Under Section G, Accounting Data, update as follows:
- 5. Under Section H, Special Contract Requirements, Allotment of Funds paragraph (c) add SLIN 7000PX;

The Line of accounting information is hereby changed as follows:

The total amount of funds obligated to the task is hereby increased from \$96,373,030.62. by \$80,000.00 to \$96,453,030.62.

CLIN/SLIN	Type Of Fund	From (\$)	By (\$)	To (\$)
7000PX/NM	FY20 RDTE			

The total value of the order is hereby increased from \$102,769,598.31 by \$0.00 to \$102,769,598.31

- 6. All other terms and conditions remain unchanged.
- 7. Contractor's Statement of Release

THE PARTIES HAVE CONSIDERED WHETHER AN EQUITABLE ADJUSTMENT IN THE CONTRACT PRICE, DELIVERY SCHEDULE, OR OTHER TERMS AND CONDITIONS OF THE CONTRACT IS WARRANTED BY VIRTUE OF THE ABOVE CHANGE(S) TO THE CONTRACT. THE PARTIES AGREE THAT NO SUCH ADJUSTMENT IS WARRANTED. THE CONTRACTOR WAIVES ALL RIGHT, TITLE AND INTEREST, IF ANY, TO FURTHER EQUITABLE ADJUSTMENTS ARISING UNDER THIS MODIFICATION.

8. Questions regarding this modification should be directed to Christy Mitchell, 023K at Christy.Mitchell@navy.mil or (301) 744-6637.

	ORDER FOR SUPPL	IEC /							PAGE 1 OF
		IE3							137
1. CONTRACT/PURCH ORDER/AGREEMENT NO.	2. DELIVERY ORDER/CALL NO.		3. DATE OF ORDER (YYYYMMMDD)		4. REC			REQUEST NO.	5. PRIORITY
N00178-04-D-4030	EH08		2020JUL	08		130	0809	9815	Unrated
6. ISSUED BY	CODE N00174	7. AD	MINISTERED BY (If o	ther than 6	5) (	CODE	S2404A		8. DELIVERY FOB
NSWC IHEODTD		DCM	DCMA Manassas					DESTINATION OTHER	
4081 North Jackson Road		1450	14501 George Carter Way, 2nd Floor						(See Schedule if
Indian Head, MD 20640-5116			ntilly, VA 20151		10 DE	IIVER 1	O FOR PO	DINT BY (Date)	other)
9. CONTRACTOR	CODE 1QU78		FACILITY 541008	371		YYMM	MDD)		11. X IF BUSINESS IS
CACI, INCFEDERAL			•		12. DI		SCHE	DULE	SMALL DISAD- VANTAGED
AND 1/370 Newbrook Drive					N	Vet 30	Days	WAWF	WOMEN-OWNED
ADDRESS Chantilly, VA 20151					13. M	AIL INV		THE ADDRESS	
								E SECTIO	N G
14. SHIP TO	CODE	15. P	AYMENT WILL BE MA	ADE BY	(	CODE	HQ033	8	MARK ALL PACKAGES AND
SEE SECTION F		l .	S Columbus Cent	er,South	Entitle	ement	Operatio	ons	PAPERS WITH IDENTIFICATION
		l .	Box 182264	2264					NUMBERS IN
16 DELIVERY/		Colu	mbus, OH 43218	-2264					BLOCKS 1 AND 2.
TYPE  DELIVERY/ CALL  This delivery order/ca	II is issued on another Governmen	t agenc	y or in accordance wi	ith and sub	ject to 1	terms ar	nd conditio	ns of above num	nbered contract.
OF PURCHASE ACCEPTANCE THE	CONTRACTOR HEREBY ACCEPTS	THE O	DEFER REPRESENTED	BY THE N	IIMBERI	ED PUR			n terms specified herein.
ORDER ACCEPTANCE. THE	DDIFIED, SUBJECT TO ALL OF TH	E TERM	IS AND CONDITIONS	SET FORT	ΓΗ, ANE	AGREE	S TO PER	FORM THE SAM	1E.
NAME OF CONTRACTOR	SIGNATURE			TYPED	NAME A	AND TIT	LE		DATE SIGNED (YYYYMMMDD)
If this box is marked, supplier must sign Acc	eptance and return the following r	number	of copies:						(1111MiMiMiMDD)
17. ACCOUNTING AND APPROPRIATION DATA/	OCAL USE								
SEE SCHEDULE									
		_		20. QUA	NTITY	21.			
18. ITEM NO. 19. S	SCHEDULE OF SUPPLIES/SERVICE	s		ORDER ACCEPT	ΓED*	UNIT	22. 0	INIT PRICE	23. AMOUNT
SEE SCHEDULE									
	24. UNITED STATES OF AMERI	CA				1			
*If quantity accepted by the Government is same as quantity ordered, indicate by X.		CA				1		25. TOTAL 26.	
If different, enter payingly untity accepted below quantity ordered and encircle.	BY:		C	ONTRACTI	NG/ORE	) SERING	OFFICER	DIFFERENCES -	
27a. QUANTITY IN COLUMN 20 HAS BEEN				011111/1011	110,011	<u>z</u>	OTTICEN		
	CEPTED, AND CONFORMS TO E CONTRACT EXCEPT AS NOTED					7			
b. SIGNATURE OF AUTHORIZED GOVERNMENT	REPRESENTATIVE	١ ٠	c. DATE (YYYYMMMDD)		ED NA		TITLE OF	AUTHORIZED G	GOVERNMENT
				I INCERN	,				
e. MAILING ADDRESS OF AUTHORIZED GOVER	NMENT REPRESENTATIVE	1	28. SHIP. NO.	29. D.O.		5 BERNO		30. INITIALS	
e. MAILING ADDITION OF ACTIONIZED GOVERN	NWENT HEI HESENTATIVE	'	EG. Brill . NG.	23. 2.0.		8			
		I	PARTIAL	32. PAID	ву	3		33. AMOUNT	VERIFIED CORRECT FOR
f. TELEPHONE NUMBER g. E-MAIL ADDRE	SS		FINAL			1			
		3	31. PAYMENT					34. CHECK NU	JMBER
36. I CERTIFY THIS ACCOUNT IS CORRECT AND  a. DATE  b. SIGNATURE AND TITLE OF (			COMPLETE						
a. DATE b. SIGNATURE AND TITLE OF C	ERTIFYING OFFICER	ļ	PARTIAL					35. BILL OF LA	ADING NO.
37. RECEIVED 38. RECEIVED BY (Print)	39. DATE RECEI	VED 4	FINAL 40. TOTAL CON-	41. S/R A	ACCOU	NT NUM	BER	42. S/R VOUC	HER NO.
AT	(YYYYMMML	DD)	TAINERS						

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Unit Est. Cost

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# **Section B - Supplies and Services**

# CLIN - SUPPLIES OR SERVICES

Cost	Tuna	Itama
COSt	1 1 1 1 1 1	Items

Item	PSC	Supplies/Services	Qty
7000		Additional Year - Ceiling	
		7000AA R499 Additional Year - Ceiling (Fund Type - TBD)	
7000AB	R499	Technical Standards Processing, HM & E Standards Engineering, Business and Financial Management PM5 (O&MN,N) (O&MN,N)	
		7000AC R499 Electronic Business Decision Management (eBDMS) E4, TS5 (O&MN,N) (O&MN	I,N)
7000AD	R499 St	rike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. (O&MN,N) (O&MN,N)	
7000AE	R499	SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)	
7000AF	R499	SEA 05Z Program Support E2,PM1,EM4 (O&MN,N) (O&MN,N)	
7000AG	R499 O	ffice of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)	
7000AH	R499 O	ffice of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)	
000AJ	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4. (O&MN,N) (O&MN,N)	
7000AK	R499 C	office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4. (O&MN,N) (O&MN,N)	
7000AL	R499	PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (O&MN,N) (O&MN,N)	
7000AM	R499 P	PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (O&MN,N) (O&MN,N)	
7000AN	R499 Pl	MS325 Boat Engineering and Program Management Support E10,PM1,PM2,PM3 and PS2 (O&MN,N) (O&MN,N)	
7000AP	R499	PMS325 Boat Engineering and Program Management Support E10,PM1,PM2,PM3 and PS2 (O&MN,N) (O&MN,N)	
7000AQ	R499 SI	EA 05T FRR-DP Program and Financial Management. PM1, PM2, EM4 (FY16 RDTE) (RDT&E)	
7000AR	R499	SEA 05T Technology Group Design Exploration Model Cross Platform Systems Development(CPSD) Program and Financial Management PM1,PM2,EM3,EM4,TL1,TL2(FY16 RDTE) (RDT&E)	
7000AS	R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2, E6, E9, E10, E12, E13, E14, E19, E20,P M1, PM4, PM6, PM7, EM1, EM4 (FY16 RDTE) (RDT&E)	
7000AT	R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2, E6, E9, E10, E12, E13, E14, E19, E20, PM1, PM4, PM6, PM7, EM1, EM4 (FY16 RDTE) (RDT&E)	
7000AU	R499	Strike Force Interoperability C5IMP Support PM1-3, PM6 E3, E4 (FY16 RDTE) (RDT&E)	
7000AV	R499	Tactical Information Coordinator Technical Aid (TIC TECHAID) Support E4,TS5 (FY16 RDTE) (RDT&E)	
7000AW	R499 T	actical Information Coordinator Technical Aid (TIC TECHAID) Support E4,TS5 (FY16 RDTE) (RDT&E)	

 $7000 AX\ R499\ CVN\ 78\ Class\ Carrier\ Engineering\ Team\ Support.\ E1,\ E2,\ E4,\ E7,\ E9,\ E12,\ E15,\ E16,\ E17,$ PM1-3, PM9; EM1-4, PS1, PS2 (FY16 RDTE) (RDT&E)

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Item	PSC Supplies/Services	Qty	Unit	Est. Cost
7000AY	R499 SEA 05T Technology Office Support PM1, PM2, PM4, PM5, EM4, EM6. (FY16 RDTE) (RDT&E)			
7000AZ	R499 PMS 420 LSC Mission Package Cost Support to SEA 05C PM2 and TS9 (FY16 RDTE) (RDT&E)			
7000BB	R499 Littoral Combat Ship (LCS) Cost Estimating Support/ Analysis Task PM2 and TS9 (FY16 RDTE) (RDT&E)			
7000BC	R499 T-AO(X) Fleet Replenishment(T-AO Navy Oiler) E1,E2,E5,E7,E10,E13,PM1,PM2,PM5 and PM9 (FY15 RDTE) (RDT&E)			
7000BD	R499 LHA (R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY16 RDTE) (RDT&E)			
7000BE	R499 DDG 51 Flight Upgrade III Ship Design Management Engineering and Integration in support of Preliminary Contract and Detail Design E5, EM2, EM3, EM5, TS7 (FY16 SCN) (SCN)			
7000BF	R499 T-AO(X) Fleet Replenishment(T-AO Navy Oiler) E1, E2, E5, E7, E10, E13, PM1, PM2, PM5 and PM9 (FY16 SCN) (SCN)			
7000BH	R499 ZUMWALT Class ship Design Manager Support. E2 (FY15 SCN) (SCN)	1		
7000BJ	R499 Ship-to-Shore Connector (SSC) DD&C E1-2,E4-7,E9-17,E19-E20, PM1-9, EM1-3, EM5, TL1-2. (FY15 SCN) (SCN)			
7000BK	R499 OPLOG Technical and Programmatic Oversight and Support. E12, PM3, TS8. (FY16 NDSF) (NDSF)			
7000BL	R499 OPLOG Technical and Programmatic Oversight and Support. E12, PM3, TS8. (FY16 NDSF) (NDSF)			
7000BM	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2. (FY 14 OPN) (OPN)			
7000BN	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (OCF O&MN,N) N4657916RC00112 (O&MN,N)			
7000BP	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (OCF O&MN,N) N6051416RC001IN (O&MN,N)			
7000BQ	R499 SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)			
7000BR	R499 T-AGS 66 Engineering and Management Program Management Support E1-E14, E16, E19, E22, E24, PM1-PM3, PM5, PM9 and PS1 (FY15 OCF OPN) N6230615RC00227 (OPN)			
7000BS	R499 FMC Systems and Logistics Engineering Support E1-E6 and TS5 (FMS ADMIN) (FMS Case #XXXXXX)			
7000BT	R499 T-AGS 66 Engineering and Management Program Management Support E1-E14, E16, E19, E22, E24, PM1-PM3, PM5, PM9 and PS1 (FY 07 SCN) (SCN)			
7000BV	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
	7000BW R499 SEA 05Z Program Support PM 1- and EM4 (O&MN,N) (O&MN,N)			
7000BX	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (O&MN,N) (O&MN,N)			
7000BY	R499 Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4. (O&MN,N) (O&MN,N)			
7000BZ	R499 Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4. (O&MN,N) (O&MN,N)			
7000CA	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000CB	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000CC	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000CD	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			

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Unit Est. Cost

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Item	PSC Supplies/Services	Qty	1
7000CE	R499 Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2, E6, E9, E10, E12, E13, E14, E19, E20, PM1, PM4, PM6, PM7, EM1, EM4 (O&MN,N) (O&MN,N)		
7000CF	R499 SEA 05T Technology Group Design Exploration Model Cross Platform Systems Development Program and Financial Management PM1, PM2,EM3,EM4,TL1,TL2 (FY 16 RDTE) (RDT&E)		
7000CG	R499 (SEWIP) DDG 51 Flight Upgrade III Ship Design Management Engineering and Integration in support of Contract and Detail Design E5, EM2, EM3, EM5, TS1,TS7,TS8 (FY 16 RDTE) (RDT&E)		
7000CH	R499 Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. (FY 16 RDTE) (RDT&E)		
7000CJ	R499 Tactical Information Coordinator Technical Aid (TIC TECHAID) and Force Level Safety Support E4 and TS5. (FY16 RDT&E)(RDT&E)		
7000CK	R499 Tactical Information Coordinator Technical Aid (TIC TECHAID) and Force Level Safety Support E4 and TS5. (FY16 RDTE) (RDT&E)		
7000CL	R499 Littoral Combat Ship (LCS) Cost Estimating Support/ Analysis Task PM2 and TS9. (FY 16 RDTE) (RDT&E)		
7000CM	R499 Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9. (FY 16 RDTE) (RDT&E)		
7000CN	R499 LHA (R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY16 RDTE) (RDT&E)		
7000CP	R499 SEA 05C Cost Support for PEO IWS 1.0 Aegis Modernization, Task TS9 (FY 16 RDTE) (RDT&E)		
7000CQ	R499 SEA 05C Cost Support for PEO IWS 10.0 QRCC program, Task TS9(FY 16 RDTE) (RDT&E)		
7000CR	R499 SEA 05C Cost Support for PEO IWS 6.0 Laser for Navy Application ,Task TS9 (FY16 RDTE) (RDT&E)		
7000CS	R499 LX(R) Systems Engineering - Indicative, Preliminary, and Contract Designs, System Trade Studies, Cost Estimating, System Engineering Technical Review, Gate, and Milestone DAB Support E1-7, E9-10, E-17-18, E22, E24, PM1, PM2, PM4, PM5, PM9, EM1-7, TS1, TS4-5, TS8, TS9, TL1-2. (FY16 RDTE) (RDT&E)		
7000CT	R499 Combat system integration Systems Engineering Team Support E4, TS5 (FY16 RDTE) (RDT&E)		
7000CU	R499 SEA 05C Cost Support for PEO IWS 2.0 (FY 16 OPN) (OPN)		
7000CV	R499 SEA 05C Cost Support for PEO IWS 6.0 (FY 15 OPN) (OPN)		
7000CW	R499 SEA 05C Cost Support for PEO IWS 6.0 TS9 (FY 16 OPN) (OPN)		
7000CX	R499 SEA 05C Cost Support for PEO IWS 6.0 TS9 (O&MN,N) (O&MN,N)		
7000CY	R499 Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9. (FY 15 SCN) (SCN)		
7000CZ	R499 Littoral Combat Ship (LCS) Cost Estimating Support/ Analysis Task PM2 and TS9. (FY 15 SCN)) (SCN)		
	7000DA R499 Ship-to-Shore Connector (SSC) Cost Estimating and Analysis TS9(FY15 SCN) (SC	N)	
7000DB	R499 SEA 05C Cost Support for PEO IWS 6.0 TS9 (FY12 SCN) (SCN)		
7000DC	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2. (FY 16 SCN) (SCN)		
7000DD	R499 OPLOG Technical and Programmatic Oversight and Support. E12, PM3, TS8. (FY16 NDSF) (NDSF)		
7000DE	R499 Theater Anti-Submarine Warfare (ASW) History and Analysis Support for Future Force Architecture TWH E3, E5, E8, E9, TS1, TS2, TS3, TS8, TL2 FY16 RDTE OCF N6887616RCRC008 (RDT&E)		

Qty Unit Est. Cost

Fixed CPFF

Item PS	C Supplies/Services
7000DF R4	99 Theater Anti-Submarine Warfare (ASW) History and Analysis Support for Future Force Architecture TWH E3, E5, E8, E9, TS1, TS2, TS3, TS8, TL2 (FY15 RDTE) N6887615RCK0032 (RDT&E)
7000DG R499	PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (OCF O&MN,N) N6051416RC001IN (O&MN,N)
7000DH R499	T-AGS 66 Engineering and Management Program Management Support E1-E14, E16, E19, E22, E24, PM1-PM3, PM5, PM9 and PS1 (O&MN,N) (O&MN,N)
7000DJ R4	99 PMS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3, PS2 (FY14 OPN) (OPN)
7000DK R499	PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (WCF) (WCF)
7000DL R4	99 SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)
7000DM R499	Technical Standards Processing, HM & E Standards Engineering, Business and Financial Management PM5 (O&MN,N) (O&MN,N)
7000DN R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)
7000DP R499	05V1 Engineering and Management support for the In-Service and Complex Overhaul (RCOH) Carrier Engineering Team. E1-E9, E11, E12, E17, E18, E20, E22, PM1-PM9, EM1-EM6, PS1 and PS2 (O&MN,N) (O&MN,N)
7000DQ R49	99 SEA 05Z Program Support. E2,EM4,PM1 (O&MN,N) (O&MN,N)
7000DR R4	99 (PMS 505) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (O&MN,N) (O&MN,N)
7000DS R4	99 (PEO LCS) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (O&MN,N) (O&MN,N)
7000DT R4	99 (PMS 495) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (O&MN,N) (O&MN,N)
7000DU R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2, E6, E9, E10, E12, E13, E14, E19, E20, PM1, PM4, PM6, PM7, EM1, EM4, EM5 (FY16 RDT&E) (RDT&E)
7000DV R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2, E6, E9, E10, E12, E13, E14, E19, E20, PM1, PM4, PM6, PM7, EM1, EM4, EM5 (FY15 RDT&E) (RDT&E)
7000DW R499	9 SEA 05T FRR-DP Program and Financial Management PM1, PM2, EM4 (FY16 RDTE) (RDT&E)
7000DX R499	T-AO(X) Fleet Replenishment(T-AO Navy Oiler) E1, E2, E5, E7, E10, E13, PM1, PM2, PM5 and PM9 (FY15 RDTE) (RDT&E)
7000DY R499	(PMS 515) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY16 RDTE) (RDT&E)
7000DZ R4	99 T-ATF Engineering and Project Management Support. E1, E2, E4, E5, E7,E9, E10, E11, E13, E17, E24, PM1, PM2, EM1, EM2, EM3, and TS1(FY15 RDTE) (RDT&E)
7000EA R4	99 LHA (R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY16 RDTE) (RDT&E)
7000EB R4	99 SEA 05 Cost Support for PEO IWS 3.0 Railgun, TS9 (FY16 RDTE) (RDT&E)
7000EC R4	99 Ship-to-Shore Connector (SSC) DD&C E1-2,E4-7,E9-17,E19- E20,PM1-9,EM1-3,EM5,TL1-2.(FY15 SCN) (SCN)
7000ED R4	99 Amphibious Assault Ship (LHA) Detail Design & Construction Support E1-E10, E12-13, E15-E19, PM1-PM4, PM6, PM7, PM9, EM1-EM6 and TL1. (FY12 SCN) (SCN)
7000EE R4	99 SEA 05T Technology Group Design Exploration Model Cross Platform Systems Development Program and Financial Management PM1, PM2,EM3,EM4,TL1,TL2 (FY16 RDTE) (RDT&E)
7000EF R4	99 DDG 51 Class Ship Design Manager Technical Support E2, E3, E5, E6, E7, E8, E9, E11, E12, E17 (FY13 SCN) (SCN)
7000EG R4	99 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (FY16 SCN)(SCN)
7000EH R4	99 AGOR Engineering and Program Management Support. E10, PM1, PM2, PM6, PM7, PM9, EM2, EM4, TS5 (FY12 SCN) (SCN)

Qty Unit Est. Cost

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Item	PSC Supplies/Services
7000EJ	R499 (PMS 501) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY15 SCN) (SCN)
7000EK	R499 (PMS 501) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY15 SCN) (SCN)
7000EL	R499 PMS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3, PS2 (FY15 OPN OCF) (OPN)
7000EM	R499 PMS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3, PS2 (O&MN,N OCF) N3131A16WR00112 (O&MN,N)
7000EN	R499 PMS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3, PS2 (O&MN,N OCF) (O&MN,N)
7000EP	R499 T-AGS 66 Engineering and Program Management Support E1-2,E4-E14, E16,E19, E22, E24, PM1-PM3, PM5, PM9, PS1(FY15 OPN OCF) N6230615RC00627(OPN)
7000EQ	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (O&MN,N OCF) N3241616RC0011P (O&MN,N)
7000ER	R499 USCG Acquisition Programmatic & Technical Support, Planning, Analysis & Assessment. E1-E8, E10-E13, E17-E20, 22, 24, PM1-9, EM1-3, EM5, TS1, TS3-4, and TS7-9 (O&MN, NOCF) HSCG2316XMSR059 (O&MN, N)
7000ES	R499 USCG Acquisition Programmatic & Technical Support, Planning, Analysis & Assessment. E1-E8, E10-E13, E17-E20, 22, 24, PM1-9, EM1-3, EM5, TS1, TS3-4, and TS7-9 (O&MN, NOCF (O&MN, N)
7000ET	R499 T-AO(X) Fleet Replenishment (T-AO Navy Oiler) E1, E2, E5, E7, E10, E13, PM1, PM2, PM5 and PM9(16 SCN) (SCN)
7000EU	R499 Engineering in Support of the LSC Acquisition and Lifecycle Program E1-E8,PM1-PM7 (FMS ADMIN) (FMS Case #XXXXXX)
7000EV	R499 FMC Systems and Logistics Engineering Support E1-E6 ,E10,PM1,PM2,PM3,PM6,PM7,PS2,TS5 TS5 (FMS ADMIN) (FMS Case #XXXXXX)
7000EW	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (WCF OCF NUWC) (WCF)
7000EX	R499 SEA 05Z Program Support. E2,EM4,PM1(O&MN,N) (O&MN,N)
7000EZ	R499 SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5. (O&M,N) (O&MN,N)
7000FA	R499 SEA 05Z Program Support. E2, EM4, PM1 (0&M,N) (O&MN,N)
700	0FB R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&M,N) (O&MN,N)
7000FC	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)
7000FD	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)
7000FE	R499 SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)
7000FF	R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (O&MN,N) (O&MN,N)
7000FG	R499 SEA 05T Marine Engineering. Provide Technical and Programmatic Support (SBIR) PM 1-2, EM3-4, TL1-2. (FY16 RDTE) (RDT&E)
7000FH	R499 SEA 05T FRR-DP Program and Financial Management PM1,PM2,EM4 (FY17 RDTE) (RDT&E)
7000FJ	R499 Provide SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5. (FY17 RDTE) (RDT&E)
7000FK	R499 Provide SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5. (FY16 RDTE) (RDT&E)
7000FL	R499 CVN 78 Class Carrier Engineering Team Support. E1, E2, E4, E7, E9, E12, E15, E16, E17, PM1-3, PM9, EM1-4, PS1, PS2. (FY17 RDTE) (RDT&E)

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Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	
7000FM	R499 C	VN 79 Class Carrier Engineering Team Support. E1, E2, E4, E7, E9, E12, E15, E16, E17, PM1-3, PM9, EM1-4, PS1, PS2. (FY17 RDTE) (RDT&E)				
7000FN	R499	SEA 05C Cost Support for PEO IWS 1.0 Aegis Modernization, Task TS9 (O&MN,N) (O&MN,N)				
7000FP	R499	Ship-to-Shore Connector (SSC) DD&C E1-2,E4-7,E9-17,E19- E20,PM1-9,EM1-3,EM5,TL1-2.(FY16 RDTE) (RDT&E)				
7000FQ	R499	CVN 72 05V1 Engineering and Management support for the In-Service and Complex Overhaul (RCOH) Carrier Engineering Team E1-E9,E11,E12,E17,E18,E20,E22,PM1-PM9,EM1-EM6,PS1 and PS2 (FY17 SCN) (SCN)				
7000FR	R499	CVN 73 05V1 Engineering and Management support for the In-Service and Complex Overhaul (RCOH) Carrier Engineering Team E1-E9,E11,E12,E17,E18,E20,E22,PM1-PM9,EM1-EM6,PS1 and PS2 (FY16 SCN) (SCN)				
7000FS	R499	CVN 74 05V1 Engineering and Management support for the In-Service and Complex Overhaul (RCOH) Carrier Engineering Team E1-E9,E11,E12,E17,E18,E20,E22,PM1-PM9,EM1-EM6,PS1 and PS2 (FY17 SCN) (SCN)				
		7000FT R499 Ship-to-Shore Connector (SSC) Cost Estimating and Analysis. TS9 (FY15 SCN) (S	CN)			
7000FU	R499	Littoral Combat Ship (LSC) Cost Estimating Support/Analysis Task PM2 and TS9. (FY 16 SCN) (SCN)				
7000FV	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9. (FY16 SCN) (SCN)				
7000FW	R499 L	X(R) Systems Engineering - Indicative, Preliminary, and Contract Designs, System Trade Studies, Cost Estimating, System Engineering Technical Review, Gate, and Milestone DAB Support E1-7, E9-10,E-17-18, E22, E24, PM1, PM2, PM4, PM5, PM9, EM1-7, TS1, TS4-5, TS8, TS9, TL1-2. (FY12 SCN) (SCN)				
7000FX	R499	ZUMWALT Class Ship Design Manager Support E2(FY17 SCN) (SCN)				
7000FY	R499	Engineering Support for USNS Puller (ESB3) PS1 and PS2. (FY16 NDSF) (NDSF)				
7000FZ	R499	USCG Acquisition Programmatic & Technical Support, Polar Ice Breaker Phase 2 Studies. E1,E2,E7,E9,E13,E14,E19,E20,E22,PM1,PM2,PM3,PM5,PM7,EM2,EM3,EM4,TS3,TS5,TS9 (O&MN,HSCG2317XAPB002 (SCN)	N OCI	F)		
7000GA	R499 FI	MC Systems and Logistics Engineering Support E1-E6 ,E10,PM1,PM2,PM3,PM6,PM7,PS2,TS5 TS5 (FMS KU-P-GGC ) (FMS Case #KUPGGC)				
7000GB	R499	FMC Systems and Logistics Engineering Support E1-E6 ,E10,PM1,PM2,PM3,PM6,PM7,PS2,TS5 TS5 (FMS ADMIN) (FMS Case #XXXXXX)				
7000GC	R499	Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. (FY17 RDTE) (RDT&E)				

7000GD R499 Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. FY17 OMN (O&MN,N)
 7000GE R499 Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. (FY17 RDTE) (RDT&E)
 7000GF R499 Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. (FY17 OMN) (O&MN,N)

E2 (O&MN,N) (O&MN,N)

PS2(O&MN,N) (O&MN,N)

(O&MN,N) (O&MN,N)

RDTE) (RDT&E)

7000GG R499 Technical Standards Processing, HM & E Standards Engineering, Business and Financial Management PM5, EM4,

7000GH R499 05V1 Engineering and Management support for the In-Service and Complex Overhaul (RCOH) Carrier Engineering Team E1-E9, E11, E12, E17, E18, E20, E22, PM1-PM9, EM1-EM6, PS1 and

7000GK R499 PMS325 Boat Engineering and Project Management Support E10, PM1, PM2, PM3 and PS2

7000GL R499 Tactical Information Coordinator Technical Aid (TIC TECHAID) Support E4, TS5 (FY17

Item PSC Supplies/Services

Qty Unit Est. Cost

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- 7000GM R499 SEA 05T Technology Group Design Exploration Model Cross Platform Systems
  Development(CPSD) Program and Financial Management PM1, PM2, EM3, EM4, TL1, TL2
  (FY17 RDTE) (RDT&E)
- 7000GN R499 (CVN 80) Class Carrier Engineering Team Support. E1, E2, E4, E7, E9, E12, E15, E16, E17, PM1-3, PM9; EM1-4, PS1, PS2 (FY17 RDTE) (RDT&E)
- 7000GP R499 Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9. (FY17 RDTE) (RDT&E)
- 7000GQ R499 LHA 8 Cost Estimating and Analysis Support to SEA 05C TS9 (FY17 RDTE) (RDT&E)
- 7000GR R499 Tactical Information Coordinator Technical Aid (TIC TECHAID) Support E4 and TS5. (FY17 RDT&E) (RDT&E)
  - 7000GS R499 Systems Engineering Team Support E4, TS5 (FY17 RDTE) (RDT&E)
- 7000GT R499 OPLOG Technical and Programmatic Oversight and Support. E12, PM3, TS8. (FY17 RDTE) (RDT&E)
- 7000GU R499 Amphibious Assault Ship (LHA) Detail Design & Construction Support E1-E10, E12-13, E15-E19, PM1-PM4, PM6, PM7, PM9, EM1-EM6 and TL1. (FY16 SCN) (SCN)
- 7000GV R499 T-AGS 66 Engineering and Program Management Support E1-E14, E16, E19, E22, E24, PM1-PM3, PM5, PM9 and PS1 (FY13 SCN) (SCN)
- 7000GW R499 PMS325 Boat Engineering and Program Management Support E10, PM1, PM2, PM3 and PS2 (FY17 OPN) (OPN)
- 7000GX R499 SEA 05Z Marine Engineering PM 1-2,EM4 and EM20(O&MN,N) (O&MN,N)
- 7000GY R499 SEA 05Z Program Support. E2, E9, E13, PM1, PM2, PM4, PM5, PM6 (O&MN,N) (O&MN,N)
- 7000GZ R499 SEA 05Z Program Support. E2, E9, E13, PM1, PM2, PM4, PM5, PM6 (O&MN,N) (O&MN,N)
- 7000HA R499 Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9. (FMS ADMIN) (FMS Case #XXXXXX)
- 7000HB R499 Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)
- 7000HC R499 Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)
- 7000HD R499 Afloat Cybersecurity Program Management Support PM1, PM2, PM3, PM4, TL2 (FY17 RDTE) (RDT&E)
- 7000HE R499 PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 (O&MN.N) (O&MN.N)
- 7000HF R499 SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)
- 7000HJ R499 PMS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3,PS2 (O&MN.N) (O&MN.N)
- 7000HK R499 LX(R) Systems Engineering Indicative, Preliminary, and Contract Designs, System Trade Studies, Cost Estimating, System Engineering Technical Review, Gate, and Milestone DAB Support E1-7, E9-10, E-17-18, E22, E24, PM1, PM2, PM4, PM5, PM6, PM9, EM1-7, TS1, TS4-5, TS8, TS9, TL1-2. (FY16 RDTE) (RDT&E)
- 7000HL R499 SEA 05T Marine Engineering. Provide Technical and Programmatic Support (SBIR) PM1-2, EM3-4, TL1-2, (FY16 RDTE) (RDT&E)
- 7000HM R499 Ship-to-Shore Connector (SSC) DD&C E1-2,E4-7,E9-17,E19-E20,PM1-9,EM1-3,EM5,TL1-2.(FY16 RDTE) (RDT&E)
- 7000HP R499 Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY RDTE) (RDT&E)
- 7000HQ R499 SC(X)R-LCU (R) Cost Estimating and Analysis Support to SEA 05C TS9, E1-7,E9-10,E17-18,E22,E24,PM1-6,PM9,EM1-7,TS1,TS4-5,TS8,TS9,and TL12.(FY17 RDTE) (RDT&E)
- 7000HR R499 Ship-to-Shore Connector (SSC) DD&C E1-2,E4-7,E9-17,E19-E20, PM1-9, EM1-3,EM5, TL1-2. (FY16 SCN) (SCN)

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Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
7000HS	R499	PMS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3,PS2 (FY15 OPN) (OPN)			
7000HT	R499	Engineering support for USNS Puller (ESB3)PS1 and PS2. (FY16 NDSF) (NDSF)			
7000HU	R499 P	MS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3,PS2 (FY15 OPN) (OPN)			
7000HV	R499 S	trike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4. OCF (O&MN,N) DWAM62955 (O&MN,N)			
7000HW	R499 F	PMS 325 Service Craft and Targets Engineering and Project Management Support. E2, E10, PM1, PM2, PM3, PM6, PM7, PS2 OCF (O&MN,N) N5005417RCB0002 (O&MN,N)			
7000HX	R499 P	MS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3, PS2 OCF (FY16 RDTE) 11004866 (RDT&E)			
7000HY	R499 P	MS 325 Boats Engineering and Project Management Support E10,PM1,PM2,PM3, PS2 OCF (O&MN,N) RP000517RXS0044 (O&MN,N)			
7000JA	R499	AGOR Engineering and Program Management Support. E10, PM1, PM2, PM6, PM7, PM9, EM2, EM4, TS5 OCF (O&MN,N) OMAO-PAD-00002(O&MN,N)			
7000JB	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5. (O&MN,N) (O&MN,N)			
7000JC	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (O&MN,N) (O&MN,N)			
		7000JD R499 SEA 05Z Program Support. E2,EM4, PM1 (O&MN,N) U.S.C. 2410(a) Invoked (O	&MN,1	4)	
7000JE	R499	SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000JF	R499	SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000JG	R499	SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000JH	R499	SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) (O&MN,N)			
7000JJ	R499	SEA 05C Cost Support for PEO IWS 1.0 Aegis Modernization, Task TS9 (O&MN,N) (O&MN,N)			\$
7000JK	R499	Technical Standards Processing, HM & E Standards Engineering, Business and Financial Management PM5,EM4,E2 (O&MN,N) (O&MN,N)			
7000JL	R499	SEA 05Z Marine Engineering PM 1-2, EM4 and EM20 (O&MN,N) U.S.C. 2410(a) Invoked (O&MN,N)			
7000JM	R499	SEA 05Z Program Support. E2,E9,E13,PM1,PM2,PM4,PM5,EM4,EM6 (O&MN,N) (O&MN,N)			
7000JN	R499	SEA 05Z Program Support. E2,E9,E13,PM1,PM2,PM4,PM5,EM4,EM6 (O&MN,N) (O&MN,N)			
7000JP	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (O&MN,N) (O&MN,N)			
7000JQ	R499	Ship Design (SDM) and Systems Intergration Manager (SIM) Manual Update EM3 (O&MN,N) (O&MN,N)			
7000JR	R499	LHA 8 Cost Estimating and Analysis Support to SEA 05C TS9 (FY17 RDTE) (RDT&E)			
7000JS	R499	SEA 05T Marine Engineering. Provide Technical and Programmatic Support(SBIR) PM1-2, EM3-4, TL1-2 (FY17 RDTE) (RDT&E)			
7000JT	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&M,N) (O&MN,N)			
7000JU	R499	Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4(O&MN,N) $(\mbox{O\&MN},\mbox{N})$			
7000JV	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)			

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Item	PSC S	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee
7000JW	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)				
7000JX	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)				
7000JY	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N) $$				
7000JZ	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N) $$				
7000KA	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N) $$				
7000KB	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N) $$				
7000KC	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N) $$				
7000KD	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (OPN) (OPN)				
7000KE	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (OPN) (OPN)				
7000KF	R499	Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4(O&MN,N) (O&MN,N)				
7000KG	R499	Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4(O&MN,N) (O&MN,N)				
7000KH	R499	Strike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4.(O&MN,N) (O&MN,N)				
7000KJ	R499	SEA 05T FRR-DP Program and Financial Management PM1,PM2,EM4 (FY 17 RDTE) (RDT&E)				
7000KK	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (FY 17 RDTE) (RDT&E)				
7000KL	R499	SEA 05T FRR-DP Program and Financial Management PM1, PM2, EM4 (FY18 RDTE) (RDT&E)				
7000KM	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (FY 18 RDTE) (RDT&E)				
7000KN	R499	Tactical Information Coordinator Technical Aid (TIC TECHAID) Support E4,TS5 (FY18 RDTE) (RDT&E)				
7000KP	R499	Systems Engineering Team Support E4, TS5 (FY18 RDT&E) (RDT&E)				
7000KQ	R499	LHA (R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY18 RDTE) (RDT&E)				
7000KR	R499	SC(X)R-LCU (R) Cost Estimating and Analysis Support to SEA 05C TS9,E1-7,E9-10,E17-18,E22,E24,PM1-6,PM9,EM1-7,TS1,TS4-5,TS8,TS9,and TL12.(FY18 RDTE) (RDT&E)				
7000KS	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY 18 RDTE) (RDT&E)				
7000KT	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY 17 RDTE) (RDT&E)				
7000KU	R499	(PMS 505) Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY 17 OPN) (OPN)				
7000KV	R499	DDG 51 SEA 05 Cost Support for PEOs TS9 (FY13 SCN) (SCN)				
7000KW	R499	DDG 123 Combat System Requirement Definition and System Technology Assessment. Provide Engineering Support PM2 and E4(FY16 SCN) (SCN)				
7000KX	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1,EM4,EM5 (OCFO&MN,N) N0006018RC00112 (O&MN,N)				
7000KY	R499	SEA 05T Technology Group SBIR/STTR Training Development, Outreach Capability and Program and Financial Management PM1-2, EM3-4, TL1-2 (FY17 RDTE) (RDT&E)				

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Item	PSC Supp	blies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
7000KZ		rike Force Interoperability C5IMP Support. PM1-PM3, PM6, E3 and E4(FY18 RDTE) DT&E)					
7000LB	R499 SE	A 05 ACIO Program Management Support. EM4 and PM1(FY18 RDTE) (RDT&E)					
7000LC	R499 Shi	ip-to-Shore Connector (SSC) Cost Estimating and Analysis. TS9 (FY15 SCN) (SCN)					
7000LD	R499 Shi	ip-to-Shore Connector (SSC)Cost Estimating and Analysis. TS( (FY18 SCN) (SCN)					
7000LE	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000LF		A 05T Technology Group Cross Platform Systems Development(CPSD) Program and nancial Management PM1, PM2, EM3, EM4, TL1, TL2 (FY17 RDTE) (RDT&E)					
7000LG	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000LH	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000LJ	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000LK	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000LM	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000LN		A 05T Technology Group Cross Platform Systems Development(CPSD) Program and nancial Management PM1, PM2, EM3, EM4, TL1, TL2 (FY18 RDTE) (O&MN,N)					
7000LP	Pro	A 05T Technology Group SIR/STTR Training Development, Outreach Capability and ogram and Financial Management PM1, PM2, EM4, TL1, TL2 Development (CPSD) Program d Financial Management PM1, PM2, EM3, EM4, TL1, TL2 (FY18 RDTE) (RDT&E)					
7000LQ	R499 LH	IA (R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY18 RDTE) (RDT&E)					
7000LR		A 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, 0,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (O&MN,N) (O&MN,N)					
7000LS		A 05Z Program Support. E2, E9, E13, PM1, PM2, PM4, PM5, PM6 (O&MN,N) &MN,N)					
7000LT		A 05Z Program Support. E2, E9, E13, PM1, PM2, PM4, PM5, PM6 (O&MN,N) &MN,N)					
7000LU	R499 SE	A 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)					
7000LV		fice of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) &MN,N)					
7000LW		toral Combat Ship (LCS) Cost Estimating Support/Analysis(FMS ADMIN) (FMS Case XXXXX)					
7000LX	R499 SE	A 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)					
7000LY	R499 SE	A 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N (O&MN,N)					
7000LZ		fice of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) &MN,N)					
7000MA	TS	C(X)R-LCU (R) Cost Estimating and Analysis Support to SEA 05C 9,E1-7,E9-10,E17-18,E22, E24, PM1-6,PM9,EM1-7, TS1, TS4-5, TS8, TS9 and TL12 Y17 RDTE) (RDT&E)					
7000MB	R499 SE	A 05Z Marine Engineering PM 1, PM2 and PM4 (O&MN,N) (O&MN,N)					
7000MC	R499 SE	A 05Z Program Support. E2,EM4,PM1 (O&MN,N) (O&MN,N)					

7000MD R499 SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)

Item	PSC S	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
7000ME	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)					
7000MF	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MG	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MH	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MJ	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MK	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000ML	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MM	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MN	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000MP	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY18 RDTE) (RDT&E)					
7000MQ	R499	LHA (R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY19 RDTE) (RDT&E)					
7000MR	R499	SEA 05 Cost Support PEO IWS 10.0 TS9 (FY19 RDTE) (RDT&E)					
7000MS	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (FY19 RDTE) (RDT&E)					
7000MT	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (FY19 RDTE) (RDT&E)					
7000MU	R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2,E6,E9,E10,E12,E13,E14,E19,E20,PM1,PM4,PM6,PM7,EM1,EM4,EM5 (RDT&E)					
7000MV	R499	Ship-to-Shore Connector (SSC) Cost Estimating and Analysis TS9 (FY15 SCN) (SCN)					
7000MW	R499	Ship-to-Shore Connector (SSC) Cost Estimating and Analysis TS9 (FY18 SCN) (SCN)					
7000MX	R499	SEA 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000MY	R499	SEA 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000MZ	R499	SEA 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000NA	R499	SEA 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000NB	R499	SEA 05Z Marine Engineering PM 1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000NC	R499	SEA 05Z Program Support. E2,EM4,PM1 (O&MN,N) (O&MN,N)					
7000ND	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)					
7000NE	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000NF	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (O&MN,N) (O&MN,N)					

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7000NG R499 Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (O&MN,N) (O&MN,N)

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Item	PSC S	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
7000NH	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY19 RDTE) (RDT&E)					
7000NJ	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FMS ADMIN) (FMS Case #XXXXXX)					
7000NK	R499	DDG 51 SEA 05 Cost Support for PEOs TS9 (FY14 SCN) (SCN)					
7000NL	R499	LHA(R) Cost Estimating and Analysis Support to SEA 05C TS9 (FY19 RDT&E) (RDT&E)					
7000NM	R499	SEA 05T Technology Group SIR/STTR Training Development, Outreach Capability and Program and Financial Management PM1,PM2,PM6,EM3,EM4,TS1,TL1,TL2 (FY18 RDTE) (RDT&E)					
7000NN	R499	$Littoral\ Combat\ Ship\ (LCS)\ Cost\ Estimating\ Support/Analysis\ Task\ PM2\ and\ TS9\ (FY19\ RDTE)\ (RDT\&E)$					
7000NP	R499	SEA 05T Technology Group Design Exploration Model Cross Platform Systems Development(CPSD) Program and Financial Management (FY19 RDTE) (RDT&E)					
7000NQ	R499	SEA 05T Technology Group Design Exploration Model Cross Platform Systems Development(CPSD) Program and Financial Management(FY19 RDTE) (RDT&E)					
7000NR	R499	SEA 05T Technology Group Design Exploration Model Cross Platform Systems Development(CPSD) Program and Financial Management(FY19 RDTE) (RDT&E)					
7000NS	R499	SEA 05Z Marine Engineering PM1, PM2 and PM4. (O&MN,N) (O&MN,N)					
7000NT	R499	SEA 05Z Program Support. E2,EM4,PM1 (O&MN,N) (O&MN,N)					
7000NU	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)					
7000NV	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)					
7000NW	R499	Office of CHENG Program and Financial Management PM1, PM2, PM3 and EM4 (O&MN,N) (O&MN,N)					
7000NX	R499	SEA 05T Technical and Programmatic Support (FFR&DP)E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (FY19 RDTE) (RDT&E)					
7000NY	R499	SEA 05T Technology Group SIR/STTR Training Development, Outreach Capability and Program and Financial Management PM1,PM2,PM6,EM3,EM4,TS1,TL1,TL2 (FY18 RDTE) (RDT&E)					
7000NZ	R499	Shipyard Study (FY 19 OMN) (O&MN,N)					
7000PA	R499	SEA 05/05Z21 Program Support E2,E9,E13,PM1,PM2,PM4,PM5,EM6 (FY19 OMN) (O&MN,N)					
7000PB	R499	SEA 05 Cost Support PEO's TS9 (FY19 OMN) (O&MN,N)					
7000PC	R499	SEA 05 Cost Support PEO's TS9 (FY19 RDTE) (RDT&E)					
7000PD	R499	SEA 05 Cost Support PEO's TS9( FY15 SCN) (SCN)					
7000PE	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY19 OMN) (O&MN,N)					
7000PF	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY19 OMN) (O&MN,N)					
7000PG	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY19 OMN) (O&MN,N)					
7000PH	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY19 OMN) (O&MN,N)					
7000PJ	R499	Littoral Combat Ship (LCS) Cost Estimating Support/Analysis Task PM2 and TS9 (FY19 OMN) (O&MN,N)					

7000PK R499 Shipyard Study (FY19 OMN) (O&MN,N)

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Item	PSC S	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
7000PL	R499	Shipyard Study (FY19 OMN) (O&MN,N)					
7000PM	R499	SEA 05T Technology Group SIR/STTR Training Development, Outreach Capability and Program and Financial Management PM1,PM2,PM6,EM3,EM4,TS1,TL1,TL2 (FY19 RDT&E) (RDT&E)					
7000PN	R499	Cost Estimating Support PEOs IWS 10.0 TS9 (FY20 RDTE) (RDT&E)					
7000PP	R499	Cost Estimating Support PEOs IWS 2.0 TS9 (FY20 RDTE) (RDT&E)					
7000PQ	R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) FY20 RDTE E2,E6,E9,E10,E12,E13,E14,E19, E20,PM1,PM4,PM6,PM7,EM1, EM4,EM5 (RDT&E)					
7000PR	R499	Provide SEA 05T Technical and Programmatic Support (FFR&DP) E2,E6,E9,E10,E12,E13,E14,E19,E20,PM1,PM4,PM6,PM7,EM1,EM4,EM5 FY20RDTE (RDT&E)					
7000PS	R499	SEA 05T9 FFR&DP Program and Financial Management PM1,PM2,EM4 FY20 RDTE (RDT&E)					
7000PU	R499	(PMS 404 SEA 05 Cost Support PEOs TS9(FY19 RDTE) (RDT&E)					
7000PV	R499	(IWS 2.0) SEA 05 Cost Support PEOs TS9(FY20 RDTE) (RDT&E)					
7000PW	R499	(PMS515)LittoralCombatShip(LSC)CostEstimatingSupportAnalysisTS9, PM2(FundType-OTHER)					
7000PX	R499	(PMS 404) SEA 05 Cost Support PEOs TS9(FY20 RDTE) (RDT&E)					

# ODC Items:

Item	PSC	Supplies/Services	Qty Unit	Est. Cost	
9000		ODCs in support of CLIN 7000			
9000AA	R499	Additional Year - Ceiling (Fund Type - TBD)			
9000AB	R499	Other Direct Costs in Support of SLIN 7000AB (O&MN,N) (O&MN,N)			
9000AC	R499	Other Direct Costs in Support of SLIN 7000AC (O&MN,N) (Fund Type - TBD)			
9000AD	R499	Other Direct Costs in Support of SLIN 7000AD (O&MN,N) (O&MN,N)			
9000AL	R499	Other Direct Costs in Support of SLIN 7000AL (O&MN,N) (O&MN,N)			
9000AM	R499	Other Direct Costs in Support of SLIN 7000AM(O&MN,N) (O&MN,N)			
9000AS	R499	Other Direct Costs in Support of SLIN 7000AS (FY16 RDTE) (RDT&E)			
9000AV	R499	Other Direct Costs in Support of SLIN 7000AV (FY16 RDTE) (RDT&E)			
9000AW	R499	Other Direct Costs in Support of SLIN 7000AW (FY16 RDTE) (RDT&E)			
9000AX	R499	Other Direct Costs in Support of SLIN 7000AX (FY16 RDTE) (RDT&E)			
9000AZ	R499	Other Direct Costs in Support of SLIN 7000AZ (FY16 RDTE) (RDT&E)			
9000BA	R499	Other Direct Costs in Support of LSC Cost Estimating (FY16 RDTE) (RDT&E)			
9000BD	R499	Other Direct Costs in Support of SLIN 7000BD (FY16 RDTE) (RDT&E)			

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
9000BJ	R499	Other Direct Costs in Support of SLIN 7000BJ (FY15 SCN) (SCN)			
9000BM	R499	ODC in support of CLIN 7000 (OPN)			
9000BN	R499	ODC in support of CLIN 7000 (O&MN,N)			
9000BQ	R499	Other Direct Costs in Support of SLIN 7000BQ (O&MN,N) (O&MN,N)			
9000BU	R499	Other Direct Costs in Support of SLIN 7000BL (FY16 NDSF) (NDSF)			
9000BV	R499	Other Direct Costs in Support of SLIN 7000BV (O&MN,N) (O&MN,N)			
9000BX	R499	Other Direct Costs in Support of SLIN 7000BX (O&MN,N) (O&MN,N)			
9000CA	R499	Other Direct Costs in Support of SLIN 7000CA (O&MN,N) (O&MN,N)			
9000CE	R499	Other Direct Costs in Support of SLIN 7000CE (O&MN,N) (O&MN,N)			
9000CF	R499	Other Direct Costs in Support of SLIN 7000CF (FY16 RDTE) (RDT&E)			
9000CH	R499	ODCs in Support of SLIN 7000CH (FY16 RDTE) (RDT&E)			
9000CJ	R499	Other Direct Costs in Support of SLIN 7000CJ (FY16 RDTE) (RDT&E)			
9000CK	R499	Other Direct Costs in Support of SLIN 7000CK (FY16 RDTE) (RDT&E)			
9000CM	R499	Other Direct Costs in Support of SLIN 7000CM (FY16 RDTE) (RDT&E)			
9000CS	R499	Other Direct Costs in Support of SLIN 7000CS (FY16 RDTE) (RDT&E)			
9000CT	R499	ODC in support of CLIN 7000 (RDT&E)			
9000CY	R499	Other Direct Costs in Support of SLIN 7000CY (FY14 SCN) (SCN)			
9000CZ	R499	Other Direct Costs in Support of SLIN 7000CZ (FY14 SCN) (SCN)			
9000DD	R499	Other Direct Costs in Support of SLIN 7000DD (FY16 NDSF) (NDSF)			
9000DE	R499	Other Direct Costs in Support of SLIN 7000DE (FY16 RDTE OCF) N6887616RCRC008 (RDT&E)			
9000DJ	R499	Other Direct Costs in Support of SLIN 7000DJ (FY14 OPN) (OPN)			
9000DK	R499	Other Direct Costs in Support of SLIN 7000DK (WCF) (WCF)			
9000DL	R499	SEA 05 ACIO Program Management Support. EM4 and PM1 (O&MN,N) (O&MN,N)			
9000DM	R499	Other Direct Costs in Support of SLIN 7000DM (O&MN,N) (O&MN,N)			
9000DR	R499	Other Direct Costs in Support of SLIN 7000DR (FY16 O&MN,N) (O&MN,N)			
9000DU	R499	Other Direct Costs in Support of SLIN 7000DU (FY16 RDTE) (RDT&E)			
9000DY	R499	Other Direct Costs in Support of SLIN 7000DY( FY16 RDTE) (RDT&E)			
9000DZ	R499	Other Direct Costs in Support of SLIN 7000DZ (FY15 RDTE) (RDT&E)			

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
9000EC	R499	Other Direct Costs in Support of SLIN 7000EC (FY15 SCN) (SCN)			
9000ED	R499	Other Direct Costs in Support of SLIN 7000ED (FY12 SCN) (SCN)			
9000EF	R499	Other Direct Costs in Support of SLIN 7000EF (FY13 SCN) (SCN)			
9000EH	R499	Other Direct Costs in Support of SLIN 7000EH (FY12 SCN) (SCN)			
9000EL	R499	Other Direct Costs in Support of SLIN 7000EL (OPN)			
9000EM	R499	Other Direct Costs in Support of SLIN 7000EM (FY16 O&MN,N OCF) N3131A16WR00112 (O&MN,N)			
9000EN	R499	Other Direct Costs in Support of SLIN 7000EN (FY16 O&MN,N OCF) (O&MN,N)			
9000EP	R499	Other Direct Costs in Support of SLIN 7000EP( FY15 OPN OCF) N6230615RC00627 (OPN)			
9000EQ	R499	Other Direct Costs in Support of SLIN 7000EQ (FY16 O&MN,N OCF) N3241616RC0011P (O&MN,N)			
9000ES	R499	Other Direct Costs in Support of SLIN 7000ES (FY16 O&MN,N OCF) HSCG2316XAFR620 (O&MN,N)			
9000ET	R499	Other Direct Costs in Support of SLIN 7000ET (FY16 SCN) (SCN)			
9000EU	R499	Other Direct Costs in Support of SLIN 7000EU (FMS ADMIN) (FMS Case #XXXXXX)			
9000EV	R499	Other Direct Costs in Support of SLIN 7000EV(FMS ADMIN) (FMS Case #XXXXXX)			
9000EW	R499	Other Direct Costs in Support of SLIN 7000EW ( WCF OCF NUWC) (WCF)			
9000EX	R499	Other Direct Costs in Support of SLIN 7000EX (O&MN,N) (O&MN,N)			
9000EZ	R499	ODCs in Support of SLIN 7000EZ (O&MN,N) (O&MN,N)			
9000FB	R499	ODCs in Support of SLIN 7000FB(O&MN,N) (O&MN,N)			
9000FD	R499	ODCs in Support of SLIN 7000FD (O&MN,N) (O&MN,N)			
9000FF	R499	ODCs in Support of SLIN 7000FF(O&MN,N) (O&MN,N)			
9000FG	R499	ODCs in Support of SLIN 7000FG (FY16 RDTE) (RDT&E)			
9000FJ	R499	ODCs in Support of SLIN 7000FJ (RDTE)) (RDT&E)			
9000FM	R499	Other Direct Costs in Support of SLIN 7000FM (FY17 RDTE) (RDT&E)			
9000FP	R499	ODCs in Support of SLIN 7000FP (FY16 RDTE) (RDT&E)			
9000FQ	R499	Other Direct Costs in Support of SLIN 7000FQ (FY17 SCN) (SCN)			
9000FR	R499	Other Direct Costs in Support of SLIN 7000FR (FY 16 SCN) (SCN)			

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
9000FS	R499	Other Direct Costs in Support of SLIN 7000FS (FY 17 SCN) (SCN)			
9000FT	R499	ODCs in Support of SLIN 7000FT (FY15 SCN) (SCN)			
9000FX	R499	ODCs in Support of SLIN 7000FX (FY17 SCN) (SCN)			
9000GB	R499	Other Direct Costs in Support of SLIN 7000GB (FMS ADMIN) (FMS Case #XXXXXX)			
9000GC	R499	Other Direct Costs in Support of SLIN 7000GC (FY17 RDTE) (RDT&E)			
9000GE	R499	Other Direct Costs in Support of SLIN 7000GE (FY17 RDTE) (O&MN,N)			
9000GG	R499	Other Direct Costs in Support of SLIN 7000GG (O&MN,N) (O&MN,N)			
9000GJ	R499	Other Direct Costs in Support of SLIN 7000GJ (O&MN,N) (O&MN,N)			
9000GL	R499	ODC in support of CLIN 7000GL (RDT&E)			
9000GM	R499	Other Direct Costs in Support of SLIN 7000GM (FY17 RDTE) (RDT&E)			
9000GR	R499	Other Direct Costs in Support of SLIN 7000GS (FY17 RDTE) (RDT&E)			
9000GS	R499	Other Direct Costs in Support of SLIN 7000GS (FY17 RDTE) (RDT&E)			
9000GT	R499	Other Direct Costs in Support of SLIN 7000GT (FY17 RDTE) (RDT&E)			
9000GV	R499	Other Direct Costs in Support of SLIN 7000GV (FY13 SCN) (SCN)			
9000GW	R499	Other Direct Costs in Support of SLIN 7000GW (FY17 OPN) (OPN)			
9000GZ	R499	Other Direct Costs in Support of SLIN 7000GZ (O&MN,N) (O&MN,N)			
9000HD	R499	Other Direct Costs in Support of SLIN 7000HD (FY17 RDTE) (RDT&E)			
9000HE	R499	Other Direct Costs in Support of SLIN 7000HE (O&MN,N) (O&MN,N)			
9000HF	R499	Other Direct Costs in Support of SLIN 7000HF (O&MN,N) (O&MN,N)			
9000HJ	R499	Other Direct Costs in Support of SLIN 7000HJ (O&MN,N) (O&MN,N)			
9000HK	R499	Other Direct Costs in Support of SLIN 7000HK(FY16 RDTE) (RDT&E)			
9000HL	R499	Other Direct Costs in Support of SLIN 7000HL (FY16 RDTE) (RDT&E)			
9000HU	R499	Other Direct Costs in Support of SLIN 7000HU(OCF FY15 OPN) (OPN)			
9000HV	R499	Other Direct Costs in Support of SLIN 7000HV OCF (O&MN,N) DWAM62955 (O&MN,N)			
9000HW	R499	Other Direct Costs in Support of SLIN 7000HW OCF (O&MN,N) N5005417RCB0002 (O&MN,N)			
9000HX	R499	Other Direct Costs in Support of SLIN 7000HX OCF (FY16 RDTE) 11004866 (RDT&E)			

9000HY         R499         Other Direct Costs in Support of SLIN 700HIV CCF (OEMNLN)           9000HZ         R499         Other Direct Costs in Support of SLIN 700HZ (FOR)           9000JA         R499         Other Direct Costs in Support of SLIN 700HZ (FOR)           9000JA         R499         Other Direct Costs in Support of SLIN 7000JA (CAC OMN)           900UB         R499         Other Direct Costs in Support of SLIN 7000JB (OEMNLN)           900UG         R499         Other Direct Costs in Support of SLIN 7000JB (OEMNLN) (OEMNLN)           900UJG         R499         Other Direct Costs in Support of SLIN 700UJB (OEMNLN) (OEMNLN)           900UJG         R499         Other Direct Costs in Support of SLIN 700UJB (OEMNLN) (OEMNLN)           900UJF         R499         Other Direct Costs in Support of SLIN 700UJP (OEMNLN) (OEMNLN)           900UJF         R499         Other Direct Costs in Support of SLIN 700UJP (OEMNLN) (OEMNLN)           900UJF         R499         Other Direct Costs in Support of SLIN 700UJP (OEMNLN) (OEMNLN)           900UKF         R499         Other Direct Costs in Support of SLIN 700UKP (EYEL OEMS IN SUPPORT OEMS IN SUPPO	Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
	9000HY	R499	7000HY OCF (O&MN,N)			
	9000HZ	R499	7000HZ (FY15 OPN)			
	9000JA	R499	7000JA (OCF OMN)			
	9000JB	R499	**			
	9000JE	R499	**			
7000JK (O&MN,N) (O&MN,N)	9000JG	R499	**			
	9000JK	R499	**			
	9000JP	R499	**			
	9000JV	R499	**			
	9000KF	R499	**			
	9000KG	R499	**			
	9000KK	R499	**			
	9000KM	R499	**			
7000KP (FY18 RDTE) (RDT&E)           9000KS         R499         Other Direct Costs in Support of SLIN 7000KS (FY18 RDTE) (RDT&E)           9000KU         R499         Other Direct Costs in Support of SLIN 7000KU(FY17 OPN) (OPN)           9000KW         R499         Other Direct Costs in Support of SLIN 7000KW(FY16 SCN) (SCN)           9000KZ         R499         Other Direct Costs in Support of SLIN 7000KZ (FY18 RDTE) (RDT&E)           9000LE         R499         Other Direct Costs in Support of SLIN 7000LE (O&MN,N) (O&MN,N)           9000LF         R499         ODC in support of CLIN 7000 (RDT&E)           9000LN         R499         Other Direct Costs in Support of SLIN 7000LN(FY18 RDTE) (RDT&E)           9000LP         R499         Other Direct Costs in Support of SLIN 7000LP(FY18 RDTE) (RDT&E)           9000LT         R499         Other Direct Costs in Support of SLIN 7000LT (FY18 O&M,N) (O&MN,N)           9000LZ         R499         Other Direct Costs in Support of SLIN 7000LX (O&MN,N) (O&MN,N)           9000MB         R499         Other Direct Costs in Support of SLIN	9000KN	R499	**			
	9000KP	R499	**			
7000KU(FY17 OPN) (OPN)	9000KS	R499				
7000KW(FY16 SCN) (SCN)	9000KU	R499	**			
7000KZ (FY18 RDTE) (RDT&E)  9000LE R499 Other Direct Costs in Support of SLIN 7000LE (O&MN,N) (O&MN,N)  9000LF R499 ODC in support of CLIN 7000 (RDT&E)  9000LN R499 Other Direct Costs in Support of SLIN 7000LN(FY18 RDTE) (RDT&E)  9000LP R499 Other Direct Costs in Support of SLIN 7000LP(FY18 RDTE) (RDT&E)  9000LT R499 Other Direct Costs in Support of SLIN 7000LT (FY18 O&M,N) (O&MN,N)  9000LX R499 Other Direct Costs in Support of SLIN 7000LX (O&MN,N) (O&MN,N)  9000LZ R499 Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)  9000MB R499 Other Direct Costs in Support of SLIN	9000KW	R499	**			
7000LE (O&MN,N) (O&MN,N)	9000KZ	R499	**			
9000LN  R499 Other Direct Costs in Support of SLIN 7000LN(FY18 RDTE) (RDT&E)  9000LP R499 Other Direct Costs in Support of SLIN 7000LP(FY18 RDTE) (RDT&E)  9000LT R499 Other Direct Costs in Support of SLIN 7000LT (FY18 O&M,N) (O&MN,N)  9000LX R499 Other Direct Costs in Support of SLIN 7000LX (O&MN,N) (O&MN,N)  9000LZ R499 Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)  9000MB R499 Other Direct Costs in Support of SLIN	9000LE	R499	**			
7000LN(FY18 RDTE) (RDT&E)  9000LP  R499  Other Direct Costs in Support of SLIN 7000LP(FY18 RDTE) (RDT&E)  9000LT  R499  Other Direct Costs in Support of SLIN 7000LT (FY18 O&M,N) (O&MN,N)  9000LX  R499  Other Direct Costs in Support of SLIN 7000LX (O&MN,N) (O&MN,N)  9000LZ  R499  Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)  9000MB  R499  Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)	9000LF	R499	ODC in support of CLIN 7000 (RDT&E)			
7000LP(FY18 RDTE) (RDT&E)  9000LT  R499  Other Direct Costs in Support of SLIN 7000LT (FY18 O&M,N) (O&MN,N)  9000LX  R499  Other Direct Costs in Support of SLIN 7000LX (O&MN,N) (O&MN,N)  9000LZ  R499  Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)  9000MB  R499  Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)	9000LN	R499				
7000LT (FY18 O&M,N) (O&MN,N)  9000LX R499 Other Direct Costs in Support of SLIN 7000LX (O&MN,N) (O&MN,N)  9000LZ R499 Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)  9000MB R499 Other Direct Costs in Support of SLIN	9000LP	R499				
7000LX (O&MN,N) (O&MN,N)  9000LZ R499 Other Direct Costs in Support of SLIN 7000LZ (O&MN,N) (O&MN,N)  9000MB R499 Other Direct Costs in Support of SLIN	9000LT	R499	* *			
7000LZ (O&MN,N) (O&MN,N) 9000MB R499 Other Direct Costs in Support of SLIN	9000LX	R499	**			
11	9000LZ	R499	**			
	9000MB	R499	**			

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost
9000MX	R499	Other Direct Costs in Support of SLIN 7000MX (O&MN,N) (O&MN,N)			
9000MZ	R499	Other Direct Costs in Support of SLIN 7000MZ (O&MN,N) (O&MN,N)			
9000NC	R499	Other Direct Costs in Support of SLIN 7000NC (O&MN,N) (O&MN,N)			
9000NG	R499	Other Direct Costs in Support of SLIN 7000NG (O&MN,N) (O&MN,N)			
9000NL	R499	Other Direct Costs in Support of SLIN 7000NL (RDT&E) (RDT&E)			
9000NM	R499	Other Direct Costs in Support of SLIN 7000NM (FY18 RDTE) (RDT&E)			
9000NQ	R499	Other Direct Costs in Support of SLIN 7000NQ (FY19 RDTE) (RDT&E)			
9000NS	R499	Other Direct Costs in Support of SLIN 7000NS (O&MN,N) (O&MN,N)			
9000NT	R499	Other Direct Costs in Support of SLIN 7000NT (O&MN,N) (O&MN,N)			
9000NU	R499	Other Direct Costs in Support of SLIN 7000NU (O&MN,N) (O&MN,N)			
9000NX	R499	Other Direct Costs in Support of SLIN 7000NX(FY19 RDTE) (RDT&E)			
9000NY	R499	Other Direct Costs in Support of SLIN 7000NY (FY18 RDTE) (RDT&E)			
9000NZ	R499	Other Direct Costs in Support of SLIN 7000NZ (FY 19 OMN) (O&MN,N)			
9000PK	R499	Other Direct Costs in Support of SLIN 7000PK(FY19 OMN) (O&MN,N)			
9000PM	R499	Other Direct Costs in Support of SLIN 7000PM(FY19 RDTE) (RDT&E)			
9000PN	R499	ODC in support of CLIN 7000 (O&MN,N)			
9000PP	R499	ODC in support of CLIN 7000 (O&MN,N)			
9000PQ	R499	ODC in support of CLIN 7000 (Fund Type - TBD)			
9000PR	R499	ODC in support of CLIN 7000 (RDT&E)			
9000PS	R499	ODC in support of CLIN 7000 (RDT&E)			
9000PT	R499	Other Direct Costs in Support of SLIN (7000NU Established on MOD 28) EM1, PM2 SEA05 ACIO Program (O&MN,N)			
9000PU	R499	ODC in support of CLIN 7000 (RDT&E)			
9000PV	R499	ODC in support of CLIN 7000 (RDT&E)			
9000PW	R499	ODC in support of CLIN 7000 (Fund Type - OTHER)			

Note A: Base Period Items- Base Period SLINs (1001AA through 3001AA), the base period through 27 May 2009 will commence on the date of Task Order award. The 1000 and 4000 series CLINs are Level of Effort requirements.

Note B: Option Items - Option item to which the option clause in Section I-2 applies and which is to be supplied only if and to the

extent said option is exercised.

Note C: In accordance with Section M, the Government reserves the right to award up to three Task Orders.

Award Term Item to which the AWARD TERM clause in SECTION H applies and which is to be supplied only if and to the extent said Item is earned, retained and awarded in accordance with the AWARD TERM PLAN provided in SECTION H. Notwithstanding the word "Option" which appears in the Section B CLIN description or elsewhere in this Task Order, for Award Term Items, Award Terms are not "Option" Items.

Note D: ODC- Estimated ODC costs (based on past performance) are per man-hour. Design Site costs must be reflected as \$1M per year for each hours. This estimate must be included in Section B of the offer for CLIN 3001, Option CLIN 6002, and Award Term CLINs 6003, 6004, and 6005. Other ODC amounts proposed by an Offeror shall be included in said CLINs and the narrative rationale provided by the Offeror. These are non-fee bearing CLINs and shall be priced as cost only.

Note E: Task Order requirements that apply to the divison of work between prime contractors, subcontractors and small businesses are as follows:

- Large busines prime contractors shall perform a minimum of 40% of the total work effort.
- Small business prime contractors shall perform a minimum of 30% of the total work effort.
- Large business prime contractors shall subcontract at least 25% of the work effort to small businesses.
- No single subcontractor shall perform more than the prime contractor.
- A prime contractor may be a subcontractor to another prime contractor.

#### CONTRACT SUMMARY FOR PAYMENT OFFICE (COST TYPE)(NAVSEA) (FEB 1997)

This entire contract is cost type.

#### PAYMENTS OF FEE(S) (LEVEL OF EFFORT) (NAVSEA) (MAY 1993)

- (a) For purposes of this delivery order, "fee" means "fixed fee" in cost-plus-fixed-fee level of effort type delivery orders.
- (b) The Government shall make payments to the Contractor, subject to and in accordance with the clause in this contract entitled "FIXED FEE" (FAR 52.216-8) or "INCENTIVE FEE", (FAR 52.216-10), as applicable. Such payments shall be equal to \_\_\_\_\_\_ percent () of the allowable cost of each invoice submitted by and payable to the Contractor pursuant to the clause of this contract entitled "ALLOWABLE COST AND PAYMENT" (FAR 52.216-7), subject to the withholding terms and conditions of the "FIXED FEE" or "INCENTIVE FEE" clause, as applicable (percentage of fee is based on fee dollars divided by estimated cost dollars, including facilities capital cost of money). Note: CLINs 0003, 0006 and 0009 are "Cost Only". Total fee(s) paid to the Contractor shall not exceed the fee amount(s) set forth in this contract.
- (c) The fee(s) specified in SECTION B, and payment thereof, is subject to adjustment pursuant to paragraph (g) of the special contract requirement entitled "LEVEL OF EFFORT." If the fee(s) is reduced and the reduced fee(s) is less than the sum of all fee payments made to the Contractor under this contract, the Contractor shall repay the excess amount to the Government. If the final adjusted fee exceeds all fee payments made to the contractor under this contract, the Contractor shall be paid the additional amount, subject to the availability of funds. In no event shall the Government be required to pay the Contractor any amount in excess of the funds obligated under this contract at the time of the discontinuance of work.
- (d) Fee(s) withheld pursuant to the terms and conditions of this contract shall not be paid until the contract has been modified to reduce the fee(s) in accordance with the "LEVEL OF EFFORT" special contract requirement, or until the Procuring Contracting Officer has advised the paying office in writing that no fee adjustment is required.

# **Section C - Description/Specifications/Statement of Work**

#### 1. FUNDING

The funding indicated below shall be utilized for the particular type of work described herein.

RDT&E: Technology development, prototype development requirements definition, preliminary design, contract design, test and evaluation support, concept development, feasibility studies, design tools, design reviews, product improvement (outside performance envelope).

SCN: Acquisition support of new construction surface ships to include detail design support, ship acceptance tests and trials, final contract trials, initial outfitting and ship post delivery support, shipboard installation support (new construction ships), engineering & integration supporting new construction ships, develop Navy training plan for new construction ships, program management support of new construction ships, logistic support of new construction ships, production engineering for new construction ships, quality assurance (new construction ships). Engineering support of Advanced Procurement, construction and long lead material procurement.

O&MN: Maintenance, training, operational support, reliability & maintainability analysis, general management support, general office support, staffing analyses, support of web sites, engineering & integration supporting active fleet ships, business and financial manager support, logistic support of active fleet ships, engineering support of active fleet ships.

NDSF: All of the above when in support of ship programs funded by NDSF.

FMS: All of the above when in support of ship programs funded by FMS programs.

OPN: Modernization support, shipboard installation support for OPN funded systems, shipalt support, program management support of OPN funded systems, logistics support of OPN funded systems, engineering support of OPN funded systems, production engineering for OPN funded systems, product improvement of OPN funded systems (within performance envelope), quality assurance (OPN funded systems), equipment procurement support.

#### 2. BACKGROUND

This task order is for the procurement of professional services support for the Naval Systems Engineering Directorate (SEA 05). Services required include naval architecture, engineering, ship design project management, ship design team and site support, technical library management, in service technical support and related engineering disciplines.

These services will include advanced ship and vehicle concept development; future fleet force concept development; design tools, ship design standards, processes and criteria development; comparative naval architecture; conversion and new construction concepts, naval architecture, marine engineering, preliminary design; contract design; systems engineering; preparation of specifications and technical data packages, design related acquisition program or project support, detailed design engineering and review; production engineering support, and other lifecycle engineering for surface ships and other surface vehicles, aircraft carriers, and submarines and other submersibles.

The engineering and technical work applies to research and development, new designs, construction, conversions, modernizations, and fleet support of all surface ships, submarines, and aircraft carriers under U.S. Navy Cognizance, including work performed under Navy cognizance for other U.S. government agencies or foreign countries. The

work also applies to special studies and program in the naval engineering field as well as development and update of technical directives, standards, specification, design data sheets, instructions and drawings.

#### 3. SCOPE OF WORK

The scope of work is described below. First it is synopsized. Then the scope of work is described as general requirements in the context of phases of, and/or activities that, constitute ship design, acquisition and support. Finally, the scope of work is organized into task areas with specific tasks that the contractor will conduct to support those phases and/or activities.

#### A. SYNOPSIS OF REQUIREMENTS

Provide engineering support to SEA 05 throughout the various phases of ship design, acquisition and support from concept studies to preliminary design, contract design, detailed design and construction, and life cycle support including, but not limited to, the following services:

In general, provide systems engineering analysis, reviews, studies, documentation and recommendations related to the development, interoperability, integration, operations, maintenance, sustainment, and disposal of the ship, including its systems, subsystems and equipment.

Review engineering and technical documentation, to determine compliance with engineering standards, and technical accuracy and adequacy in relation to functional, operational, and technical requirements.

Provide engineering and technical support to assist in resolution of emergent technical problems.

Provide Integrated Data Environment support and Computer Aided Design/Computer Aided Engineering support.

Conduct reliability, maintainability, availability, and environmental safety and occupational health analyses and reviews.

Provide subject matter technical expertise for meetings, presentations, inquiries and action item resolution.

Assist in the insertion of science and technology, including Small Business Innovative Research (SBIR), Manufacturing Technology (MANTECH) and Future Naval Capabilities (FNC) processes. Provide information and recommendations in response to Congressional, DOD, other Government agency, media, industry, or individual inquiries, and audits.

Undertake studies deemed necessary by SEA 05 in support of emerging requirements or to address ship technical issues. These services shall be provided to NAVSEA during all phases of a ship acquisition process. The contractor shall provide a labor mix appropriate for each phase of the ship acquisition process. The contractor shall provide professional services in project management, engineering, technical library management, and related disciplines.

Provide support for international programs and international data exchanges.

Prepare documentation to support and trace design decisions and evolution. Document design requirements, assumptions, and results.

B. GENERAL REQUIREMENTS (in the context of phases of, and/or activities that, constitute ship design, acquisition and support)

The performance of work shall include, but is not limited to:

Concept Studies - Concept studies are generally "clean sheet of paper" development of new ship configurations, new

ship types, evolutions of existing and/or previous ship classes. These studies are done in support of naval mission capabilities identification, new technology planning and assessment, analysis of alternative (AoA) studies, strategic planning, wargaming, and other efforts in support of the Navy After Next. These studies can also include formulation and analysis of force level concepts of ship, unmanned vehicles and other force components and support to the Center for Innovative Ship Design.

Feasibility Studies - Feasibility studies provide an impact analysis of the ship and its major systems on Navy ships with a minimum amount of data/information. Contact with Type Commanders, ship personnel, Commander Fleet Forces Command (CFFC), the Naval Warfare Development Center (NWDC), and the Naval Surface Warfare Center (NSWC), etc., may be necessary to define desired ship capabilities and features. Efforts will be required to gather interface data, background data and information, to analyze the impact of the desired capabilities, characteristics, and features. Feasibility studies are used for both new ship designs and backfit or conversion of existing ships. Feasibility study investigations associated ship systems are more than just the definition and identification of the impact on the systems themselves. The investigations must be comprehensive and identify changes that may affect ship size, signatures, major equipment selection, arrangements, location, and size of main equipment rooms (e.g. identify the need for additional machinery space, etc.), desired ship/system performance, or to determine services safety, manning and security requirements.

Preliminary Design or equivalent - Preliminary design activity comprises the development required to provide an engineering description of the ship and each major system in terms of very rough system diagrams, layout drawings and performance characteristics. Tradeoff studies are accomplished to refine subsystem definition and to provide a basis for the selection of major components. The preliminary design must achieve a complete engineering description of an integrated ship system so that the basic ship size and definition will not change during contract design. Specific baseline requirements to be used in each preliminary design task will be defined by the Task Order Manager upon initiation of the design. The following documents are typical of those that are used to define the baseline for preliminary design which may be furnished to the Contractor: Feasibility reports; Conceptual Design Reports; Requirements documents (Initial Capabilities Documents (ICD), draft Capabilities Development Documents (CDD)); Ship Characteristics; Preliminary System Performance Requirements; Interface Requirements; Safety and Security Considerations. In development of preliminary design of various ship systems, the contractor may be tasked to perform any of the following: Baseline definition; Establishment of design criteria and sources; Collection of interface data, information, and requirements; Conduct studies, analyses and investigations; Review interface documentation; Provide status of design developments reports; Presentation of design development; Documentation of design development; Develop or maintain Computer Aided Design models.

Contract Design or equivalent - During this phase, the results of the preliminary design must be validated and a greater level of design detail is normally developed. Contract design effort encompasses the preparation of the product model(s) and specifications required to provide an information package sufficiently detailed for negotiation of a construction contract with a ship builder. The ship and ship systems preliminary design deliverables, preliminary design reports, unresolved items and specifications and other documents establish the starting point of ship design. Shortly following the start of contract design, a baseline is established and configuration control is initiated. This control requires formal submission and approval of any changes. In development of various portions of contract design, the contractor may be tasked to perform any of the following: Define system baseline and develop criteria; Conduct special studies; Develop study sketches, calculations, notes and study drawings; Develop contract guidance drawings; Develop specification sections and inputs to various interfacing specification sections; Develop system development change reports; Develop a master equipment list for machinery systems; Develop configuration change request as necessary; Review interfacing documents and comment; Participate in and assist in circulation and review of the ship specification and adjudication of comments thereto and in preparation for and assistance during ship specification reading sessions; Develop design histories; Maintain design notebooks; Develop specific design documentation and reports; Assist in the design reviews of the preliminary design effort and resolve comments and recommendations; Develop or maintain Computer Aided Design models.

Detail Design, Construction, and Post Shakedown Availability (PSA) or equivalent - This phase supports new construction and lasts until the ship is completed. Tasks include review and approval (within specified timeframes) of various product models and/or drawings (system diagrammatic, arrangements, etc) and associated supporting documentation by the design agent (or his subcontractors). The items submitted for Headquarters review and/or approval also include but are not limited to: Shipbuilder forwarding letter; Supervisor of Shipbuilding (SOS) forwarding letter; System Description; System and equipment calculations. The following documents are used to define the baseline ship for which detail design support efforts may be required of the contractor: Detail ship specifications with all changes (Headquarters Modification Requests (HMRs), Field Modification Requests (FMRs) and modifications thereto); Contract Data Requirements List (CDRLS); Contract and Contract Guidance Drawings; Study Drawings; Military STANDARD MIL - STD-777 and applicable revision; Contract Design Change Reports, Preliminary Design Development; Reports and/or Impact Analysis report (if available); Contract design and Preliminary Design histories (if available); Contract Design and Preliminary Notebooks (if available); On site (shipyard or industrial activity) technical support for construction or PSA; ShipAlt Proposals (SAPs), ShipAlt Records (SARs), Justification of Cost Forms (JCFs) and Ship Change Documents (SCDs).

The number and type of systems involved in detail design support efforts are a function of the particular ship detail specifications.

In-Service Ship Design and Engineering - In-service surface ship design and engineering supports the fleet and handles class wide technical issues applying total ship systems engineering to maintenance, repairs and modernization. Additionally, In-service Ship Design and Engineering are primary first responders at NAVSEA to incidents that require technical guidance and response. Class specific technical issues addressed, include but are not limited to, SCD evaluations, TAT approval, and ICMP deferral adjudication. In-service Surface Ship Design and Engineering representatives interface with Engineering Field Representatives, Ship Maintenance Teams, Regional Maintenance Center and Naval Shipyard Chief Engineers (CHENGS) and Technical Warrant Holders (TWHs). In-service Ship Design and Engineering provides technical resolutions working across the program managers, PARMs and technical boundaries. Fleet modernization design engineering is done in support of major upgrades of existing ships and ship classes, as well as the latter flight of ships on programs that span a length of several years. These design engineering efforts are associated with the management of future (proposed and/or approved) military and technical improvements and changes. These efforts are similar to a new ship design effort in that it is an integration of a number of design disciplines aimed towards a single goal or objective. The significant difference between a modernization design effort and a new ship design effort is the existence of a baseline ship for which the requirements are defined. Also, there is documentation available (e.g., Ship Information Books (SIBs), Damage Control (DC) Books, Technical Manuals) that define the baseline ship. One of the significant tasks in a modernization design which may be required of the contractor, is the verification or definition of the currency of the baseline ship with the documentation. Modernization design integrates many military and technical improvements, many in the form of SHIPALTS and/or proposals, not only to eliminate conflicts between/among such improvements, but also to determine if baseline ship resources can adequately handle total package of improvements. The more important product of a modernization design effort are SHIPALTS and/or proposals that identify changes to new baseline resources either unknown or unplanned for the lifecycle operation of the ship.

Shipboard Installation Support - Provide support for various ship systems and shipboard equipment installations on both new construction and active fleet ships. This involves on board technical support during installation with redesign and documentation revision as appropriate. Alignment and calibration support may be involved as well as trouble-shooting and testing.

Independent Design Reviews - Participate in independent design reviews involving in-depth investigation and analysis of a system, subsystem, or equipment for the purpose of identifying problem areas, technical deficiencies, and recommended design solutions. An independent design review team is usually composed of a varied team of government employees, industry representatives, and support contractors who have sufficient expertise to conduct the analyses. Reviews will encompass examination of top level requirements and specifications, reliability,

maintainability, and availability data, suitability of equipment/system for intended purpose, operational characteristics, human factors, safety, cost, size, and weight. At the conclusion of an independent design review, prepare a comprehensive report of the findings and recommendations including redesign proposals as appropriate.

Special Studies - Contractor may be tasked to perform special studies on ships, ship systems and shipboard equipment. These studies involve the solution of problems that degrade the operational performance of hull, mechanical, and electrical systems, and related equipment which go beyond the narrow scope of technical changes and product improvements. Solutions will consider improvements in shipboard operator/maintainer training, integrated logistic support documentation, spare parts support, and repair recommendations. Such non-technical improvements may be accomplished in conjunction with or as alternatives to product improvements. Solution development involves interim as well as long term (or final) fixes. The contractor will be required to prepare appropriate reports.

ABS Rules for Building and Classing Naval Vessels - This effort shall include the development and maintenance of the technical criteria used in determining technical acceptability as a part of classification. The contractor shall complete the development of technical criteria for applicable programs which will be in the form of ABS Rules for Building and Classing Naval Vessels (NVR) for use in the acquisition process of Naval combatant ships. The NVR is written to be applicable to any non-nuclear US Navy surface ship, with a special focus on those typically designed using combatant standards. The NVR will be used in conjunction with a collection of military-unique appendices provided by NAVSEA to cover all functional areas of a warship and address all aspects of verification, validation and certification.

Application of other American Bureau of Shipping (ABS) rules (non-NVR) and US Coast Guard (USCG) regulations to naval ship projects – This effort shall include the following: Regulatory body corporate history and issue management; Digital data management/collaborative work environment/integrated design environment; Project, logistic, and financial management; Physics based simulation, and visualization of designs; Technology management; Test and trial management; Engineering change proposal development for ships and production systems; Modernization (alteration) development; In-service ship modernization including in-service installations; Material selection and fabrication; Producibility studies; Standardization/reverse engineering; Independent design reviews; Failure modes and effects analysis; Ship systems integration; Prototype development; Ship model testing and other testing work in support of ship design; Ship certification; Design tools, standards, processes and criteria development and updates; Risk analysis; Historical ship design analysis and archiving of information and data; Comparative naval architecture and ship design.

#### C. TASK AREAS WITH SPECIFIC TASKS

ENGINEERING (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

# E1: Hull Systems Engineering

Develop ship compartmentation, external arrangements, topside arrangements, and general access design. Develop and maintain the Weight Estimate. Develop, validate, and document the hull form, control surfaces, appendages, and stack configuration. Perform speed/power calculations, maneuverability assessments, seakeeping performance predictions, and hydrodynamic load analysis. Validate that the ship meets the stability and reserve buoyancy requirements. Develop the structural design of the ship including structural arrangements, stress analysis, scantlings, and design criteria. Develop space layouts for habitability (food service, sanitary, living, recreation, leisure & community), administrative, medical/dental, laundry, and stowage and issue room spaces. Develop and list hull outfitting equipment requirements. Develop a concept acoustic design with options for a total ship system solution to mitigate flight deck, machinery, HVAC, and fluid system airborne noise.

E2: Machinery Systems Engineering

Develop and/or oversee the design of the selected ship propulsion system(s), including the necessary calculations, studies, analyses, testing, and modeling and simulation to support the design. Develop and/or review the design and prepare drawings defining the arrangement of main and auxiliary machinery spaces, propulsion shafting, and combustion air intake and exhaust gas systems. Develop and/or describe the shipboard industrial facilities (workshops, etc.) to define equipment locations and space requirements. Define, develop, and document the design of the HVAC systems and refrigerating plants. Develop and/or review the design for all ship environmental systems, including the necessary calculations, studies, and analyses to support the design. Perform studies and prepare drawings for auxiliary equipment. Provide the documentation required to justify and trace detail design decisions and evolution. Perform studies and analyses, define, identify and document the design of components necessary for the ship's electrical and degaussing systems. Develop and describe the machinery control systems. Perform studies and prepare drawings to describe the ship steering and motion control systems.

Provide engineering support for construction, alteration, testing, and sea trials of deck systems and machinery systems as follows:

- a. Review and monitor detail design and installation of deck systems and machinery systems. Attend status reviews at NAVSEA, at the shipbuilding yards, and onboard ships, documenting discussions, findings, and recommendations.
- b. Attend pre-trial reviews, providing reports of findings and recommendations to facilitate work-up of ship systems for trials.
- c. Participate in ship sea trials and assist in the adjudication of trial deficiencies.
- d. Attend design reviews at NAVSEA and vendor facilities, documenting discussions, findings, and recommendations.

#### E3: Warfare Systems Engineering

Establish the spatial adequacy of the Combat Systems compartments, and define the special installation arrangement requirements for those compartments. Set forth in design and engineering terminology the ship Combat System design requirements necessary to meet the performance requirements in the CDD. Analyze the Radiation Hazards (RADHAZ), i.e. Hazards of Electromagnetic Radiation to Personnel, Ordnance and Fuels (HERP, HERO, HERF), and Nuclear Electromagnetic Pulse (NEMP) in order to eliminate hazards to personnel and material. Determine and record the maximum achievable safe pointing and firing zones for guns, missiles, etc. onboard ship. Perform studies evaluating different topside arrangements in terms of the impact on weapons systems and emitters. Specify settings of cut-out cams, fixed stops, and computer software settings. Establish and record blast areas (temperature and pressure; positive and negative) which result from ordnance firing. Establish and record required settings for emitters and the resulting radiation zones. Define all operational events necessary to assure continuity of the man-machine interface as reflected on the Functional Flow Diagrams for use in determining/evaluating combat systems reaction time and the practicability of combined operations. Describe the operational relationships and procedures that take into account the design philosophy utilized in space allocations and arrangements, and provide operating personnel with station manning requirements, assigned responsibilities, and operational procedures. Eliminate or minimize Electromagnetic Interference (EMI) both above and below deck. Describe the operational relationships and procedures that take into account the design philosophy utilized in space allocations and arrangements, and to provide operating personnel with station manning requirements, assigned responsibilities, and operational procedures. Recommend/implement the transition of legacy combat systems to modern open-standard/architecture digital systems by leveraging existing technology refresh-capable, ruggedized Commercial Off The Shelf (COTS) equipment, systems and architectures. Determine, define and record the electrical/electronic/logical interrelationships between a Core Data Network (CDN) and other ship systems. Also, determine, define and record the electrical/electronic/logical interrelationships between these sub-systems, and the ship support systems.

# E4: C4ISR Systems Engineering

Establish a comprehensive list of all Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems, equipment, and antennas. Establish the spatial adequacy of C4ISR compartments, and define the special installation arrangement requirements of those compartments. Depict the primary operational mode for each major operational function of all C4ISR systems and their primary data flow path. Enable the determination of the optimum interface of sub-systems to achieve the desired capability. Analyze the electromagnetic compatibility (EMC) of equipment/systems resulting from design characteristics or physical arrangements/locations in order to eliminate or minimize Electromagnetic Interference (EMI) both above and below deck. Provide a plan to optimize the operational performance of topside HF/UHF/VHF Communications Antennas considering their location and the effects of ship's structure. Analyze the ship's susceptibility relative to electrical and physical security of electrical information processing systems. Identify the SHIP PROGRAM LAN architecture, infrastructure and design considerations, including open architecture. Provide systems engineering support to the SHIP program for development of the C4I Support Plan (C4ISP) and Integrated Architecture. Recommend/implement the transition of legacy C4ISR systems to modern open-standard/architecture digital systems by leveraging existing technology refresh-capable, ruggedized Commercial Off The Shelf (COTS) equipment,

# E5: Mission Systems Engineering

systems and architectures

Develop and describe the handling and stowage systems for Cargo/Ammunition (Ground), Aviation Ammunition, Stores, and United States Marine Corps (USMC) Vehicles including vehicle ancillary services in sufficient detail to provide arrangements, weight, and cost data. Develop, design and describe the replenishment system in sufficient detail so that sizing criteria, system arrangements, characteristics of main and auxiliary equipment, and estimated weights can be obtained. Develop and describe in sufficient detail to provide arrangement, weight, and cost data the following items: the Well Deck and Landing Craft Handling systems, Anchoring, Mooring, and Towing systems, Boat Handling and Unmanned Vehicles, small craft, and towed body interface (launch & recovery, and stowage and handling systems), Torpedo handling/stowage and Torpedo launch, and Medical and Dental facilities. Develop modeling and simulation (M&S) tools for demonstrating the functionality of the SHIP super system and ensure that the integration of all subsystems meet operational requirements. This M&S tool can be used to demonstrate the flow of weapons/cargo, vehicles and troops, along with sortic generation rates for both aircraft and landing craft onload/offload capabilities. This will also aid in providing detail to arrangements, weight and cost data for contract design initiation, and useful in identifying Shipboard workload reduction concepts.

## E6: Human Systems Integration (HSI)

Conduct Human Systems Integration (HSI) across all ship/system boundaries and interfaces. A human-centered design approach shall be employed that optimizes manning, enhances human performance, and achieves the mission requirements. Address human factors engineering, human performance, manpower, personnel, training, survivability, system safety, and quality of life aspects of the ship/system design. Ensure that the ship/system design/design modification/modernization efforts or upgrade maintains optimized manning throughout the ship/system life cycle, minimizes total ownership cost, and provides the crew with a high quality of life.

Perform top-down-requirements analyses to allocate functions/tasks to hardware, software, or to personnel in support of total system performance, which includes human performance. Demonstrate that an optimized crew can effectively operate and maintain the ship/system.

Define the skills required for each task; work load (hours / week); and organization for each billet and off-board personnel required to operate, maintain, and support the ship/system over its operational spectrum.

Design a Total Ship System Training Architecture (TSSTA) that provides for a fully mission ready crew, including

individual, team, and battle group training, and shore establishment. The TSSTA shall develop specified skills for watchstanding and on-board maintenance. The Contractor shall identify any changes in the U.S. Navy infrastructure, policy, statutes, organization, and procedures, necessary to operate and support the introduction and operation of the ship/system into the current force.

The following are applicable references, provided for guidance in HSI activities:

- 1) ASTM F1166-95a Standard Practice for Human Engineering Design for Marine Systems, Equipment, and Facilities
- 2) ASTM F1337-91 Standard Practice for Human Engineering Program Requirements for Ship and Marine Systems, Equipment, and Facilities
- 3) IEEE Std 1220-1998 Standard for Application and Management of the Systems Engineering Process

Develop the Human Systems Integration (HSI) Plan. The HSI Plan describes the approach to developing and managing the ship/system HSI and manning requirements, HSI elements, and functionalities to ensure the attainment of ship/system human performance, safety, habitability, personal survivability, manning, personnel, and training objectives. The HSI Plan shall include ship/system HSI scope and structure, HSI engineering process and controls integrated with the systems engineering process, HSI Schedule, and the HSI engineering team composition, for all ship/system HSI activities, including manpower, personnel, training, human engineering, and Quality of Life (QOL). The HSI Plan identifies applicable standards and guidelines to ensure that ship/system HSI objectives are met, describes HSI activities and products at each phase of acquisition, identifies HSI measures of effectiveness and measures of performance, and describes studies and analyses to develop the training concept, workload reduction concept, and human machine interface design concept for the expected worst case ship operational environments.

Develop the Navy Training Systems Plan (NTSP), which defines the training requirements and resources for emergent requirements and systems (including major subsystems, e.g. gun, munitions). The NTSP documents mechanisms for ensuring that emergent training requirements are met, and identifies personnel required to install, operate, maintain or in any way use the emergent system. The NTSP shall be prepared in consideration of the requirements of OPNAVINST 1500.76, "Navy Training System Requirements, Acquisition and Management" and NTRDM P-751-1-9-97, "Navy Training Requirements Documentation Manual."

Develop the Manning Concept to provides a detailed description of the ship/system manning including:

- a) Definition of each billet and description of tasks to be performed, workload (hours per week), and the skills required to perform each function.
- b) Risks associated with each function and system; include mitigation measures and manning impact.
- c) Personnel management concepts, such as crew rotation schemes; crew selection criteria, assignment, training, and deployment; shipboard organization including operational and administrative organizations to support battle management; platform management; operational guidelines for HM&E, damage control, and automation;
- d) Analytical reports and/or test results supporting manning concept design including:
- i) A Crewing Workload Analysis Report that validates the suitability of the crew size and composition to perform required {ship/system} missions, maintain ship systems and/or equipment, conduct shipboard evolutions, and provide necessary technical, engineering, material, logistics, and administrative support across the full spectrum of peacetime and wartime applications.
- ii) A Crew Training Analysis Report that validates that crew level training is fully supportive of required

{ship/system} missions and is sustainable.

Develop System Manpower, Personnel, and Training Policy Requirements. System Manpower and Personnel Policy Requirements serve to identify required or recommended changes to statutes, policies or doctrine in order to ensure realization of the {ship/system} manning concept and manpower, personnel, and training objectives.

Design human machine interfaces for operations and maintenance workstations and work sites based on an analysis of requirements for human interaction with automation, and techniques to automate, consolidate, eliminate, and simplify functions and tasks on legacy ships and systems. Specific attention will be given to reduction in human error in operations and maintenance, and making systems error tolerant.

Develop HSI Performance Metrics for the engineering design, risk management and test and evaluation of human performance at all workstations and work sites used for operations, maintenance and support.

## E7: Total Ship Survivability Engineering

Develop and/or provide the design requirements for ship susceptibility. Ensure that the ship design will fulfill the Radar Cross Section, Acoustic Radiated Waterborne Noise, Infrared (IR), and Magnetic signature goals as specified in the CDD. Analyze the ship's proposed Combat Systems self defense capability. Assess the vulnerability of the ship design. Assist in the development and selection of ship protection features, which will enable the ship to fulfill the goals for survivability as specified. Ensure that the latest survivability features against AIREX threats are applied to the ship design so that the ship fulfills survivability goals as specified in the CDD. Ensure that the ship design will fulfill the UNDEX protection goals as specified. Ensure that adequate and latest Fire Protection, Damage Control, CBR warfare defense, and Recoverability capabilities are incorporated in the ship design in order to fulfill the goals for survivability as specified. Ensure survivability solutions are incorporated into the design package.

Develop and/or conduct survivability studies for hull, mechanical, and electrical systems and equipment. Develop and/or describe survivability/vulnerability methodology, perform and/or review ship vulnerability model studies, develop and assess shock hardening techniques, acoustic and non-acoustic signature, investigate fire and damage control aspects as they apply to ship survivability, and weapons effects, both conventional and nuclear. As necessary, the efforts will involve consideration of ballistic effects, thermal effects, electromagnetic pulse (EMP), nuclear air blast, underwater shock, and radiological, chemical, and biological warfare. Investigations and studies will involve total ship survivability system and subsystem survivability, and defense mechanisms.

Provide technical and management services in support of the development and design evaluation. This includes Hull, Mechanical, and Electrical (HM&E) system analysis for survivability strengths and weaknesses. Perform identification of system compliance with basic principles of separation and redundancy. Research various HM&E systems to identify design issues in order to enhance the survivability of the ship. Provide support in the development of the total employment of these systems into a basic concept of operations (CONOPS). Review the Damage Control CONOPS as the system design matures. Develop and provide methods by which the design can be evaluated within the context of a variety of casualty scenarios. Support the planning and coordination of working groups and design reviews

## E8: Aviation Systems Engineering

Develop and describe all facets of design related to aviation. Develop and describe the ship flight deck and hangar deck design and requirements, including: sizing, location of deck markings, servicing requirements and location, spotting, deck flow, placement and sizing of the aircraft elevators, helo control stations, hangar doors, Recovery Assist, Securing and Traversing (RAST) System, Jet Blast Deflector (JBD) and ski jump, maximum density spotting, and vertical replenishment (VERTREP) operations. Develop and describe the visual landing aids requirements and night vision device compatibility requirements in sufficient detail to provide arrangements, performance specifications, and cost data. Develop and describe aircraft maintenance facilities requirements to a level that permits

optimum size and locations in the ship. Support aviation modeling and simulation efforts, including the development of a ship effectiveness model. Perform modeling and simulation to obtain airwake and thermal data with various ship and aircraft configurations. Provide support to incorporate existing or planned aircraft programs in order to assess their impact on ship design. Develop and describe ship aviation related C4I requirements, including: define the interfaces and the information products and services exchanged between the aviation and ship systems for mission planning and execution, support, and training. Specify communications, data links, and information systems as required.

# E9: Engineering Design Data & History

Review, maintain and make recommendations with regard to engineering plans, program records, technical manuals, design histories, design configurations, databases, regulatory body and other documents. Maintain a digital technical library and database with paper backup. Prepare documentation to support and trace design decisions and evolution. Document design requirements, assumptions, and results. Implement requirements traceability mapping tools.

## E10: Marine Regulatory Body & Commercial Standards

Evaluate issues and surface ship historical background to provide recommendations related to regulatory body and American Bureau of Shipping (ABS) issues, including statutory compliance. Review, and provide recommendations on total commercial ship and ship system performance specification and design and certification issues. Maintain a legacy specification or requirements document incorporating lessons learned over the course of the program.

# E11: Computer Aided Design & Engineering.

Provide digital engineering support services, which includes Computer Aided Design, Computer Aided Engineering, and modeling and simulation-based analyses. Provide an Integrated Design Environment.

#### E12: Test and Evaluation Engineering

Draft, analyze, review, and provide recommendations on test and evaluation program planning, provide installation, testing, execution documentation and checkout support of ship and mission systems and participate in tests and trials. Conduct testing of ship systems and equipment. Tests may be either shore based or on board ship and are conducted for the purpose of demonstrating compliance with published specifications, drawings, etc., and demonstrating attributes such as workmanship, alignment, strength, rigidity, tightness, and suitability for the purpose intended. During these tests, the contractor will arrange for the provision of all necessary materials, power, equipment, instrumentation, and personnel to conduct each test. Appropriate documentation, test plans, test agenda, and test reports will be prepared by the contractor. Participate in various ship trials. These trials include Acceptance Trials, Final Contract Trials, Standardization Trials, Vibration Trials, Machinery Performance Trials, Dock Trials, Post Repair Trials, Shock Trials, and other special trials. Perform specific scientific, operational, and physical tests and evaluations in support of developmental items. Provide engineering support during trial card meetings and screening conferences. Conduct a technical evaluation of responses to all trial cards to verify the feasibility of the response and compatibility with ship systems. Provide a surge trial card team during peak trial card activity to investigate and resolve trial cards that impact HM&E systems in conjunction with the trial card coordinator and NAVSEA technical codes.

# E13: Reliability, Maintainability, Availability Engineering.

Conduct reliability, maintainability, availability, transportability, hazard, environmental, occupational health, system safety, risk analyses, and other system engineering analyses. Provide reports, plans, and other substantiating documentation as required. Provide support for the development, implementation, and maintenance of an engineering database consisting of equipment operating times; Reliability, Maintainability, and Availability (R/M/A) data; Configuration Management and Maintenance; etc. This effort includes collection and development of

engineering data and providing the data in reports which identify equipment configuration, repair/failure history, maintenance projections, and R&M projections. The data base is sufficiently adequate for projecting requirements for spare engine, depot repair projections, modification kit requirements, special support equipment and systems stock planned program requirements. Develop and provide maintenance plans with schedules identifying periodic inspection and maintenance actions required by the maintenance projections.

## E14: Failure Modes and Effects Analyses

Conduct failure modes and effects analyses and prepare appropriate reports. A failure modes and effect analysis is an organized procedure for identifying evaluating, and analyzing all known potential failure modes for the equipment/system in question, together with the causes and the proposed actions to inhibit such failures or reduce their criticality. All detection mechanisms and backup means of operation for a given failure mode shall be identified. For all single-point failure mode (where no redundancy exists in the design) any compensating provisions such as failure indicators, fail-safe features, securing mechanisms, and alarms shall be identified. Where there are no compensating provisions, justification shall be provided for their lack of adequate compensating provisions recommended.

## E15: Materials Engineering

Provide support in the development, analysis, testing and certification of materials and their application. Provide support in the areas of materials engineering, and materials quality assurance and reliability. Work consists of specification development and revision, evaluation of new materials, recommendation/selection of materials for specific applications, testing of selected materials (both destructive and non-destructive), failure analyses, and fabrication and joining techniques, among others.

# E16: Ship Certification

The contractor shall provide ship and ship system certification support to include as a minimum: development or evaluation of Total Ship Certification strategies and plans; development or evaluation of individual system certification requirements and associated design rules, certification criteria & procedures; development or implementation of certification documentation including the management of Objective Quality Evidence to support certification determinations by cognizant technical authorities; and, engineering analysis and technical support for the planning & execution of a comprehensive Total Ship Certification Program on a given ship. This will also include liaison to, or participation with, the American Bureau of Shipping (ABS).

## E17: Total Ship Systems Integration

Perform total ship system integration. Total ship systems integration is the amalgamation of the principal design products and trade-off studies during the ship design process into a design package that synthesizes all shipboard subsystems into a total ship system. In this process, all technical aspects of the design are required to be coordinated, configuration control managed, new technologies prioritized and evaluated from a risk/reward basis, and inconsistencies or incompatibilities between ship subsystems resolved. Ship system integration tasks may also be assigned during ship modernization and conversion. Establish and control major ship interfaces to support modular payloads. The contractor shall conduct ship surveys and audits to identify, evaluate, and resolve ship systems engineering discrepancies that impact ship performance. Provide technical services at meetings, technical reviews and program reviews. Interface with NAVSEA technical codes, Program Office, shipbuilders, planning yards, Navy Labs, Supervisors of Shipbuilding and support contractors to evaluate and resolve technical issues.

## E18: Integrated Topside Design (ITD)

Perform comprehensive topside design integration. ITD is a Systems Engineering and integration effort that treats all ship topside structures, associated equipment and cooperating elements as a total ship topside system while

considering the impact of the mechanical, climatic, environmental, signature and electro-magnetic environmental effects upon the whole system. Integrated Topside Design shall be performed in accordance with the Integrated Topside Design and Certification Process for New Construction Ships and the Integrated Topside Design and Certification Process for In-Service Ships.

E19:Design for Production / Producibility Engineering Studies

Conduct design for production engineering efforts to develop recommended changes to ship design to improve the producibility. Develop generic build and/or production strategies. Conduct producibility engineering studies on various ship systems and equipment, identifying and evaluating alternatives in designs which could reduce construction and/or fabrication costs or time. Identify and evaluate changes in ship materials, equipment, or configuration which have potential construction cost savings and favorable impact upon weight or performance. Identify changes which could reduce maintenance burden or reduce numbers of parts thereby enhancing utility over the life cycle.

E20: Value Engineering Studies

Conduct value engineering studies on various ship systems and equipment, identifying and evaluating alternatives in designs which could reduce construction and/or fabrication costs or time. Identify and evaluate changes in ship materials, equipment, or configuration which have potential construction cost savings and favorable impact upon weight or performance. Identify changes which could reduce maintenance burden or reduce numbers of parts thereby enhancing utility over the life cycle.

E21: Standardization and Reverse Engineering

Develop Navy owned designs for ship equipments including (as appropriate) reverse engineering (forensic analysis of existing equipments for materials, fabrication techniques, dimensioning, and tolerancing). Unique designs will be produced for individual equipment or families of equipment, including but not limited to a series of fire pumps, winches or valves with differing capacities.

E22: Product Model, Drawing Preparation and Review

Develop and produce the following ship design products:

Ship design product models and drawings;

Ship construction product models and drawings;

Selected record drawings;

Installation control drawings;

Ship equipment drawings (including outline drawings, assembly drawings,

subassembly drawings, parts lists, JCFs, SAPs, SARs, SCDs);

Non-deviation drawings;

Standard and Type drawings;

Project peculiar documents.

Provide appropriate levels of review of any such product models and drawings. Reviews may be required for format,

technical feasibility, dimensioning and tolerancing, producibility, technical accuracy, or any combination of the foregoing.

E23: Models and Mockups

In support of certain engineering tasks, construct feasibility models or mockups of various ship systems and equipment and assemble items or developmental equipment for shipboard tests and simulations. This includes electrical breadboarding, scale study models of handling equipment, compartment arrangement models, etc. Extensive use of computer aided design and simulations is anticipated.

E24: Hull Form Engineering

Provide technical and scientific efforts in support of hull form research and development engineering efforts in the areas of Hull Form Studies, Risk Assessment, Wind and Wave Effects, Theory Advisory, Dynamic Stability, and Computational modeling.

PROJECT MANAGEMENT (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

PM1: Project Work Schedule, Cost Management

Provide formal management systems and processes to manage work schedule and cost, specifications, configuration management, and product quality assurance.

PM2: Ship and Ship Systems Cost, Schedule and Performance Management

Evaluate issues and provide recommendations related to ship, ship system, and information system cost, schedule, and performance.

PM3: Technical and Detail Design Management Review

Manage the technical studies, design, design reviews, problem resolution, and life-cycle monitoring work. Support design meetings, zone reviews, program reviews and conferences.

PM4: Technical Action Item Tracking.

Maintain a computer based action item tracking system to track all technical work done in support of ship projects.

PM5: Specification Development Process & Management

Manage development and decision basis of performance-based specifications, circulars of requirements, and other specifications.

PM6: Configuration Management

Contractor shall provide technical and engineering services in support of configuration management. Configuration management is a discipline that integrates the technical and administrative actions of identifying the functional and physical characteristics of an item during its life cycle, controlling changes to those characteristics and providing information on the status of change actions. Configuration management is comprised of three major areas of effort: identification; control; and status accounting. The contractor will provide technical support for configuration management in all phases of the life cycle of a configuration item. This entails conducting configuration audits, identifying items, establishing and maintaining databases, engineering change proposal preparation and tracking, participation in technical reviews, and preparing of appropriate reports during the ship design.

PM7: Engineering Change Proposal Development

Changes and improvements during the detail design development may be necessary. These can result from directed changes in basic requirements or from discrepancies in specifications or contract design drawings. In most cases, these changes and improvements will be implemented by Engineering Change Proposal (ECP) in coordination with the Ship Acquisition Program Manager (SHAPM).

Contractor tasks may include the following:

Identification during detail design review, of changes, and improvements that may require ECP action

Development of preliminary ECP's for review & comment

Participation in preliminary ECP review meetings

Development of final ECP's for presentation to SHAPM change control board

Review of resulting detail design changes developed in response to an approved ECP

PM8: Computer Aided Design Management.

Manage efficiently design and design integration using 2-D computer aided design tools; 3-D product modeling tools; structural, hydrodynamic, and various engineering software tools.

PM9: Project Team Integration

Provide processes to manage multi-disciplinary project teams. Teams may include personnel from other companies, shipyards, or Navy activities (i.e. Naval Surface Warfare Center).

PM10: Classified Project Design Site Process/Management

Maintain management processes to work on classified projects up to Secret within the Design Site described in Design Site task 1 (DS1) below.

ENGINEERING MANAGEMENT SUPPORT (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

EM1: Total Ship Systems Engineering Team/Integrated Product Team Management Support

Arrive at fiscal estimates and schedules to satisfy engineering team/integrated product team (IPT) requirements. Ensure each task is scheduled to permit the most continuous flow of activity and to make all participants aware of changes in direction. Be responsible for ensuring all engineering team/IPT products are integrated and consistent within the engineering team/IPT as well as across all other engineering teams/IPTs. Where decisions or compromises cannot be made within the engineering team/IPT, request a decision by a higher authority.

EM2: Design Integration Management Support

Perform system design reviews in the context of a total ship engineering approach. Review, analyze, make recommendations for the use of, and implement design budget controls. Review, analyze, and make recommendations for the use of, and implement design decision-making tools. Develop a Specifications package consistent with the intent of the Acquisition Strategy. Establish and maintain a Configuration Management Database. Review, analyze and track Contract Data Requirements List (CDRL) items.

EM3: Engineering Management Documentation Support

Draft and maintain the Ship Design Systems Engineering Management Plan (SEMP), Annual Execution Plan and Ship Design History. Develop a Modeling and Simulation support plan. Develop a Verification, Validation and Accreditation (VV&A) Plan. Review and modify ship program and project products for proper grammar, readability, and clarity. Perform all aspects of design related data management, including the identification of data items, acquisition, control, maintenance, and storage of data from preliminary design through construction and ship delivery. Provide technical writing assistance including preparation of Technical Reports and Annual Reports.

## EM4: Business and Financial Management Support

Provide draft budget exhibits for all appropriation accounts, including RDT&E and SCN, for the annual FMB review, OSD review, and President's Budget congressional review. Provide a strategic budgeting Red Team, to review and prepare analysis reports of draft budget exhibits to reflect possible reaction of higher level comptroller officials and congressional staff members to the budget. Provide funds execution plans for anticipated obligations and expenditures for each appropriation account, including RDT&E, SCN, OPN, and O&MN, for the life of the funds appropriated for each fiscal year, and update the plans to reflect the status of actual execution. In collaboration with participating managers, provide funds execution plans for anticipated obligations and expenditures for each component of cost in the Ship Project Directive work breakdown structure for each item of government furnished equipment over the entire duration of the life of the funds. Update the plans to reflect the status of actual execution. Provide funds execution information for inclusion in program briefings, reports, and correspondence to comptroller officials and congressional staff members.

## EM5: Risk Management Support

Provide technical and engineering expertise to identify, analyze, mitigate, and track the program's technical risks. Implement and execute the program's risk plan as it applies to technical risk. Provide technical risk assessments, analyses, metrics, and recommendations. Research technical risk lessons learned from other Ship Acquisition Programs, and select risk items that may be applicable to ship programs and other projects. Provide training for members of SDM teams on techniques available to control risk. Prepare information and summaries of technical risk management initiatives, plans and results for inclusion in briefings, status reports, and program milestone documentation for reviews by acquisition officials in the Navy Secretariat and the Office of the Secretary of Defense.

# EM6: Management Operating System Support

Assist with the development, implementation, and execution of the NAVSEA/PEO Management Operating System, including, but not limited to: action item tracking and reporting, development and maintenance of the Master Design Schedule, and activity log and workload tracking and projections.

## EM7: International Technical Exchange Program Management Support

Identify potential foreign programs and design efforts of beneficial interest to SEA 05 and ship programs. Workwith, but not limited to, Navy International Programs Office, technical authorities, other DoD program offices, and foreign governmental officials to establish a sufficient set of agreements to permit the exchange of relevant data between ship and selected foreign programs and design efforts. Plan and facilitate meetings and conferences between SEA 05 and ship programs and selected foreign programs and design efforts. Track data requests and exchanges between SEA 05 and foreign programs and design efforts.

#### TECHNICAL STUDIES (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

# TS1: Concept Studies

Perform engineering concept studies to develop and define new ship designs in support of the Joint Capabilities Integration and Develop System (JCIDS) [CJCS 3170], analysis of alternative efforts, technology assessment and

needs identification, strategic studies and planning, force structure studies, naval wargaming, and emergent joint and naval capabilities requirements.

#### TS2: Future Force Formulation Studies

Develop force level concepts including ships, unmanned vehicles, and other force components. Performance warfare assessments and analysis of alternative future forces. Support war gaming on force level concepts.

# TS3: Ship Design Tools, Processes, Practices, Criteria, Databases

Develop and upgrade computer tools that are used to do engineering analysis and other engineering efforts in support of ship design and naval engineering. Develop and upgrade ship design and engineering processes, practices and methods. Develop and upgrade engineering and design criteria for naval ship design. Develop and upgrade databases, web pages and other ship design and engineering repositories and references.

Collect existing information on design tool usage, standardization, data translation/exchange and usage of IDEs on Navy programs from various sources including recent studies, publications, key SEA 05 personnel with related responsibilities (current and former TWH for Product Data Integration and Exchange/Tools), etc.

Create list of issues related to standardization of design tools and approach that will impact the cost of the Future Fleet. Examples of areas to investigate include shortfalls in the areas of design tools, drawing manuals, training packages, vendor furnished information, and other tech documents/electronic reviews.

Provide alternatives for implementing standardized design tools and approaches that will improve the affordability of ship design and construction programs.

#### TS4: Human Systems Integration Engineering

Identify the minimum quantitative and qualitative manpower requirements essential to operation, maintenance, and support of the ship under given conditions of readiness with the goal of a manpower reduction in accordance with the CDD. Perform a Top-Down Functional Analysis for ship in conjunction with other IPTs, to support the total ship manpower assessment and provide analysis for HSI support and requirements definition and decomposition. Ensure that human factors and other HSI domains are integrated into the design at the earliest possible stages keeping shipboard workload reduction in focus. Review, revise, and recommend methods and rationale that identify military and civilian personnel with the skills and grades required to operate and maintain ship systems and equipment. Provide technical analyses, reviews, studies, inputs and recommendations for the development of training documentation, processes and plans.

## TS5: Integrated Logistics Support (ILS)

Draft and recommend technical ILS requirements in shipbuilding, systems production, and modernization throughout program life cycle.

Provide support in all areas of ILS for ships, ship systems and shipboard equipment and prepare supporting documentation. ILS is the composite of all support considerations necessary to assure the effective and economical support of a system or equipment for it programmed life cycle. Logistics elements include all requirements and resources necessary to operate and maintain the system or equipment at all levels of support (organizational, intermediate, and depot). Provide recommendations for spare parts based upon technical investigations of problems or identified maintenance issues. Provide technical analyses in support of logistics management, and perform reviews of technical manuals and other logistics documentation.

The elements to be addressed include:

Maintenance Planning;
Support and test equipment;
Supply Support;
Packaging, Handling, storage and transportation;
Technical Data (including drawings);
Technical publications;
Facilities;
Personnel and training.

TS6: Ship Conversion

Undertake ship conversion feasibility studies in support of emerging requirements. These studies shall be supported by cost and schedule estimates.

TS7: Red Team Reviews / Independent Review Panels / Audit Teams

Facilitate and provide required technical information/corporate memory expertise to IPTs, special advisory boards, offsites, working groups and audit teams.

TS8: Special Studies Engineering

Undertake special studies in support of emerging requirements or to address fleet technical issues.

TS9: Independent Cost Estimates and Schedules

Prepare independent cost estimates and schedules for system procurement or repair, life cycle, production, or other activities and provide recommendations on cost realism.

TECHNICAL LIBRARY MANAGEMENT (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

TL1: Design Histories

Maintain a complete electronic and hard copy design history including specifications; all technical issues studied and reported; correspondence tracking system, plans and schedules, technical presentations and briefings. Support maintenance of data and/or history on a Navy web site.

TL2: Design Databases

Manage and maintain database. Maintain document library in a searchable format. Library is to be updated and available to personnel at design site and NAVSEA technical codes. Provide technical direction/assistance to install library and search system onto local area network.

ON-SITE SUPPORT FOR CONTRACT DESIGN, DETAIL DESIGN, CONSTRUCTION AND POST-DELIVERY (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

PS1: On-Site Engineering Support

Provide on-site engineering, project management and technical support at shipbuilder's facility, and repair facilities during detail design, construction and post-delivery.

PS2: On Site Test, Trials, Evaluation and Logistics Analysis Support

Provide on-site test, trials and logistics analysis support at shipbuilder's facility during detail design, construction and post-delivery. Provide logistical analysis and support to SEA 05D for issues relevant to ships.

DESIGN SITES (Funded by RDT&E, SCN, OPN, O&M, NDSF, FMS)

DS1: Design Sites

Provide and maintain a suitable, co-located facility from which to conduct this work, within a 2-mile radius from the Washington Navy Yard, to support integrated design and engineering capability including accredited connectivity to the NAVSEA Zone 1 network infrastructure. This facility shall be capable of accommodating government personnel and contractor personnel numbers as needed to support the project or program. This facility shall house a technical library (digital and paper) of no less than 400 square feet. The design site shall contain conference and meeting facilities including a networked conference room with projection and VTC capability (including the ability to host a VTC with potentially 7 different locations with at least one site simultaneously displayed with a data presentation) capable of seating 40 people. The conference room shall be capable of being secured for classified meetings to the Secret level. The design site shall have ready access to a networked conference room with projection capability capable of seating 150 people. The design site shall contain a dedicated networked conference room with projection capability of seating up to 12 people. The facility shall provide all computer hardware and software required to support these task statements. The facility shall have a secure room suitable for closed storage of classified material up to Secret and for classified data processing. The design site shall meet requirements for security accreditation up to Secret, if required by the project. Additionally, the contractor shall provide offsite safe storage of all backup digital data.

DS2: Design Site Information Technology and Network Support

Maintain information technology and network support to the design site. Provide NMCI compliant connectivity and necessary connection to shipbuilder/design agent design information infrastructure.

DS3: Integrated Digital Environment

The contractor shall develop and maintain an Integrated Digital Environment (IDE), which shall be accessible by ship design program/project stakeholders. The IDE shall provide the ability to electronically communicate and process information across the various ship design project activities, processes, and functions, including but not limited to the entry, movement, manipulation, configuration management, maintenance, and approval of data.

#### **GENERAL DELIVERABLES:**

**Progress Reports:** 

A monthly progress report is due to the Task Order Manager that identifies authorized funding, current and cumulative expenditures, remaining funds and percentage of funds remaining, assigned tasks and percentage of completion for individual tasks.

Other progress reports/schedules/agendas/meeting minutes/studies as defined by individual task order or technical instruction based on a cost estimate.

**Engineering Products Format:** 

Deliverables shall be in electronic MS-Office format, MS-Project, PDF or HTML formats. Design and engineering product models shall be in accordance with ISO 10303 Standard for the Exchange of Product model data (STEP) Application Protocols (APs):

#### SYSTEM LEVEL APs

AP 233 Systems engineering data representation

AP 239 Product lifecycle support

SHIP STRUCTURAL ENVELOPE APS

AP 215 Ship arrangement

AP 216:2003 Ship molded forms

AP 218 Ship structures

**DISTRIBUTED SYSTEMS APS** 

AP 212:2001 Electrotechnical design and installation

AP 227 Plant Spatial Configuration (piping, HVAC, cable trays, simple mechanical systems

Material and Prototype Hardware--The contractor may be required to procure materials for construction/fabrication of feasibility models and mock ups, and materials in support of shipboard and laboratory testing. Prototype hardware items may be procured for the purposes of testing and validation of products vs. requirements. This may require technical assistance in procurement, in-process design reviews, hardware manufacturing progressing, trial installations, Technical Evaluation (TECHEVAL), Operational Evaluation (OPEVAL), and test results analyses. This contract is not to be construed as a hardware procurement. Material and hardware may be procured under this contract for prototype and demonstration shipboard installations.

#### SECURITY REQUIREMENTS

Much of the work under this contract shall be UNCLASSIFIED. A portion may be classified at the Secret level. Additionally, all ADP positions required for database support must conform to applicable Department of Defense and Department of the Navy requirements.

#### **FACILITY:**

- a. Capability to store up to TOP SECRET in secure containers.
- b. Ability to work with TOP SECRET material at the Design Site (may be restricted room or area).
- c. Does not require classified open storage.
- d. Requirement for receptionist to control access to site.

#### PERSONNEL:

- a. Personnel to be U.S. citizens (exceptions on a case-by-case basis).
- b. Principal and senior staff (not less than 75% of staff) to have SECRET clearances. (Select staff to have TOP SECRET clearances as necessary).

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c. Junior staff and some administrative staff may have CONFIDENTIAL or no clearances (not more that 25% of staff).

# **Section D - Packaging and Marking**

Packaging and marking shall be in accordance with Section D of the IDIQ contract.

# **UNCLASSIFIED DATA**

All unclassified data shall be prepared for shipment in accordance with best commercial practice.

## **CLASSIFIED DATA**

Classified reports, data, and documentation shall be prepared for shipment in accordance with National Industrial Security Program Operating Manual (NISPOM), DOD 5220.22-M dated 28 February 2006.

# MARKING OF REPORTS (NAVSEA) (SEP 1990)

All reports delivered by the Contractor to the Government under this contract shall pro	ominently show on the cover of the
report:	

(1) name and busine	ess address of the Contractor			
(2) contract number				
(3) contract dollar a	mount			
(4) whether the cont	tract was competitively or non-competitively awarded			
(5) sponsor:				
(Name of Individual Sponsor)				
(Name of Requiring Activity)				
	(City and State)			

# **Section E - Inspection and Acceptance**

Inspection and Acceptance for all items shall be in accordance with Section E of the SEAPORT Multiple Award IDIQ contract.

# **Section F - Deliveries or Performance**

## CLIN - DELIVERIES OR PERFORMANCE

The periods of performance for the following firm items are from date of task order award through 12 months thereafter, estimated at:

7000 A	A	03/24/2016	_	09/01/2021
7000 A	В	06/01/2016	_	05/31/2017
7000 A	C	03/24/2016	-	03/23/2017
7000 A	D	03/24/2016	-	03/23/2017
7000 A	E	03/24/2016	-	03/23/2017
7000 A	F	03/24/2016	-	03/23/2017
7000 A	G	03/24/2016	-	03/23/2017
7000 A	Н	03/24/2016	-	03/23/2017
7000 A	J	03/24/2016	-	03/23/2017
7000 A	.K	03/24/2016	-	03/23/2017
7000 A	L	03/24/2016	-	03/23/2017
7000 A	M	03/24/2016	-	03/23/2017
7000 A	N	03/24/2016	-	03/23/2017
7000 A	.P	03/24/2016	-	03/23/2017
7000 A	Q	03/31/2016	-	09/01/2017
7000 A	.R	03/31/2016	-	09/01/2017
7000 A	S	03/31/2016	-	09/01/2017
7000 A	T	03/31/2016	-	09/01/2017
7000 A	Ū	03/31/2016	-	09/01/2017
7000 A	V	03/31/2016	-	09/01/2017
7000 A	W	03/31/2016	-	09/01/2017
7000 A	X	03/31/2016	-	09/30/2017
7000 A	Y	03/31/2016	-	09/30/2017
7000 A	Z	03/31/2016	-	09/01/2017
7000 B	В	03/31/2016	-	09/01/2017
7000 B	С	03/31/2016	-	09/01/2017
7000 B	D	03/31/2016	-	09/01/2017
7000 B	E	04/06/2016	-	09/01/2018
7000 B	F	04/06/2016	-	09/01/2017
7000 B	Н	04/06/2016	-	09/01/2017
7000 B	J	04/06/2016	-	09/01/2017
7000 B	K	03/29/2016	-	09/01/2017
7000 B	L	03/29/2016	-	12/31/2017
7000 B	M	03/30/2016	-	09/01/2017
7000 B	N	04/01/2016	-	03/30/2017
7000 B	P	04/01/2016	-	03/30/2017
7000 B	Q	03/24/2016	-	03/23/2017
7000 B	R	04/01/2016	-	09/01/2017

7000 BS         04/06/2016 = 04/05/2017           7000 BT         03/29/2016 = 12/31/2017           7000 BV         07/02/2016 = 07/01/2017           7000 BW         07/02/2016 = 07/01/2017           7000 BX         07/02/2016 = 07/01/2017           7000 BY         07/02/2016 = 07/01/2017           7000 BY         07/02/2016 = 07/01/2017           7000 BY         07/02/2016 = 07/01/2017           7000 CA         07/02/2016 = 07/01/2017           7000 CB         07/02/2016 = 07/01/2017           7000 CB         07/02/2016 = 07/01/2017           7000 CC         07/02/2016 = 07/01/2017           7000 CE         07/02/2016 = 07/01/2017           7000 CF         05/18/2016 = 09/01/2017           7000 CG         06/02/2016 = 09/01/2017           7000 CG         06/02/2016 = 09/01/2017           7000 CG         05/18/2016 = 09/01/2017           7000 CD         05/18/2016 = 09/01/2017           7000 CD         05/18/2016 = 09/01/2017           7000 CD         05/18/2016 = 09/01/2017				
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7000 BW         07/02/2016         - 07/01/2017           7000 BX         07/02/2016         - 07/01/2017           7000 BY         07/02/2016         - 07/01/2017           7000 BZ         07/02/2016         - 07/01/2017           7000 CA         07/02/2016         - 07/01/2017           7000 CB         07/02/2016         - 07/01/2017           7000 CD         07/02/2016         - 07/01/2017           7000 CE         07/02/2016         - 07/01/2017           7000 CF         05/18/2016         - 09/01/2017           7000 CG         06/02/2016         - 09/01/2017           7000 CG         06/02/2016         - 09/01/2017           7000 CG         06/02/2016         - 09/01/2017           7000 CG         05/18/2016         - 09/01/2017           7000 CG         05/18/2016         - 09/01/2017           7000 CK         05/18/2016         - 09/01/2017           7000 CK         05/18/2016         - 09/01/2017           7000 CM         05/18/2016         - 09/01/2017           7000 CM         05/18/2016         - 09/01/2017           7000 CD         05/18/2016         - 09/01/2017           7000 CD         05/18/2016         - 09/01/2017	7000 <b>BT</b>	03/29/2016	-	12/31/2017
7000 BX         07/02/2016 - 07/01/2017           7000 BY         07/02/2016 - 07/01/2017           7000 BZ         07/02/2016 - 07/01/2017           7000 CA         07/02/2016 - 07/01/2017           7000 CB         07/02/2016 - 07/01/2017           7000 CC         07/02/2016 - 07/01/2017           7000 CD         07/02/2016 - 07/01/2017           7000 CE         07/02/2016 - 07/01/2017           7000 CF         05/18/2016 - 09/01/2017           7000 CG         06/02/2016 - 09/01/2017           7000 CG         06/02/2016 - 09/01/2017           7000 CG         06/02/2016 - 09/01/2017           7000 CG         05/18/2016 - 09/01/2017           7000 CG         05/18/2016 - 09/01/2017           7000 CG         05/18/2016 - 09/01/2017           7000 CK         05/18/2016 - 09/01/2017           7000 CM         05/18/2016 - 09/01/2017           7000 CM         05/18/2016 - 09/01/2017           7000 CR         05/18/2016 - 09/01/2017	7000 BV	07/02/2016	-	07/01/2017
7000 BY         07/02/2016         - 07/01/2017           7000 BZ         07/02/2016         - 07/01/2017           7000 CA         07/02/2016         - 07/01/2017           7000 CB         07/02/2016         - 07/01/2017           7000 CC         07/02/2016         - 07/01/2017           7000 CD         07/02/2016         - 07/01/2017           7000 CE         07/02/2016         - 07/01/2017           7000 CF         05/18/2016         - 09/01/2017           7000 CG         06/02/2016         - 09/01/2017           7000 CG         06/02/2016         - 09/01/2017           7000 CG         05/18/2016         - 09/01/2017           7000 CG         05/18/2016         - 09/01/2017           7000 CL         05/18/2016         - 09/01/2017           7000 CL         05/18/2016         - 09/01/2017           7000 CN         05/18/2016         - 09/01/2017           7000 CD         05/18/2016         - 09/01/2017	7000 BW	07/02/2016	_	07/01/2017
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7000 CC         07/02/2016 - 07/01/2017           7000 CD         07/02/2016 - 07/01/2017           7000 CE         07/02/2016 - 07/01/2017           7000 CF         05/18/2016 - 09/01/2017           7000 CG         06/02/2016 - 09/30/2017           7000 CH         05/18/2016 - 09/01/2017           7000 CJ         05/18/2016 - 09/01/2017           7000 CK         05/18/2016 - 09/01/2017           7000 CL         05/18/2016 - 09/01/2017           7000 CM         05/18/2016 - 09/01/2017           7000 CN         05/18/2016 - 09/01/2017           7000 CP         05/18/2016 - 09/01/2017           7000 CR         05/18/2016 - 09/01/2017           7000 CQ         05/18/2016 - 09/01/2017           7000 CQ         05/18/2016 - 09/30/2017           7000 CS         05/18/2016 - 09/30/2017           7000 CS         05/18/2016 - 09/30/2017           7000 CT         05/18/2016 - 09/01/2017           7000 CV         06/19/2016 - 09/01/2017           7000 CV         06/19/2016 - 09/01/2017           7000 CY         05/19/2016 - 09/01/2017           7000 DA         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/01/2017	7000 CA	07/02/2016	_	07/01/2017
7000         CD         07/02/2016         - 07/01/2017           7000         CE         07/02/2016         - 07/01/2017           7000         CF         05/18/2016         - 09/01/2017           7000         CG         06/02/2016         - 09/01/2017           7000         CH         05/18/2016         - 09/01/2017           7000         CJ         05/18/2016         - 09/01/2017           7000         CK         05/18/2016         - 09/01/2017           7000         CL         05/18/2016         - 09/01/2017           7000         CM         05/18/2016         - 09/01/2017           7000         CM         05/18/2016         - 09/01/2017           7000         CM         05/18/2016         - 09/01/2017           7000         CN         05/18/2016         - 09/01/2017           7000         CP         05/18/2016         - 09/01/2017           7000         CR         05/18/2016         - 09/30/2017           7000         CR         05/18/2016         - 09/30/2017           7000         CS         05/18/2016         - 09/01/2017           7000         CS         05/18/2016         - 09/01/2017	7000 CB	07/02/2016	-	07/01/2017
7000 CE         07/02/2016 - 09/01/2017           7000 CF         05/18/2016 - 09/01/2017           7000 CG         06/02/2016 - 09/30/2017           7000 CH         05/18/2016 - 09/01/2017           7000 CJ         05/18/2016 - 09/01/2017           7000 CK         05/18/2016 - 09/01/2017           7000 CL         05/18/2016 - 09/01/2017           7000 CM         05/18/2016 - 09/01/2017           7000 CN         05/18/2016 - 09/01/2017           7000 CP         05/18/2016 - 09/01/2017           7000 CR         05/18/2016 - 09/01/2017           7000 CS         05/18/2016 - 09/30/2017           7000 CS         05/18/2016 - 09/30/2017           7000 CT         05/18/2016 - 09/01/2017           7000 CT         05/18/2016 - 09/01/2017           7000 CV         06/19/2016 - 09/01/2017           7000 CV         06/19/2016 - 09/01/2017           7000 CY         05/19/2016 - 09/01/2017           7000 CY         05/19/2016 - 09/17/2017           7000 CY         05/19/2016 - 09/17/2017           7000 DA         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/01/2017           7000 DB         05/20/2016 - 09/01/2017	7000 CC	07/02/2016	-	07/01/2017
7000         CF         05/18/2016         - 09/01/2017           7000         CG         06/02/2016         - 09/30/2017           7000         CH         05/18/2016         - 09/01/2017           7000         CJ         05/18/2016         - 09/01/2017           7000         CK         05/18/2016         - 09/01/2017           7000         CL         05/18/2016         - 09/01/2017           7000         CM         05/18/2016         - 09/01/2017           7000         CM         05/18/2016         - 09/01/2017           7000         CN         05/18/2016         - 09/01/2017           7000         CP         05/18/2016         - 09/01/2017           7000         CQ         05/18/2016         - 09/30/2017           7000         CR         05/18/2016         - 09/30/2017           7000         CS         05/18/2016         - 09/30/2017           7000         CS         05/18/2016         - 09/30/2017           7000         CS         05/18/2016         - 09/01/2017           7000         CY         06/19/2016         - 09/01/2017           7000         CW         06/19/2016         - 09/01/2017	7000 CD	07/02/2016	-	07/01/2017
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7000 CK         05/18/2016 - 09/01/2017           7000 CL         05/18/2016 - 09/01/2017           7000 CM         05/18/2016 - 09/01/2017           7000 CN         05/18/2016 - 09/01/2017           7000 CP         05/18/2016 - 09/01/2017           7000 CQ         05/18/2016 - 09/30/2017           7000 CS         05/18/2016 - 09/30/2017           7000 CT         05/18/2016 - 09/30/2017           7000 CU         06/19/2016 - 09/01/2017           7000 CV         06/19/2016 - 09/01/2017           7000 CW         06/19/2016 - 09/01/2017           7000 CY         05/19/2016 - 09/01/2017           7000 CY         05/19/2016 - 09/17/2017           7000 DA         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2018           7000 DC         05/19/2016 - 09/01/2018           7000 DB         05/19/2016 - 09/01/2018           7000 DB         05/20/2016 - 09/01/2017           7000 DB         05/20/2016 - 09/01/2017           7000 DB         05/20/2016 - 09/01/2017           7000 DB         07/02/2016 - 09/01/2017           7000 DB         07/02/2016 - 09/01/2017	7000 CH	05/18/2016	-	09/01/2017
7000 CL	7000 CJ	05/18/2016	-	09/01/2017
7000 CM	7000 CK	05/18/2016	-	09/01/2017
7000 CN         05/18/2016 - 09/01/2017           7000 CP         05/18/2016 - 09/01/2017           7000 CQ         05/18/2016 - 09/30/2017           7000 CR         05/18/2016 - 09/30/2017           7000 CS         05/18/2016 - 09/30/2017           7000 CT         05/18/2016 - 09/01/2017           7000 CU         06/19/2016 - 09/01/2017           7000 CV         06/19/2016 - 09/01/2017           7000 CW         06/19/2016 - 09/01/2017           7000 CY         05/19/2016 - 09/17/2017           7000 CZ         05/19/2016 - 09/17/2017           7000 DA         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2017           7000 DB         05/19/2016 - 09/17/2017           7000 DC         05/19/2016 - 09/01/2018           7000 DE         05/19/2016 - 06/30/2018           7000 DE         05/19/2016 - 09/01/2017           7000 DF         05/20/2016 - 09/01/2017           7000 DF         05/20/2016 - 09/01/2017           7000 DG         07/02/2016 - 09/01/2017           7000 DL         09/02/2016 - 09/01/2017	7000 CL	05/18/2016	-	09/01/2017
7000 CP         05/18/2016         - 09/01/2017           7000 CQ         05/18/2016         - 09/30/2017           7000 CR         05/18/2016         - 09/30/2017           7000 CS         05/18/2016         - 09/30/2017           7000 CT         05/18/2016         - 09/01/2017           7000 CU         06/19/2016         - 09/01/2017           7000 CV         06/19/2016         - 09/01/2017           7000 CW         06/19/2016         - 09/01/2017           7000 CY         05/19/2016         - 09/17/2017           7000 CY         05/19/2016         - 09/17/2017           7000 CZ         05/19/2016         - 09/17/2017           7000 DA         05/19/2016         - 09/17/2017           7000 DB         05/19/2016         - 06/30/2018           7000 DB         05/19/2016         - 06/30/2018           7000 DC         05/19/2016         - 06/30/2018           7000 DE         05/20/2016         - 06/30/2018           7000 DE         05/20/2016         - 09/01/2017           7000 DF         05/20/2016         - 09/01/2017           7000 DK         09/02/2016         - 09/01/2017           7000 DK         09/02/2016         - 09/01/2017	7000 CM	05/18/2016	-	09/01/2017
7000 CQ	7000 CN	05/18/2016	-	09/01/2017
7000 CR	7000 CP	05/18/2016	_	09/01/2017
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7000 CV	7000 CT	05/18/2016	_	09/01/2017
7000 CW 06/19/2016 - 09/01/2017 7000 EX 07/02/2016 - 07/01/2017 7000 CY 05/19/2016 - 09/17/2017 7000 CZ 05/19/2016 - 09/17/2017 7000 DA 05/19/2016 - 09/17/2017 7000 DB 05/19/2016 - 09/17/2018 7000 DC 05/19/2016 - 06/30/2018 7000 DD 09/02/2016 - 06/30/2018 7000 DE 05/20/2016 - 09/01/2017 7000 DF 05/20/2016 - 09/01/2017 7000 DG 07/02/2016 - 09/01/2017 7000 DH 07/02/2016 - 07/01/2017 7000 DL 09/02/2016 - 09/01/2017 7000 DL 09/02/2016 - 09/01/2017 7000 DL 09/02/2016 - 09/01/2017 7000 DM 09/02/2016 - 09/01/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017	7000 Cu	06/19/2016	-	09/01/2017
7000 ex       07/02/2016 - 09/17/2017         7000 CY       05/19/2016 - 09/17/2017         7000 CZ       05/19/2016 - 09/17/2017         7000 DA       05/19/2016 - 09/17/2017         7000 DB       05/19/2016 - 02/01/2018         7000 DC       05/19/2016 - 06/30/2018         7000 DD       09/02/2016 - 06/30/2018         7000 DE       05/20/2016 - 09/01/2017         7000 DF       05/20/2016 - 09/01/2017         7000 DG       07/02/2016 - 07/01/2017         7000 DH       07/02/2016 - 07/01/2017         7000 DJ       05/20/2016 - 09/01/2017         7000 DL       09/02/2016 - 09/01/2017         7000 DL       09/02/2016 - 09/01/2017         7000 DL       09/02/2016 - 09/01/2017         7000 DN       09/02/2016 - 09/01/2017         7000 DN       09/02/2016 - 09/01/2017         7000 DP       09/02/2016 - 09/01/2017         7000 DR       09/02/2016 - 09/01/2017         7000 DR       09/02/2016 - 09/01/2017         7000 DS       09/02/2016 - 09/01/2017	7000 CV	06/19/2016	_	09/01/2017
7000 CY       05/19/2016 - 09/17/2017         7000 CZ       05/19/2016 - 09/17/2017         7000 DA       05/19/2016 - 09/17/2017         7000 DB       05/19/2016 - 02/01/2018         7000 DC       05/19/2016 - 06/30/2018         7000 DD       09/02/2016 - 06/30/2018         7000 DE       05/20/2016 - 09/01/2017         7000 DF       05/20/2016 - 09/01/2017         7000 DG       07/02/2016 - 07/01/2017         7000 DH       07/02/2016 - 09/01/2017         7000 DJ       05/20/2016 - 09/01/2017         7000 DK       09/16/2016 - 09/01/2017         7000 DL       09/02/2016 - 09/01/2017         7000 DM       09/02/2016 - 09/01/2017         7000 DN       09/02/2016 - 09/01/2017         7000 DP       09/02/2016 - 09/01/2017         7000 DQ       09/02/2016 - 09/01/2017         7000 DR       09/02/2016 - 09/01/2017         7000 DS       09/02/2016 - 09/01/2017	7000 CW	06/19/2016	_	09/01/2017
7000 CZ       05/19/2016 - 09/17/2017         7000 DA       05/19/2016 - 09/17/2017         7000 DB       05/19/2016 - 02/01/2018         7000 DC       05/19/2016 - 06/30/2018         7000 DD       09/02/2016 - 06/30/2018         7000 DE       05/20/2016 - 09/01/2017         7000 DF       05/20/2016 - 09/01/2017         7000 DG       07/02/2016 - 07/01/2017         7000 DH       07/02/2016 - 09/01/2017         7000 DJ       05/20/2016 - 09/01/2017         7000 DK       09/16/2016 - 09/01/2017         7000 DL       09/02/2016 - 09/01/2017         7000 DM       09/02/2016 - 09/01/2017         7000 DN       09/01/2016 - 09/01/2017         7000 DP       09/02/2016 - 09/01/2017         7000 DQ       09/02/2016 - 09/01/2017         7000 DR       09/02/2016 - 09/01/2017         7000 DS       09/02/2016 - 09/01/2017	7000 ex	07/02/2016	_	07/01/2017
7000 DA	7000 CY	05/19/2016	-	09/17/2017
7000 DB	7000 CZ	05/19/2016	-	09/17/2017
7000 DC	7000 DA	05/19/2016	_	09/17/2017
7000 DD       09/02/2016 - 06/30/2018         7000 DE       05/20/2016 - 09/01/2017         7000 DF       05/20/2016 - 09/01/2017         7000 DG       07/02/2016 - 07/01/2017         7000 DH       07/02/2016 - 07/01/2017         7000 DJ       05/20/2016 - 09/01/2017         7000 DK       09/16/2016 - 09/01/2017         7000 DL       09/02/2016 - 09/01/2017         7000 DM       09/02/2016 - 09/01/2017         7000 DN       09/01/2016 - 09/01/2017         7000 DP       09/02/2016 - 09/01/2017         7000 DQ       09/02/2016 - 09/01/2017         7000 DR       09/02/2016 - 09/01/2017         7000 DS       09/02/2016 - 09/01/2017         7000 DS       09/02/2016 - 09/01/2017         7000 DT       09/02/2016 - 09/01/2017	7000 DB	05/19/2016	-	02/01/2018
7000 <b>DE</b> 05/20/2016 - 09/01/2017 7000 DF 05/20/2016 - 09/01/2017 7000 DG 07/02/2016 - 07/01/2017 7000 DH 07/02/2016 - 07/01/2017 7000 DJ 05/20/2016 - 09/01/2017 7000 DK 09/16/2016 - 09/01/2017 7000 <b>DL</b> 09/02/2016 - 09/01/2017 7000 DM 09/02/2016 - 09/01/2017 7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017	7000 DC	05/19/2016	-	06/30/2018
7000 DF	7000 DD	09/02/2016	-	06/30/2018
7000 DG 07/02/2016 - 07/01/2017 7000 DH 07/02/2016 - 07/01/2017 7000 DJ 05/20/2016 - 09/01/2017 7000 DK 09/16/2016 - 09/01/2017 7000 DL 09/02/2016 - 09/01/2017 7000 DM 09/02/2016 - 09/01/2017 7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 <b>DE</b>	05/20/2016	-	09/01/2017
7000 DH 07/02/2016 - 07/01/2017 7000 DJ 05/20/2016 - 09/01/2017 7000 DK 09/16/2016 - 09/01/2017 7000 DL 09/02/2016 - 09/01/2017 7000 DM 09/02/2016 - 09/01/2017 7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DF	05/20/2016	-	09/01/2017
7000 DJ 05/20/2016 - 09/01/2017 7000 DK 09/16/2016 - 09/01/2017 7000 DL 09/02/2016 - 09/01/2017 7000 DM 09/02/2016 - 09/01/2017 7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DG	07/02/2016	-	07/01/2017
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7000 <b>DL</b> 09/02/2016 - 09/01/2017 7000 DM 09/02/2016 - 09/01/2017 7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DJ	05/20/2016	-	09/01/2017
7000 DM 09/02/2016 - 09/01/2017 7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DK	09/16/2016	-	09/01/2017
7000 DN 09/01/2016 - 08/31/2017 7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 <b>DL</b>	09/02/2016	-	09/01/2017
7000 DP 09/02/2016 - 09/01/2017 7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DM	09/02/2016	-	09/01/2017
7000 DQ 09/02/2016 - 09/01/2017 7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DN	09/01/2016	-	08/31/2017
7000 DR 09/02/2016 - 09/01/2017 7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DP	09/02/2016	-	09/01/2017
7000 DS 09/02/2016 - 09/01/2017 7000 DT 09/02/2016 - 09/01/2017	7000 DQ	09/02/2016	-	09/01/2017
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7000	EK	09/02/2016	-	05/31/2018
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7000	EP	09/02/2016	_	09/30/2017
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7000	ER	09/02/2016	_	09/01/2017
7000	ES	09/02/2016	_	12/31/2017
7000	ET	09/02/2016	_	09/01/2020
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7000	FC	11/16/2016	-	09/01/2017
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7000	FH	11/17/2016	-	09/01/2018
7000	FJ	11/17/2016	-	09/01/2017
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7000	FQ	11/22/2016	-	03/31/2018
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7000	FV	11/22/2016	-	09/01/2017
7000	FW	11/22/2016	-	09/01/2018
7000	FX	11/22/2016	-	09/01/2018

7000 FY	11/28/2016	-	09/01/2017
7000 FZ	11/17/2016	-	09/01/2017
7000 GA	11/23/2016	-	09/01/2017
7000 GB	12/01/2016	-	11/30/2017
7000 GC	01/12/2017	-	09/01/2018
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7000 GE	01/12/2017	-	09/01/2018
7000 GF	01/13/2017	_	01/12/2018
7000 GG	02/08/2017	-	02/07/2018
7000 GH	02/08/2017	_	02/07/2018
7000 GJ	02/08/2017	-	02/07/2018
7000 GK	02/08/2017	_	02/07/2018
7000 GL	02/06/2017	-	09/01/2018
7000 GM	02/09/2017	-	09/01/2018
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7000 GT	02/09/2017	_	06/30/2018
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7000 GW	02/08/2017	_	02/07/2018
7000 GX	02/08/2017	_	09/01/2017
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7000 GZ	02/08/2017	_	02/07/2018
7000 HA	02/16/2017	_	02/15/2018
7000 HB	02/08/2017	_	02/07/2018
7000 HC	02/08/2017	-	02/07/2018
7000 HD	02/09/2017		09/30/2018
7000 HE	06/02/2017	_	06/01/2018
7000 HF	06/02/2017	_	06/01/2018
7000 HJ	06/02/2017	_	06/01/2018
7000 HK	06/02/2017	_	06/01/2018
7000 HL	06/02/2017	_	06/01/2018
7000 HM	06/02/2017	_	06/01/2018
7000 HP	05/17/2017	_	09/01/2018
7000 HQ	05/17/2017	_	09/01/2018
7000 HR	05/18/2017	_	09/01/2018
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7000 HT	05/17/2017	_	09/01/2018
7000 HU	06/02/2017	_	06/01/2018
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7000 HX	06/02/2017	_	06/01/2018
7000 HY	06/02/2017	_	06/01/2018
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7000 JB	06/02/2017	_	06/01/2018
7000 JC	08/02/2017	_	08/01/2018
7000 JD	08/02/2017	_	/_ /_ /
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7000	JG	08/02/2017	-	08/01/2018
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7000	JK	08/02/2017	-	08/01/2018
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7000	JR	07/25/2017	-	09/01/2018
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7000	KY	02/10/2018	-	09/01/2018
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7000	LE	05/04/2018	-	05/03/2019
7000	LF	05/04/2018	-	09/01/2018
7000	LG	07/02/2018	-	07/01/2019

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7000 <b>LM</b>	07/02/2018	-	07/01/2019
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7000 <b>LQ</b>	07/11/2018	-	09/01/2019
7000 <b>LR</b>	07/02/2018	-	07/01/2019
7000 <b>LS</b>	07/02/2018	-	07/01/2019
7000 <b>LT</b>	07/02/2018	-	07/01/2019
7000 <b>LU</b>	07/16/2018	-	07/15/2019
7000 <b>LV</b>	07/16/2018	-	07/15/2019
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7000	NU	07/16/2019	_	07/15/2020
7000	NV	07/16/2019	_	07/15/2020
7000	NW	07/16/2019	-	07/15/2020
7000	NX	07/12/2019	-	09/01/2020
7000	NY	07/26/2019	-	07/25/2020
7000	NZ	08/05/2019	-	09/01/2020
7000	PA	08/09/2019	-	09/01/2020
7000	PB	08/09/2019	-	09/01/2020
7000	PC	08/29/2019	-	09/01/2020
7000	PD	08/28/2019	-	09/01/2020
7000	PE	09/25/2019	-	09/01/2020
7000	PF	09/25/2019	-	09/01/2020
7000	PG	09/25/2019	-	09/01/2020
7000	PH	09/25/2019	-	09/01/2020
7000	PJ	09/25/2019	-	09/01/2020
7000	PK	09/25/2019	-	09/01/2020
7000	PL	09/25/2019	-	09/01/2020
7000	PM	11/25/2019	-	09/01/2020
7000	PN	11/25/2019	-	09/01/2020
7000	pp	11/25/2019	-	09/01/2020
7000	PQ	02/05/2020	-	09/01/2020
7000	PR	02/05/2020	-	09/01/2020
7000	PS	02/05/2020	-	09/01/2020
7000	PU	03/20/2020	-	09/01/2020
7000	PV	03/20/2020	-	09/01/2020
7000	PW	03/20/2020	-	09/01/2021
7000	PX	07/06/2020	-	09/01/2021
9000	AA	03/24/2016	-	09/01/2020
9000	AB	03/24/2016		03/23/2017
9000	AC	03/24/2016	-	03/23/2017
9000	AD	03/24/2016	-	03/23/2017
9000	AL	03/24/2016	-	03/23/2017
9000	AM	03 /24/2016	-	03/23/2017
	AS	03/31/2016	-	
9000	AV	03 /31/2016	-	09/01/2017
9000	AW	03 /31/2016	-	
	AX		-	09/30/2017
	AZ	03/31/2016		
9000	BA			09/01/2017
9000	BD	03 /31/2016		
9000	BJ	04/06/2016		09/01/2017
9000	BM	03/30/2016	_	09/01/2017

9000	BN	04/01/2016	-	03/30/2017
9000	BQ	03/24/2016	-	03/23/2017
9000	BU	03/29/2016	-	06/30/2018
9000	BV	07/02/2016	-	07/01/2017
9000	вх	07/02/2016	-	07/01/2017
9000	CA	07/02/2016	-	07/01/2017
9000	CE	07/02/2016	-	07/01/2017
9000	CF	05/18/2016	-	09/30/2017
9000	CH	11/17/2016	-	11/16/2017
9000	CJ	05/18/2016	-	09/01/2017
9000	CK	05/18/2016	-	09/01/2017
9000	CM	05/18/2016	-	09/01/2017
9000	CS	08/12/2016	-	09/01/2017
9000	CT	05/18/2016	-	09/01/2017
9000	CY	05/19/2016	-	12/31/2017
9000	CZ	05/19/2016	-	05/18/2018
9000	DD	09/02/2016	-	06/30/2018
9000	DE	05/20/2016	-	09/17/2017
9000	DJ	05/20/2016	-	09/01/2017
9000	DK	09/16/2016	-	09/01/2017
9000	DL	07/02/2016	-	07/01/2017
9000	DM	09/02/2016	-	09/01/2017
9000	DR	09/02/2016	-	09/01/2017
9000	DU	09/02/2016	-	09/01/2017
9000	DY	09/02/2016	-	09/30/2017
9000	DZ	09/02/2016	-	09/01/2017
9000	EC	09/02/2016	-	09/01/2017
9000	ED	09/02/2016	-	06/01/2018
9000	EF	09/02/2016	-	09/01/2018
9000	EH	09/02/2016	-	09/30/2017
9000	EL	09/02/2016	-	09/01/2017
9000	EM	09/02/2016	-	09/01/2017
9000	EN	09/02/2016	-	09/01/2017
9000	EP	09/02/2016	-	09/30/2017
9000	EQ	09/02/2016	-	09/01/2017
9000	ES	09/02/2016	-	12/31/2017
9000	ET	09/02/2016	-	09/01/2020
9000	EU	09/02/2016	-	09/01/2017
9000	EV	09/02/2016	-	09/01/2017
9000	EW	08/15/2016	-	11/30/2016
9000	EX	09/02/2016	-	09/01/2017
9000	EZ	11/16/2016	-	11/15/2017
9000	FB	11/16/2016	-	11/15/2017
9000	FD	11/16/2016	-	11/15/2017
9000	FF	11/16/2016	-	11/15/2017
9000	FG	11/23/2016	-	11/22/2017
9000	FJ	11/17/2016	-	09/01/2018
9000	FM	07/26/2017	-	09/01/2018
9000	FP	11/17/2016	-	09/01/2017
9000	FQ	02/06/2017	-	03/31/2018

9000	FR	02/06/2017	-	09/01/2019
9000	FS	02/06/2017	-	09/01/2019
9000	FT	11/22/2016	-	09/01/2017
9000	FX	11/22/2016	-	09/01/2018
9000	GB	02/08/2017	-	02/07/2018
9000	GC	01/12/2017	-	09/01/2018
9000	GE	01/12/2017	-	09/01/2018
9000	GG	02/08/2017	-	02/07/2018
9000	GJ	02/08/2017	-	02/07/2018
9000	GL	02/06/2017	-	09/01/2018
9000	GM	07/26/2017	-	09/01/2018
9000	GR	02/09/2017	-	09/01/2018
9000	GS	02/09/2017	-	09/01/2018
9000	GT	02/09/2017	-	06/30/2018
9000	GV	02/06/2017	-	09/30/2017
9000	GW	02/08/2017	-	02/07/2018
9000	GZ	02/08/2017	-	02/07/2018
9000	HD	07/26/2017	-	09/30/2018
9000	HE	06/02/2017	-	06/01/2018
9000	HF	06/02/2017	-	06/01/2018
9000	НJ	06/02/2017	-	06/01/2018
9000	HK	06/02/2017	-	06/01/2018
9000	HL	06/02/2017	-	06/01/2018
9000	HU	06/02/2017	-	06/01/2018
9000	HV	06/02/2017	-	06/01/2018
9000	HW	06/02/2017	-	06/01/2018
9000	нх	06/02/2017	-	06/01/2018
9000	HY	06/02/2017	-	06/01/2018
9000	HZ	06/02/2017	-	06/01/2018
9000	JA	05/23/2017	-	05/22/2018
9000	JВ	06/02/2017	-	06/01/2018
9000	JE	08/02/2017	-	08/01/2018
9000	JG	08/02/2017	-	08/01/2018
9000	JK	08/02/2017	-	08/01/2018
9000	JP	08/02/2017	-	08/01/2018
9000	JV	09/28/2017	-	09/01/2018
9000	KF	11 /15 /2017	-	11/14/2018
9000	KG	11 /15 /2017	-	
9000	KK	11/13/2017	-	11/12/2018
9000	KM	11/16/2017	-	09/30/2019
9000	KN	11/16/2017	-	09/01/2018
9000	KP	11/16/2017	-	
9000	KS	11/16/2017		09/30/2019
9000	KU	11/21/2017	-	09/01/2019
9000	KW	11/23/2017	-	09/01/2019
9000	KZ	02/10/2018	-	, . ,
9000	LE	07/02/2018	-	07/01/2019
9000	LF	05/04/2018	-	
9000	LN	07/18/2018		09/01/2019
9000	LP	07/11/2018	-	09/01/2019

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07/02/2018 - 07/01/2019
9000 LT
                09/10/2018 - 09/01/2019
9000 LX
                09/10/2018 - 09/01/2019
9000 LZ
                09/19/2018 - 09/01/2019
9000 MB
9000 MX
                01/14/2019 - 01/13/2020
9000 MZ
                01/14/2019 - 01/13/2020
                01/14/2019 - 01/13/2020
9000 NC
                01/30/2019 - 01/29/2020
9000 NG
9000 NL
                03/07/2019 - 09/01/2020
9000 NM
                04/11/2019 - 04/10/2020
                05/20/2019 - 09/01/2020
9000 NQ
9000 NS
                07/16/2019 - 07/15/2020
9000 NT
                07/16/2019 - 07/15/2020
                07/16/2019 - 07/15/2020
9000 NU
                07/12/2019 - 09/01/2020
9000 NX
                07/26/2019 - 07/25/2020
9000 NY
                08/05/2019 - 09/01/2020
9000 NZ
                09/25/2019 - 09/01/2020
9000 PK
                11/25/2019 - 09/01/2020
9000 PM
                09/25/2019 - 09/01/2020
9000 PN
                09/25/2019 - 09/01/2020
9000 PP
                09/02/2020 - 09/01/2021
9000 PQ
                01/14/2020 - 09/09/2021
9000 PR
9000 PS
                01/04/2020 - 09/01/2020
9000 PT
                02/05/2020 - 07/15/2020
                03/20/2020 - 09/01/2020
9000 PU
                03/20/2020 - 09/01/2020
9000 PV
9000 PW
                03/20/2020 - 09/01/2021
```

The period of performance for the following option items are from date of option exercise through 12 months thereafter, estimated at:

No option line items.

The period of performance for the following award-term items are from date of option exercise through 12 months thereafter, estimated at:

No award term line items.

Services to be performed hereunder will be provided primarily at the Washington Navy Yard, in the metropolitan District of Columbia area, and NAVSEA field activities, as well as ships at sea.

# The Period of Performance of the following Firm items are as follows:

7000 AA	03/24/2016 - 09/01/2021
7000 AB	06/01/2016 - 05/31/2017
7000 AC	03/24/2016 - 03/23/2017
7000 AD	03/24/2016 - 03/23/2017
7000 AE	03/24/2016 - 03/23/2017
7000 AF	03/24/2016 - 03/23/2017
7000 AG	03/24/2016 - 03/23/2017
7000 AH	03/24/2016 - 03/23/2017
7000 AJ	03/24/2016 - 03/23/2017
7000 AK	03/24/2016 - 03/23/2017
7000 AL	03/24/2016 - 03/23/2017
7000 AM	03/24/2016 - 03/23/2017
7000 AN	03/24/2016 - 03/23/2017
7000 AP	03/24/2016 - 03/23/2017
7000 AQ	03/31/2016 - 09/01/2017
7000 AR	03/31/2016 - 09/01/2017
7000 AS	03/31/2016 - 09/01/2017
7000 AT	03/31/2016 - 09/01/2017
7000 AU	03/31/2016 - 09/01/2017
7000 AV	03/31/2016 - 09/01/2017
7000 AW	03/31/2016 - 09/01/2017
7000 AX	03/31/2016 - 09/30/2017
7000 AY	03/31/2016 - 09/30/2017
7000 AZ	03/31/2016 - 09/01/2017
7000 BB	03/31/2016 - 09/01/2017
7000 BC	03/31/2016 - 09/01/2017
7000 BD	03/31/2016 - 09/01/2017
7000 BE	04/06/2016 - 09/01/2018
7000 BF	04/06/2016 - 09/01/2017
7000 BH	04/06/2016 - 09/01/2017
7000 BJ	04/06/2016 - 09/01/2017
7000 BK	03/29/2016 - 09/01/2017
7000 BL	03/29/2016 - 12/31/2017

7000 BM	03/30/2016 - 09/01/2017
7000 BN	04/01/2016 - 03/30/2017
7000 BP	04/01/2016 - 03/30/2017
7000 BQ	03/24/2016 - 03/23/2017
7000 BR	04/01/2016 - 09/01/2017
7000 BS	04/06/2016 - 04/05/2017
7000 BT	03/29/2016 - 12/31/2017
7000 BV	07/02/2016 - 07/01/2017
7000 BW	07/02/2016 - 07/01/2017
7000 BX	07/02/2016 - 07/01/2017
7000 BY	07/02/2016 - 07/01/2017
7000 BZ	07/02/2016 - 07/01/2017
7000 CA	07/02/2016 - 07/01/2017
7000 CB	07/02/2016 - 07/01/2017
7000 CC	07/02/2016 - 07/01/2017
7000 CD	07/02/2016 - 07/01/2017
7000 CE	07/02/2016 - 07/01/2017
7000 CF	05/18/2016 - 09/01/2017
7000 CG	06/02/2016 - 09/30/2017
7000 CH	05/18/2016 - 09/01/2017
7000 CJ	05/18/2016 - 09/01/2017
7000 CK	05/18/2016 - 09/01/2017
7000 CL	05/18/2016 - 09/01/2017
7000 CM	05/18/2016 - 09/01/2017
7000 CN	05/18/2016 - 09/01/2017
7000 CP	05/18/2016 - 09/01/2017
7000 CQ	05/18/2016 - 09/30/2017
7000 CR	05/18/2016 - 09/30/2017
7000 CS	05/18/2016 - 09/30/2017
7000 CT	05/18/2016 - 09/01/2017
7000 CU	06/19/2016 - 09/01/2017
7000 CV	06/19/2016 - 09/01/2017
7000 CW	06/19/2016 - 09/01/2017
7000 CX	07/02/2016 - 07/01/2017
7000 CY	05/19/2016 - 09/17/2017
7000 CZ	05/19/2016 - 09/17/2017
7000 DA	05/19/2016 - 09/17/2017
7000 DB	05/19/2016 - 02/01/2018
7000 DC	05/19/2016 - 06/30/2018
7000 DD	09/02/2016 - 06/30/2018
7000 DE	05/20/2016 - 09/01/2017

7000 DF	05/20/2016 - 09/01/2017
7000 DG	07/02/2016 - 07/01/2017
7000 DH	07/02/2016 - 07/01/2017
7000 DJ	05/20/2016 - 09/01/2017
7000 DK	09/16/2016 - 09/01/2017
7000 DL	09/02/2016 - 09/01/2017
7000 DM	09/02/2016 - 09/01/2017
7000 DN	09/01/2016 - 08/31/2017
7000 DP	09/02/2016 - 09/01/2017
7000 DQ	09/02/2016 - 09/01/2017
7000 DR	09/02/2016 - 09/01/2017
7000 DS	09/02/2016 - 09/01/2017
7000 DT	09/02/2016 - 09/01/2017
7000 DU	09/02/2016 - 09/01/2017
7000 DV	09/02/2016 - 09/01/2017
7000 DW	09/02/2016 - 09/01/2017
7000 DX	09/02/2016 - 09/01/2017
7000 DY	09/02/2016 - 09/30/2017
7000 DZ	09/02/2016 - 09/01/2017
7000 EA	09/02/2016 - 09/01/2017
7000 EB	09/02/2016 - 09/01/2017
7000 EC	09/02/2016 - 09/01/2017
7000 ED	09/02/2016 - 06/01/2018
7000 EE	09/02/2016 - 09/01/2018
7000 EF	09/02/2016 - 09/01/2018
7000 EG	09/02/2016 - 05/30/2020
7000 EH	09/02/2016 - 09/30/2017
7000 EJ	09/02/2016 - 05/31/2018
7000 EK	09/02/2016 - 05/31/2018
7000 EL	09/02/2016 - 09/01/2017
7000 EM	09/02/2016 - 09/01/2017
7000 EN	09/02/2016 - 09/01/2017
7000 EP	09/02/2016 - 09/30/2017
7000 EQ	09/02/2016 - 09/01/2017
7000 ER	09/02/2016 - 09/01/2017
7000 ES	09/02/2016 - 12/31/2017
7000 ET	09/02/2016 - 09/01/2020
7000 EU	09/02/2016 - 09/01/2017
7000 EV	09/02/2016 - 09/01/2017
7000 EW	08/15/2016 - 11/30/2016
7000 EX	09/02/2016 - 09/01/2017

11/16/2016 - 11/15/2017
11/16/2016 - 11/15/2017
11/16/2016 - 11/15/2017
11/16/2016 - 09/01/2017
11/16/2016 - 11/15/2017
11/16/2016 - 09/01/2017
11/16/2016 - 11/15/2017
11/23/2016 - 11/22/2017
11/17/2016 - 09/01/2018
11/17/2016 - 09/01/2017
11/17/2016 - 11/16/2017
11/17/2016 - 09/01/2018
11/17/2016 - 09/30/2018
11/16/2016 - 09/01/2017
11/17/2016 - 09/01/2017
11/22/2016 - 03/31/2018
11/22/2016 - 09/01/2019
11/22/2016 - 09/01/2019
11/22/2016 - 12/31/2017
11/22/2016 - 09/01/2017
11/22/2016 - 09/01/2017
11/22/2016 - 09/01/2018
11/22/2016 - 09/01/2018
11/28/2016 - 09/01/2017
11/17/2016 - 09/01/2017
11/23/2016 - 09/01/2017
12/01/2016 - 11/30/2017
01/12/2017 - 09/01/2018
01/13/2017 - 09/01/2017
01/12/2017 - 09/01/2018
01/13/2017 - 01/12/2018
02/08/2017 - 02/07/2018
02/08/2017 - 02/07/2018
02/08/2017 - 02/07/2018
02/08/2017 - 02/07/2018
02/06/2017 - 09/01/2018
02/09/2017 - 09/01/2018
02/09/2017 - 09/01/2018
02/09/2017 - 05/31/2018
02/09/2017 - 02/28/2018
02/09/2017 - 09/01/2018

7000 GS	02/09/2017 - 09/01/2018
7000 GT	02/09/2017 - 06/30/2018
7000 GU	02/08/2017 - 09/01/2018
7000 GV	02/06/2017 - 09/30/2017
7000 GW	02/08/2017 - 02/07/2018
7000 GX	02/08/2017 - 09/01/2017
7000 GY	02/08/2017 - 02/07/2018
7000 GZ	02/08/2017 - 02/07/2018
7000 HA	02/16/2017 - 02/15/2018
7000 HB	02/08/2017 - 02/07/2018
7000 HC	02/08/2017 - 02/07/2018
7000 HD	02/09/2017 - 09/30/2018
7000 HE	06/02/2017 - 06/01/2018
7000 HF	06/02/2017 - 06/01/2018
7000 HJ	06/02/2017 - 06/01/2018
7000 HK	06/02/2017 - 06/01/2018
7000 HL	06/02/2017 - 06/01/2018
7000 HM	06/02/2017 - 06/01/2018
7000 HP	05/17/2017 - 09/01/2018
7000 HQ	05/17/2017 - 09/01/2018
7000 HR	05/18/2017 - 09/01/2018
7000 HS	06/02/2017 - 06/01/2018
7000 HT	05/17/2017 - 09/01/2018
7000 HU	06/02/2017 - 06/01/2018
7000 HV	06/02/2017 - 06/01/2018
7000 HW	06/02/2017 - 06/01/2018
7000 HX	06/02/2017 - 06/01/2018
7000 HY	06/02/2017 - 06/01/2018
7000 JA	05/23/2017 - 05/22/2018
7000 JB	06/02/2017 - 06/01/2018
7000 JC	08/02/2017 - 08/01/2018
7000 JD	08/02/2017 - 08/01/2018
7000 JE	08/02/2017 - 08/01/2018
7000 JF	08/02/2017 - 08/01/2018
7000 JG	08/02/2017 - 08/01/2018
7000 JH	08/02/2017 - 08/01/2018
7000 JJ	08/02/2017 - 08/01/2018
7000 JK	08/02/2017 - 08/01/2018
7000 JL	08/02/2017 - 08/01/2018
7000 JM	08/02/2017 - 08/01/2018
7000 JN	08/02/2017 - 08/01/2018

7000 JP	08/02/2017 - 08/01/2018
7000 JQ	08/02/2017 - 08/01/2018
7000 JR	07/25/2017 - 09/01/2018
7000 JS	07/25/2017 - 09/01/2018
7000 JT	09/01/2017 - 08/31/2018
7000 JU	09/28/2017 - 09/01/2018
7000 JV	09/28/2017 - 09/01/2018
7000 JW	09/28/2017 - 09/01/2018
7000 JX	09/28/2017 - 09/01/2018
7000 JY	09/28/2017 - 09/01/2018
7000 JZ	09/02/2018 - 09/01/2019
7000 KA	09/28/2017 - 09/01/2018
7000 KB	09/28/2017 - 09/01/2018
7000 KC	09/28/2017 - 09/01/2018
7000 KD	09/28/2017 - 09/01/2018
7000 KE	09/29/2017 - 09/01/2018
7000 KF	11/15/2017 - 11/14/2018
7000 KG	11/15/2017 - 09/01/2018
7000 KH	11/15/2017 - 09/01/2018
7000 KJ	11/13/2017 - 09/01/2018
7000 KK	11/13/2017 - 11/12/2018
7000 KL	11/16/2017 - 09/01/2019
7000 KM	11/16/2017 - 09/30/2019
7000 KN	11/16/2017 - 09/01/2018
7000 KP	11/16/2017 - 09/01/2018
7000 KQ	11/16/2017 - 09/01/2019
7000 KR	11/16/2017 - 12/31/2018
7000 KS	11/16/2017 - 09/30/2019
7000 KT	11/16/2017 - 09/30/2018
7000 KU	11/21/2017 - 09/01/2019
7000 KV	11/23/2017 - 01/31/2019
7000 KW	11/23/2017 - 09/01/2019
7000 KX	11/20/2017 - 09/01/2018
7000 KY	02/10/2018 - 09/01/2018
7000 KZ	02/10/2018 - 09/01/2018
7000 LB	02/10/2018 - 09/01/2018
7000 LC	03/29/2018 - 09/01/2018
7000 LD	03/29/2018 - 12/31/2018
7000 LE	05/04/2018 - 05/03/2019
7000 LF	05/04/2018 - 09/01/2018
7000 LG	07/02/2018 - 07/01/2019

7000 LH	07/02/2018 - 07/01/2019
7000 LJ	07/02/2018 - 07/01/2019
7000 LK	07/02/2018 - 07/01/2019
7000 LM	07/02/2018 - 07/01/2019
7000 LN	07/11/2018 - 09/01/2019
7000 LP	07/11/2018 - 09/01/2019
7000 LQ	07/11/2018 - 09/01/2019
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7000 LS	07/02/2018 - 07/01/2019
7000 LT	07/02/2018 - 07/01/2019
7000 LU	07/16/2018 - 07/15/2019
7000 LV	07/16/2018 - 07/15/2019
7000 LW	09/05/2018 - 09/01/2019
7000 LX	09/10/2018 - 09/01/2019
7000 LY	09/10/2018 - 09/01/2019
7000 LZ	09/10/2018 - 09/01/2019
7000 MA	09/10/2018 - 09/01/2019
7000 MB	09/19/2018 - 09/01/2019
7000 MC	09/19/2018 - 09/01/2019
7000 MD	09/19/2018 - 09/01/2019
7000 ME	09/19/2018 - 09/01/2019
7000 MF	09/19/2018 - 09/01/2019
7000 MG	09/19/2018 - 09/01/2019
7000 MH	09/19/2018 - 09/01/2019
7000 MJ	09/19/2018 - 09/01/2019
7000 MK	09/19/2018 - 09/01/2019
7000 ML	09/19/2018 - 09/01/2019
7000 MM	09/19/2018 - 09/01/2019
7000 MN	09/19/2018 - 09/01/2019
7000 MP	09/17/2018 - 09/01/2019
7000 MQ	11/29/2018 - 09/01/2019
7000 MR	11/29/2018 - 09/01/2020
7000 MS	11/29/2018 - 09/01/2020
7000 MT	11/29/2018 - 09/01/2020
7000 MU	11/29/2018 - 09/01/2020
7000 MV	12/04/2018 - 09/01/2019
7000 MW	12/04/2018 - 09/01/2020
7000 MX	01/14/2019 - 01/13/2020
7000 MY	01/14/2019 - 01/13/2020
7000 MZ	01/14/2019 - 01/13/2020
7000 NA	01/14/2019 - 09/01/2019

7000 NB	01/14/2019 - 09/01/2019
7000 NC	01/14/2019 - 01/13/2020
7000 ND	01/14/2019 - 09/01/2019
7000 NE	01/14/2019 - 01/13/2020
7000 NF	01/14/2019 - 01/13/2020
7000 NG	01/30/2019 - 01/29/2020
7000 NH	02/02/2019 - 09/01/2020
7000 NJ	02/05/2019 - 02/04/2020
7000 NK	02/05/2019 - 09/01/2020
7000 NL	03/07/2019 - 09/01/2020
7000 NM	04/11/2019 - 04/10/2020
7000 NN	05/20/2019 - 09/01/2020
7000 NP	05/20/2019 - 09/01/2020
7000 NQ	05/20/2019 - 09/01/2020
7000 NR	05/20/2019 - 09/01/2020
7000 NS	07/16/2019 - 07/15/2020
7000 NT	07/16/2019 - 07/15/2020
7000 NU	07/16/2019 - 07/15/2020
7000 NV	07/16/2019 - 07/15/2020
7000 NW	07/16/2019 - 07/15/2020
7000 NX	07/12/2019 - 09/01/2020
7000 NY	07/26/2019 - 07/25/2020
7000 NZ	08/05/2019 - 09/01/2020
7000 PA	08/09/2019 - 09/01/2020
7000 PB	08/09/2019 - 09/01/2020
7000 PC	08/29/2019 - 09/01/2020
7000 PD	08/28/2019 - 09/01/2020
7000 PE	09/25/2019 - 09/01/2020
7000 PF	09/25/2019 - 09/01/2020
7000 PG	09/25/2019 - 09/01/2020
7000 PH	09/25/2019 - 09/01/2020
7000 PJ	09/25/2019 - 09/01/2020
7000 PK	09/25/2019 - 09/01/2020
7000 PL	09/25/2019 - 09/01/2020
7000 PM	11/25/2019 - 09/01/2020
7000 PN	11/25/2019 - 09/01/2020
7000 PP	11/25/2019 - 09/01/2020
7000 PQ	02/05/2020 - 09/01/2020
7000 PR	02/05/2020 - 09/01/2020
7000 PS	02/05/2020 - 09/01/2020
7000 PU	03/20/2020 - 09/01/2020

7000 PV	03/20/2020 - 09/01/2020
7000 PW	03/20/2020 - 09/01/2021
7000 PX	07/06/2020 - 09/01/2021
9000 AA	03/24/2016 - 09/01/2020
9000 AB	03/24/2016 - 03/23/2017
9000 AC	03/24/2016 - 03/23/2017
9000 AD	03/24/2016 - 03/23/2017
9000 AL	03/24/2016 - 03/23/2017
9000 AM	03/24/2016 - 03/23/2017
9000 AS	03/31/2016 - 09/01/2017
9000 AV	03/31/2016 - 09/01/2017
9000 AW	03/31/2016 - 09/01/2017
9000 AX	03/31/2016 - 09/30/2017
9000 AZ	03/31/2016 - 09/01/2017
9000 BA	03/31/2016 - 09/01/2017
9000 BD	03/31/2016 - 09/01/2017
9000 BJ	04/06/2016 - 09/01/2017
9000 BM	03/30/2016 - 09/01/2017
9000 BN	04/01/2016 - 03/30/2017
9000 BQ	03/24/2016 - 03/23/2017
9000 BU	03/29/2016 - 06/30/2018
9000 BV	07/02/2016 - 07/01/2017
9000 BX	07/02/2016 - 07/01/2017
9000 CA	07/02/2016 - 07/01/2017
9000 CE	07/02/2016 - 07/01/2017
9000 CF	05/18/2016 - 09/30/2017
9000 CH	11/17/2016 - 11/16/2017
9000 CJ	05/18/2016 - 09/01/2017
9000 CK	05/18/2016 - 09/01/2017
9000 CM	05/18/2016 - 09/01/2017
9000 CS	08/12/2016 - 09/01/2017
9000 CT	05/18/2016 - 09/01/2017
9000 CY	05/19/2016 - 12/31/2017
9000 CZ	05/19/2016 - 05/18/2018
9000 DD	09/02/2016 - 06/30/2018
9000 DE	05/20/2016 - 09/17/2017
9000 DJ	05/20/2016 - 09/01/2017
9000 DK	09/16/2016 - 09/01/2017
9000 DL	07/02/2016 - 07/01/2017
9000 DM	09/02/2016 - 09/01/2017
9000 DR	09/02/2016 - 09/01/2017

9000 DU	09/02/2016 - 09/01/2017
9000 DY	09/02/2016 - 09/30/2017
9000 DZ	09/02/2016 - 09/01/2017
9000 EC	09/02/2016 - 09/01/2017
9000 ED	09/02/2016 - 06/01/2018
9000 EF	09/02/2016 - 09/01/2018
9000 EH	09/02/2016 - 09/30/2017
9000 EL	09/02/2016 - 09/01/2017
9000 EM	09/02/2016 - 09/01/2017
9000 EN	09/02/2016 - 09/01/2017
9000 EP	09/02/2016 - 09/30/2017
9000 EQ	09/02/2016 - 09/01/2017
9000 ES	09/02/2016 - 12/31/2017
9000 ET	09/02/2016 - 09/01/2020
9000 EU	09/02/2016 - 09/01/2017
9000 EV	09/02/2016 - 09/01/2017
9000 EW	08/15/2016 - 11/30/2016
9000 EX	09/02/2016 - 09/01/2017
9000 EZ	11/16/2016 - 11/15/2017
9000 FB	11/16/2016 - 11/15/2017
9000 FD	11/16/2016 - 11/15/2017
9000 FF	11/16/2016 - 11/15/2017
9000 FG	11/23/2016 - 11/22/2017
9000 FJ	11/17/2016 - 09/01/2018
9000 FM	07/26/2017 - 09/01/2018
9000 FP	11/17/2016 - 09/01/2017
9000 FQ	02/06/2017 - 03/31/2018
9000 FR	02/06/2017 - 09/01/2019
9000 FS	02/06/2017 - 09/01/2019
9000 FT	11/22/2016 - 09/01/2017
9000 FX	11/22/2016 - 09/01/2018
9000 GB	02/08/2017 - 02/07/2018
9000 GC	01/12/2017 - 09/01/2018
9000 GE	01/12/2017 - 09/01/2018
9000 GG	02/08/2017 - 02/07/2018
9000 GJ	02/08/2017 - 02/07/2018
9000 GL	02/06/2017 - 09/01/2018
9000 GM	07/26/2017 - 09/01/2018
9000 GR	02/09/2017 - 09/01/2018
9000 GS	02/09/2017 - 09/01/2018
9000 GT	02/09/2017 - 06/30/2018

9000 GV	02/06/2017 - 09/30/2017
9000 GW	02/08/2017 - 02/07/2018
9000 GZ	02/08/2017 - 02/07/2018
9000 HD	07/26/2017 - 09/30/2018
9000 HE	06/02/2017 - 06/01/2018
9000 HF	06/02/2017 - 06/01/2018
9000 HJ	06/02/2017 - 06/01/2018
9000 HK	06/02/2017 - 06/01/2018
9000 HL	06/02/2017 - 06/01/2018
9000 HU	06/02/2017 - 06/01/2018
9000 HV	06/02/2017 - 06/01/2018
9000 HW	06/02/2017 - 06/01/2018
9000 HX	06/02/2017 - 06/01/2018
9000 HY	06/02/2017 - 06/01/2018
9000 HZ	06/02/2017 - 06/01/2018
9000 JA	05/23/2017 - 05/22/2018
9000 JB	06/02/2017 - 06/01/2018
9000 JE	08/02/2017 - 08/01/2018
9000 JG	08/02/2017 - 08/01/2018
9000 JK	08/02/2017 - 08/01/2018
9000 JP	08/02/2017 - 08/01/2018
9000 JV	09/28/2017 - 09/01/2018
9000 KF	11/15/2017 - 11/14/2018
9000 KG	11/15/2017 - 09/01/2018
9000 KK	11/13/2017 - 11/12/2018
9000 KM	11/16/2017 - 09/30/2019
9000 KN	11/16/2017 - 09/01/2018
9000 KP	11/16/2017 - 09/01/2018
9000 KS	11/16/2017 - 09/30/2019
9000 KU	11/21/2017 - 09/01/2019
9000 KW	11/23/2017 - 09/01/2019
9000 KZ	02/10/2018 - 09/01/2018
9000 LE	07/02/2018 - 07/01/2019
9000 LF	05/04/2018 - 09/01/2018
9000 LN	07/18/2018 - 09/01/2019
9000 LP	07/11/2018 - 09/01/2019
9000 LT	07/02/2018 - 07/01/2019
9000 LX	09/10/2018 - 09/01/2019
9000 LZ	09/10/2018 - 09/01/2019
9000 MB	09/19/2018 - 09/01/2019
9000 MX	01/14/2019 - 01/13/2020

9000 MZ	01/14/2019 - 01/13/2020
9000 NC	01/14/2019 - 01/13/2020
9000 NG	01/30/2019 - 01/29/2020
9000 NL	03/07/2019 - 09/01/2020
9000 NM	04/11/2019 - 04/10/2020
9000 NQ	05/20/2019 - 09/01/2020
9000 NS	07/16/2019 - 07/15/2020
9000 NT	07/16/2019 - 07/15/2020
9000 NU	07/16/2019 - 07/15/2020
9000 NX	07/12/2019 - 09/01/2020
9000 NY	07/26/2019 - 07/25/2020
9000 NZ	08/05/2019 - 09/01/2020
9000 PK	09/25/2019 - 09/01/2020
9000 PM	11/25/2019 - 09/01/2020
9000 PN	09/25/2019 - 09/01/2020
9000 PP	09/25/2019 - 09/01/2020
9000 PQ	09/02/2020 - 09/01/2021
9000 PR	01/14/2020 - 09/09/2021
9000 PS	01/04/2020 - 09/01/2020
9000 PT	02/05/2020 - 07/15/2020
9000 PU	03/20/2020 - 09/01/2020
9000 PV	03/20/2020 - 09/01/2020
9000 PW	03/20/2020 - 09/01/2021

# **Section G - Contract Administration Data**

OMBUDSMAN (NAVSEA AND OVERARCHING)

PROCURING CONTRACTING OFFICER (PCO)

CONTRACTING OFFEICER'S REPRESENTATIVE (COR)

ALTERNATE CONTRACTING OFFEICER'S REPRESENTATIVE (COR)

# HQ G-2-0007 INVOICE INSTRUCTIONS (NAVSEA) (JAN 2008)

(a) In accordance with the clause of this contract entitled "ELECTRONIC SUBMISSION OF PAYMENT REQUESTS" (DFARS 252.232-7003), the Naval Sea Systems Command (NAVSEA) will utilize the DoD Wide Area Workflow Receipt and Acceptance (WAWF) system to accept supplies/services delivered under this contract. This web-based system located at <a href="https://wawf.eb.mil">https://wawf.eb.mil</a> provides the technology for government contractors and

authorized Department of Defense (DoD) personnel to generate, capture and process receipt and payment-related documentation in a paperless environment. Invoices for supplies/services rendered under this contract shall be submitted electronically through WAWF. Submission of hard copy DD250/invoices may no longer be accepted for payment.

- (b) It is recommended that the person in your company designated as the Central Contractor Registration (CCR) Electronic Business (EB) Point of Contact and anyone responsible for the submission of invoices, use the online training system for WAWF at <a href="http://wawftraining.com">http://wawftraining.com</a>. The Vendor, Group Administrator (GAM), and sections marked with an asterisk in the training system should be reviewed. Vendor Quick Reference Guides also are available at <a href="http://acquisition.navy.mil/navyaos/content/view/full/3521/">http://acquisition.navy.mil/navyaos/content/view/full/3521/</a>. The most useful guides are "Getting Started for Vendors" and "WAWF Vendor Guide".
- (c) The designated CCR EB point of contact is responsible for activating the company's CAGE code on WAWF by calling 1-866-618-5988. Once the company is activated, the CCR EB point of contact will self-register under the company's CAGE code on WAWF and follow the instructions for a group administrator. After the company is set-up on WAWF, any additional persons responsible for submitting invoices must self-register under the company's CAGE code at <a href="https://wawf.eb.mil">https://wawf.eb.mil</a>.
- (d) The contractor shall use the following document types, DODAAC codes and inspection and acceptance locations when submitting invoices in WAWF:

  Type of Document (contracting officer check all that apply)

  Invoice (FFP Supply & Service)

		mvoice (111 Supply & Service)
		Invoice and Receiving Report Combo (FFP Supply)
		Invoice as 2-in-1 (FFP Service Only)
		Cost Voucher (Cost Reimbursable, T&M, LH, or FPI)
		Receiving Report (FFP, DD250 Only)
	DOD	AAC Codes and Inspection and Acceptance Locations (contracting officer complete appropriate
inform	ation	as applicable)
	Issue	e DODAAC
	Adm	in DODAAC

Pay Office DODAAC
Inspector DODAAC
Service Acceptor DODAAC
Service Approver DODAAC
Ship To DODAAC
DCAA Auditor DODAAC
LPO DODAAC

Inspection Location N00024
Acceptance Location N00024

Attachments created in any Microsoft Office product may be attached to the WAWF invoice, e.g., backup documentation, timesheets, etc. Maximum limit for size of each file is 2 megabytes. Maximum limit for size of files per invoice is 5 megabytes.

(e) Before closing out of an invoice session in WAWF, but after submitting the document(s), you will be prompted to send additional email notifications. Click on "Send More Email Notification" and add the acceptor/receiver email addresses noted below in the first email address block, and add any other additional email addresses desired in the following blocks. This additional notification to the government is important to ensure that the acceptor/receiver is aware that the invoice documents have been submitted into WAWF.

# **Send Additional Email Notification To:**

(f) The contractor shall submit invoices/cost vouchers for payment per contract terms and the government shall process invoices/cost vouchers for payment per contract terms. Contractors approved by DCAA for direct billing will submit cost vouchers directly to DFAS via WAWF. Final voucher submission will be approved by the ACO.

- (g) The WAWF system has not yet been implemented on some Navy programs; therefore, upon written concurrence from the cognizant Procuring Contracting Officer, the Contractor is authorized to use DFAS's WInS for electronic end to end invoicing until the functionality of WInS has been incorporated into WAWF.
- (h) If you have any questions regarding WAWF, please contact the WAWF helpdesk at the above 1-866 number or the NAVSEA WAWF point of contact

(End of Text)

# **Section H - Special Contract Requirements**

5252.232-9104 ALLOTMENT OF FUNDS (MAY 1993)

(a) This contract is incrementally funded with respect to both cost and fee. The amount(s) presently available and allotted to this contract for payment of fee for incrementally funded contract line item number/contract subline item number (CLIN/SLIN), subject to the clause entitled "FIXED FEE" (FAR 52.216-8) or "INCENTIVE FEE" (FAR 52.216-10), as appropriate, is specified below. The amount(s) presently available and allotted to this contract for payment of cost for incrementally funded CLINs/SLINs is set forth below. As provided in the clause of this contract entitled "LIMITATION OF FUNDS" (FAR 52.232-22), the CLINs/SLINs covered thereby, and the period of performance for which it is estimated the allotted amount(s) will cover are as follows:

CPFF/CPIF/ODC			
ITEM			

(b) The parties contemplate that the Government will allot additional amounts to this contract from time to time for the incrementally funded CLINs/SLINs by unilateral contract modification, and any such modification shall state separately the amount(s) allotted for cost, the amount(s) allotted for fee, the CLINs/SLINs covered thereby, and the period of performance which the amount(s) are expected to cover.

(c) CLIN(s)/SLIN(s) 7000AB, 7000AC, 7000AD, 7000AE, 7000AF, 7000AG, 7000AH, 7000AJ, 7000AK, 7000AL, 7000AM, 7000AN, 7000AP, 7000AQ, 7000AR, 7000AS, 7000AT, 7000AU, 7000AV, 7000AW, 7000AX, 7000AY, 7000AZ, 7000BB, 7000BC, 7000BD, 7000BE, 7000BF, 7000BH, 7000BJ, 7000BK, 7000BL, 7000BM, 7000BN, 7000BP, 7000BQ, 7000BR, 7000BS, 7000BT, 7000BV, 7000BW, 7000BX, 7000BY, 7000BZ, 7000CA, 7000CB, 7000CC, 7000CD, 7000CE, 7000CF, 7000CG, 7000CH, 7000CJ, 7000CK, 7000CL, 7000CM, 7000CN, 7000CP, 7000CQ, 7000CR, 7000CS, 7000CT, 7000CU, 7000CV, 7000CW, 7000CX, 7000CY, 7000CZ, 7000DA, 7000DB, 7000DC, 7000DD, 7000DE, 7000DF, 7000DG, 7000DH, 7000DJ, 7000DK, 7000DL, 7000DM, 7000DN, 7000DP, 7000DQ, 7000DR, 7000DS, 7000DT, 7000DU, 7000DV, 7000DW, 7000DX, 7000DY, 7000DZ, 7000EA, 7000EB, 7000EC, 7000ED, 7000EE, 7000EF, 7000EG, 7000EH, 7000EJ, 7000EK, 7000EL, 7000EM, 7000EN, 7000EP, 7000EQ, 7000ER, 7000ES, 7000ET, 7000EU, 7000EV, 7000EW, 7000EX, 7000EZ, 7000FA, 7000FB, 7000FC, 7000FD, 7000FE, 7000FF, 7000FG, 7000FH, 7000FJ, 7000FK, 7000FL, 7000FM, 7000FN, 7000FP, 7000FQ, 7000FR, 7000FS, 7000FU, 7000FV, 7000FW, 7000FX, 7000FY, 7000FZ, 7000GA, 7000GB, 7000GC, 7000GD, 7000GE, 7000GF, 7000GG, 7000GH, 7000GJ, 7000GK, 7000GL, 7000GM, 7000GN, 7000GP, 7000GQ, 7000GR, 7000GS, 7000GT, 7000GU, 7000GV, 7000GW, 7000GX, 7000GY, 7000GZ, 7000HA, 7000HB, 7000HC, 7000HD, 7000HE, 7000HF, 7000HJ, 7000HK, 7000HL, 7000HM, 7000HP, 7000HQ, 7000HR, 7000HS, 7000HT, 7000HU, 7000HV, 7000HW, 7000HX, 7000HY, 7000JA, 7000JB, 7000JC, 7000JD, 7000JE, 7000JF, 7000JG, 7000JH, 7000JJ, 7000JK, 7000JL, 7000JM, 7000JN, 7000JP, 7000JQ, 7000JR, 7000JS, 7000JT, 7000JU, 7000JV, 7000JW, 7000JX, 7000JY, 7000JZ, 7000KA, 7000KB, 7000KC, 7000KD, 7000KE, 7000KF, 7000KG, 7000KH, 7000KJ, 7000KK, 7000KL, 7000KM, 7000KN, 7000KP, 7000KQ, 7000KR, 7000KS, 7000KT, 7000KU, 7000KV, 7000KW, 7000KX, 7000KY, 7000KZ, 7000LB, 7000LC, 7000LD, 7000LE, 7000LF, 7000LG, 7000LH, 7000LJ, 7000LK, 7000LM, 7000LN, 7000LP, 7000LQ, 7000LR, 7000LS, 7000LT, 7000LU, 7000LV, 7000LW, 7000LX, 7000LY, 7000LZ, 7000MA, 7000MB, 7000MC, 7000MD, 7000ME, 7000MF, 7000MG, 7000MH, 7000MJ, 7000MK, 7000ML, 7000MM, 7000MN, 7000MP, 7000MQ, 7000MR, 7000MS, 7000MT, 7000MU, 7000MV, 7000MW,

7000MX, 7000MY, 7000MZ, 7000NA, 7000NB, 7000NC, 7000ND, 7000NE, 7000NF, 7000NG, 7000NH, 7000NJ, 7000NK, 7000NL, 7000NM, 7000NN, 7000NP, 7000NQ, 7000NR, 7000NS, 7000NT, 7000NU, 7000NV, 7000NX, 7000NY, 7000NZ, 7000PA, 7000PB, 7000PC, 7000PD, 7000PE, 7000PF, 7000PG, 7000PH, 7000PX, 7000PK, 7000PM, 7000PN, 7000PN, 7000PN, 7000PN, 7000PN, 7000PX

9000AB, 9000AC, 9000AD, 9000AL, 9000AM, 9000AS, 9000AV, 9000AW, 9000AX, 9000AZ, 9000BA, 9000BD, 9000BJ, 9000BM, 9000BN, 9000BU, 9000BU, 9000BV, 9000BX, 9000CA, 9000CE, 9000CF, 9000CH, 9000CJ, 9000CK, 9000CM, 9000CS, 9000CT, 9000CY, 9000CZ, 9000DD, 9000DE, 9000DJ, 9000DK, 9000DL, 9000DM, 9000DR, 9000DU, 9000DY, 9000DZ, 9000EC, 9000ED, 9000EF, 9000EL, 9000EL, 9000EM, 9000EN, 9000EP, 9000EQ, 9000ES, 9000ET, 9000EU, 9000EW, 9000EW, 9000EX, 9000EZ, 9000FB, 9000FD, 9000FF, 9000FG, 9000FJ, 9000FM, 9000FP, 9000FQ, 9000FR, 9000FT, 9000FX, 9000GB, 9000GC, 9000GE, 9000GG, 9000GJ, 9000GL, 9000GM, 9000GR, 9000GS, 9000GT, 9000GV, 9000GW, 9000GZ, 9000HD, 9000HE, 9000HF, 9000HJ, 9000HK, 9000HL, 9000HV, 9000HV, 9000HW, 9000HX, 9000HZ, 9000JA, 9000JB, 9000JE, 9000JG, 9000JK, 9000JF, 9000JF, 9000KF, 900KF, 900KF, 900KF, 9

(d) The Contractor shall segregate costs for the performance of incrementally funded CLINs/SLINs from the costs of performance of fully funded CLINs/SLINs.

### 5252.216-9122 LEVEL OF EFFORT (DEC 2000)

- (a) The Contractor agrees to provide the total level of effort specified in the next sentence in performance of the work described in Sections B and C of this contract. The total level of effort for the performance of this contract could be total man-hours of direct labor, including subcontractor direct labor for those subcontractors specifically identified in the Contractor's proposal as having hours included in the proposed level of effort.
- (b) Of the total man-hours of direct labor set forth above, it is estimated that man-hours are uncompensated effort.

Uncompensated effort is defined as hours provided by personnel in excess of 40 hours per week without additional compensation for such excess work. All other effort is defined as compensated effort. If no effort is indicated in the first sentence of this paragraph, uncompensated effort performed by the Contractor shall not be counted in fulfillment of the level of effort obligations under this contract.

- (c) Effort performed in fulfilling the total level of effort obligations specified above shall only include effort performed in direct support of this contract and shall not include time and effort expended on such things as local travel to and from an employee's usual work location, uncompensated effort while on travel status, truncated lunch periods, work (actual or inferred) at an employee's residence or other non-work locations (except as provided in paragraph (j) below), or other time and effort which does not have a specific and direct contribution to the tasks described in Sections B and C.
- (d) The level of effort shall be expended at an average rate of approximately man-hours per week (man-hours / weeks year). It is understood and agreed that the rate of man-hours per month may fluctuate in pursuit of the technical objective, provided such fluctuation does not result in the use of the total man-hours of effort prior to the expiration of the term hereof, except as provided in the following paragraph.

- (e) If, during the term hereof, the Contractor finds it necessary to accelerate the expenditure of direct labor to such an extent that the total man-hours of effort specified above would be used prior to the expiration of the term, the Contractor shall notify the Contracting Officer in writing setting forth the acceleration required, the probable benefits which would result, and an offer to undertake the acceleration at no increase in the estimated cost or fee together with an offer, setting forth a proposed level of effort, cost breakdown, and proposed fee, for continuation of the work until expiration of the term hereof. The offer shall provide that the work proposed will be subject to the terms and conditions of this contract and any additions or changes required by then current law, regulations, or directives, and that the offer, with a written notice of acceptance by the Contracting Officer, shall constitute a binding contract. The Contractor shall not accelerate any effort until receipt of such written approval by the Contracting Officer. Any agreement to accelerate will be formalized by contract modification.
- (f) The Contracting Officer may, by written order, direct the Contractor to accelerate the expenditure of direct labor such that the total man-hours of effort specified in paragraph (a) above would be used prior to the expiration of the term. This order shall specify the acceleration required and the resulting revised term. The Contractor shall acknowledge this order within five days of receipt.
- (g) If the total level of effort specified in paragraph (a) above is not provided by the Contractor during the period of this contract, the Contracting Officer, at its sole discretion, shall either (i) reduce the fee of this contract as follows:

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Fee Reduction = Fee(Required LOE-Expended LOE)
  Required LOE
```

- or (ii) subject to the provisions of the clause of this contract entitled "LIMITATION OF COST" (FAR 52.232-20) or "LIMITATION OF COST (FACILITIES)" (FAR 52.232-21), as applicable, require the Contractor to continue to perform the work until the total number of man-hours of direct labor specified in paragraph (a) above shall have been expended, at no increase in the fee of this contract.
- (h) The Contractor shall provide and maintain an accounting system, acceptable to the Administrative Contracting Officer and the Defense Contract Audit Agency (DCAA), which collects costs incurred and effort (compensated and uncompensated, if any) provided in fulfillment of the level of effort obligations of this contract. The Contractor shall indicate on each invoice the total level of effort claimed during the period covered by the invoice, separately identifying compensated effort and uncompensated effort, if any.
- (i) Within 45 days after completion of the work under each separately identified period of performance hereunder, the Contractor shall submit the following information in writing to the Contracting Officer with copies to the cognizant Contract Administration Office and to the DCAA office to which vouchers are submitted: (1) the total number of man-hours of direct labor expended during the applicable period; (2) a breakdown of this total showing the number of man-hours expended in each direct labor classification and associated direct and indirect costs; (3) a breakdown of other costs incurred; and (4) the Contractor's estimate of the total allowable cost incurred under the contract for the period. Within 45 days after completion of the work under the contract, the Contractor shall submit, in addition, in the case of a cost underrun; (5) the amount by which the estimated cost of this contract may be reduced to recover excess funds and, in the case of an underrun in hours specified as the total level of effort; and (6) a calculation of the appropriate fee reduction in accordance with this clause. All submissions shall include subcontractor information.
- (j) Unless the Contracting Officer determines that alternative worksite arrangements are detrimental to contract performance, the Contractor may perform up to 10% of the hours at an alternative worksite, provided the Contractor has a company-approved alternative worksite plan. The primary worksite is the traditional "main office" worksite. An alternative worksite means an employee's residence or a telecommuting center. A telecommuting center is a geographically convenient office setting as an alternative to an employee's main office. The Government reserves the

right to review the Contractor's alternative worksite plan. In the event performance becomes unacceptable, the Contractor will be prohibited from counting the hours performed at the alternative worksite in fulfilling the total level of effort obligations of the contract. Regardless of work location, all contract terms and conditions, including security requirements and labor laws, remain in effect. The Government shall not incur any additional cost nor provide additional equipment for contract performance as a result of the Contractor's election to implement an alternative worksite plan.

(k) Notwithstanding any of the provisions in the above paragraphs, the Contractor may furnish man-hours up to five percent in excess of the total man-hours specified in paragraph (a) above, provided that the additional effort is furnished within the term hereof, and provided further that no increase in the estimated cost or fee is required.

Note::

## 5252.242-9115 TECHNICAL INSTRUCTIONS (APR 1999)

- (a) Performance of the work hereunder may be subject to written technical instructions signed by the Contracting Officer's Representative specified in Section G of this contract. As used herein, technical instructions are defined to include the following:
- (1) Directions to the Contractor which suggest pursuit of certain lines of inquiry, shift work emphasis, fill in details or otherwise serve to accomplish the contractual statement of work.
- (2) Guidelines to the Contractor which assist in the interpretation of drawings, specifications or technical portions of work description.
- (b) Technical instructions must be within the general scope of work stated in the contract. Technical instructions may not be used to: (1) assign additional work under the contract; (2) direct a change as defined in the "CHANGES" clause of this contract; (3) increase or decrease the contract price or estimated contract amount (including fee), as applicable, the level of effort, or the time required for contract performance; or (4) change any of the terms, conditions or specifications of the contract.
- (c) If, in the opinion of the Contractor, any technical instruction calls for effort outside the scope of the contract or is inconsistent with this requirement, the Contractor shall notify the Contracting Officer in writing within ten (10) working days after the receipt of any such instruction. The Contractor shall not proceed with the work affected by the technical instruction unless and until the Contractor is notified by the Contracting Officer that the technical instruction is within the scope of this contract.
- (d) Nothing in the foregoing paragraph shall be construed to excuse the Contractor from performing that portion of the contractual work statement which is not affected by the disputed technical instruction.

# ORGANIZATIONAL CONFLICT OF INTEREST (NAVSEA) (JUL 2000) (RESTATED FROM BASIC CONTRACT)

(a) "Organizational Conflict of Interest" means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage. "Person" as used herein includes Corporations, Partnerships, Joint Ventures, and other business enterprises.

- (b) The Contractor warrants that to the best of its knowledge and belief, and except as otherwise set forth in the contract, the Contractor does not have any organizational conflict of interest(s) as defined in paragraph (a).
- (c) It is recognized that the effort to be performed by the Contractor under this contract may create a potential organizational conflict of interest on the instant contract or on a future acquisition. In order to avoid this potential conflict of interest, and at the same time to avoid prejudicing the best interest of the Government, the right of the Contractor to participate in future procurement of equipment and/or services that are the subject of any work under this contract shall be limited as described below in accordance with the requirements of FAR 9.5.
- (d) (1) The Contractor agrees that it shall not release, disclose, or use in any way that would permit or result in disclosure to any party outside the Government any information provided to the Contractor by the Government during or as a result of performance of this contract. Such information includes, but is not limited to, information submitted to the Government on a confidential basis by other persons. Further, the prohibition against release of Government provided information extends to cover such information whether or not in its original form, e.g., where the information has been included in Contractor generated work or where it is discernible from materials incorporating or based upon such information. This prohibition shall not expire after a given period of time.
- (2) The Contractor agrees that it shall not release, disclose, or use in any way that would permit or result in disclosure to any party outside the Government any information generated or derived during or as a result of performance of this contract. This prohibition shall expire after a period of three years after completion of performance of this contract.
- (3) The prohibitions contained in subparagraphs (d)(1) and (d)(2) shall apply with equal force to any affiliate of the Contractor, any subcontractor, consultant, or employee of the Contractor, any joint venture involving the Contractor, any entity into or with which it may merge or affiliate, or any successor or assign of the Contractor. The terms of paragraph (f) of this Special Contract Requirement relating to notification shall apply to any release of information in contravention of this paragraph (d).
- (e) The Contractor further agrees that, during the performance of this contract and for a period of three years after completion of performance of this contract, the Contractor, any affiliate of the Contractor, any subcontractor, consultant, or employee of the Contractor, any joint venture involving the Contractor, any entity into or with which it may subsequently merge or affiliate, or any other successor or assign of the Contractor, shall not furnish to the United States Government, either as a prime contractor or as a subcontractor, or as a consultant to a prime contractor or subcontractor, any system, component or services which is the subject of the work to be performed under this contract. This exclusion does not apply to any recompetition for those systems, components or services furnished pursuant to this contract. As provided in FAR 9.505-2, if the Government procures the system, component, or services on the basis of work statements growing out of the effort performed under this contract, from a source other than the contractor, subcontractor, affiliate, or assign of either, during the course of performance of this contract or before the three year period following completion of this contract has lapsed, the Contractor may, with the authorization of the SeaPort/Task Order Contracting Officer, participate in a subsequent procurement for the same system, component, or service. In other words, the Contractor may be authorized to compete for procurement(s) for systems, components or services subsequent to an intervening procurement.
- (f) The Contractor agrees that, if after award, it discovers an actual or potential organizational conflict of interest, it shall make immediate and full disclosure in writing to the SeaPort/Task Order Contracting Officer. The notification shall include a description of the actual or potential organizational conflict of interest, a description of the action which the Contractor has taken or proposes to take to avoid, mitigate, or neutralize the conflict, and any other relevant information that would assist the SeaPort/Task Order Contracting Officer in making a determination on this matter. Notwithstanding this notification, the Government may terminate the contract/Task Orders for the convenience of the Government if determined to be in the best interest of the Government.

- (g) Notwithstanding paragraph (f) above, if the Contractor was aware, or should have been aware, of an organizational conflict of interest prior to the award of this contract or becomes, or should become, aware of an organizational conflict of interest after award of this contract and does not make an immediate and full disclosure in writing to the SeaPort/Task Order Contracting Officer, the Government may terminate this contract/task orders for default.
- (h) If the Contractor takes any action prohibited by this requirement or fails to take action required by this requirement, the Government may terminate this contract for default.
- (i) The SeaPort/Task Order's Contracting Officer's decision as to the existence or nonexistence of an actual or potential organizational conflict of interest shall be final.
- (j) Nothing in this requirement is intended to prohibit or preclude the Contractor from marketing or selling to the United States Government its product lines in existence on the effective date of this contract; nor, shall this requirement preclude the Contractor from participating in any research and development or delivering any design development model or prototype of any such equipment. Additionally, sale of catalog or standard commercial items are exempt from this requirement.
- (k) The Contractor shall promptly notify the Contracting Officer, in writing, if it has been tasked to evaluate or advise the Government concerning its own products or activities or those of a competitor in order to ensure proper safeguards exist to guarantee objectivity and to protect the Government's interest.
- (l) The Contractor shall include this requirement in subcontracts of any tier which involve access to information or situations/conditions covered by the preceding paragraphs, substituting "subcontractor" for "contractor" where appropriate.
- (m) The rights and remedies described herein shall not be exclusive and are in addition to other rights and remedies provided by law or elsewhere included in the basic contract or this task order.
- (n) Compliance with this requirement is a material requirement of the basic contract and this task order.

#### AWARD TERM CLAUSE

## (a) Maximum Period of Performance

The initial Task Order period of performance may be extended through the exercise of up to one option year and three award term years (years 2 through 5), as provided for in the Section I clause of this Task Order entitled OPTION TO EXTEND THE PERIOD OF PERFORMANCE and the Award Term provisions defined herein. These additional "award term" or "option" periods will be awarded by the Government based on contractor performance as determined by the Government in accordance with this clause.

### (b) Monitoring Performance

Contractor performance will be monitored by the Government. A panel hereinafter referred to as the Award Term Review Board or ATRB will be responsible for monitoring and will make recommendations to the Term Determining Official (TDO). The ATRB may accept monitoring input from any source it chooses. The ATRB may be changed at any time at the discretion of the TDO. Notice of such change will be provided to the contractor.

The ATRB shall be composed of the following:

- SEA05, or designee
- Task Order Manager (TOM), as defined in Section G of Task Order
- SEA05 personnel, as appointed
- Procuring Contracting Officer (PCO), SEA 02651 or designee

The ATRB will report its findings and recommendations to a TDO. The TDO will make the final decision on whether the contractor's performance during the evaluation period is sufficient to earn the contractor an award term or to retain an already earned term.

The TDO shall be SEA05B or his designee.

### (c) Award Term Evaluation Periods

Each year of performance shall be an evaluation period. Each of the first four years shall be evaluated to determine whether the contractor earns an award term. Years two through four will be evaluated to determine whether the contractor has retained award terms already earned.

The Government will conduct an *interim* evaluation at approximately the half-way point of each evaluation period. These interim evaluations are intended to provide the contractor with the Government's assessment of the contractor's performance through the first half of each award term evaluation period.

A *final* evaluation will occur on an annual basis. The final evaluation will consider all effort that has occurred during the evaluation period. Only the final evaluation will be used as a basis for the award term decision.

## (d) Self-Evaluation

The Contractor shall submit to the PCO within fourteen working days after the end of each final evaluation period a written self-evaluation of its performance for that period. The written self-evaluation may contain any information that may be reasonably expected to assist the ATRB in evaluating the Contractor's performance. This self-evaluation will be considered in the ATRB's evaluation of the Contractor's performance.

## (e) Award Term Procedures

After the conclusion of an evaluation period, the ATRB will meet to evaluate the Contractor's performance, including the Contractor's self-evaluation. The Contractor may be invited to present information in addition to that contained in the self-evaluation to assist in the ATRB's evaluation. The criteria to be considered in the evaluation are set forth elsewhere in this Award Term clause.

A numerical score, on a scale of 0-100, will be determined for each of the evaluation criterion. The numerical weights for each evaluation criterion will be applied to the score. The weighted criteria scores will be summed to arrive at a total, weighted evaluation score. This score, along with any supporting narrative that may be prepared by the ATRB, will be provided to the TDO. The TDO will determine the final award term rating for an evaluation period. The Contracting Officer will inform the Contractor of the award term rating in a letter to the Contractor.

The contractor must receive a total evaluation rating score of 81 or higher to earn an award term year. If the overall evaluation rating score is 80 or below, the contractor shall not have earned an additional award term year for that evaluation period.

## (f) Retention

The contractor must receive a total evaluation rating score of 81 or higher to retain an award term year. If the overall evaluation rating score is 80 or below, the contractor shall not have retained the award term year additional award term year for that evaluation period.

### (g) Finality of Decisions

Award Term decisions are at the sole discretion of the TDO. All decisions rendered by the TDO are final. The phrase "award term decision" refers to both the decision by the TDO whether the Contractor has earned an award term and the decision by the TDO whether the Contractor has retained an award term already earned. An award term decision is made at the sole discretion of the TDO.

## (h) Fair and Reasonable Price A Necessary Condition

The Contracting Officer must determine that the price set forth in the Task Order for the services covered by the Task Order continues to be fair and reasonable for a given award term period. Such a decision is at the sole discretion of

the PCO. A decision that the price is no longer fair and reasonable will result in the Government voiding any award terms earned. A determination regarding whether there is a continued need for the same goods or services may be made at any time.

## (i) Option Exercise A Necessary Condition

If at any time the Government does not exercise an option, any previously awarded award term(s) shall be void.

## (j) Retention of Award Terms A Necessary Condition

If at any time the Contractor has not retained an award term already earned, any subsequent terms shall be void.

### (k) Continued Funds A Necessary Condition

The PCO must make a determination that sufficient funds are available before an award term that has been earned and retained may be become effective. The determination that sufficient funds are available does not constitute a finding that funds equal to the full total estimated cost of performance for a given year are available. Award term periods may be incrementally funded. In the event of incremental funding, the clause entitled LIMITATION OF FUNDS (FAR 52.232-22 (April 1984) shall apply.

The decision that sufficient funds are available is at the sole discretion of the PCO. Resources available to the program manager are subject to the managerial discretion of a program manager and a decision that sufficient funds are not available for this contract may be made even if there are funds available to the program office. A determination regarding the availability of funds may be made at any time.

## (1) Continued Requirement A Necessary Condition

The Contracting Officer must determine that a continued need for the same services covered by this Task Order exists for a given award term period. Such a decision is at the sole discretion of the Contracting Officer. A decision that the requirement has changed or that a requirement for the same goods or services no longer exists will result in the Government voiding any award terms earned. A determination regarding whether there is a continued need for the same services may be made at any time.

## (m) Failure to Retain Earned Award Terms Not a Termination

If at any time the Government does not authorize performance of a previously earned award term, the subsequent terms shall be considered void. The Contractor shall not be entitled to any costs arising out of or related to those award terms that are made void by virtue of the operation of this clause. An award term decision that an earned award term has not been retained is not a termination for convenience. A decision by the PCO that any of the necessary conditions of this clause have not been satisfied is not a termination for convenience. For example, if the Contractor has earned three award terms but the Government fails to exercise the option for the fifth year of the contract, then the contract shall end at the completion of the period of performance for the fourth year.

## (n) Contractor Right to Decline

The contractor retains the right to decline any award term earned, even after award and/or retention, *prior to* 15 months before the start of an award term year. The Contractor must notify the PCO in writing prior to 15 months before the start of the award term year of its desire not to perform the next award term year. Failure to so notify the PCO may result in a default termination if the Contractor fails to perform an award term that the Government has authorized. In the event the Contractor elects its rights to decline an earned award term, all award terms shall be void.

## (o) Extension of the Task Order

The PCO will unilaterally modify the contract to extend the period of performance in one-year increments when each of the following conditions apply:

- an award term earned has been retained;
- the Government has a continuing requirement for the service(s) covered;
- the price established for the covered line items remains fair and reasonable;
- appropriated funds are available;
- the Contractor has not expressly stated in writing that it is unwilling to perform an award term no later than fifteen months before the beginning of an award term period.

### (p) Evaluation Criteria

Evaluation Categories and Factors. Following each evaluation period, the Contractor's performance will be evaluated in the following categories, weighted as shown:

#### **EVALUATION CATEGORY WGT**

Cost Performance 25%

Schedule Performance 25%

**Technical Performance 25%** 

**Subcontract Performance 25%** 

The Government may unilaterally change any evaluation categories, weights, or factors it deems necessary. The Contractor, however, will be notified of changes prior to the beginning of an affected evaluation period. Unsatisfactory performance in any evaluation category may result in an increased weight for that category in subsequent evaluation periods.

#### AWARD TERM PLAN

#### 1.0 INTRODUCTION

This is the basis for evaluation of the contractor's performance and for presenting an assessment of that performance to the term-determining official (TDO). The evaluation for the number of term points to be awarded will begin at the start of the Task Order.

Award-term contracting is effective when performance metrics are objective, a long-term business relationship is of value to the government and to the contractor, and the expected outcomes are known up-front. The specific criteria and procedures used for assessing the contractor's performance and for determining the award term earned are described herein. All TDO decisions regarding the award-term points—including, but not limited to, the number of points, if any; the methodology used to calculate the points; the calculation of the points; the contractor's entitlement to the points: and the nature and success of the contractor's performance—are final and not subject to dispute.

The award term will be provided to the supplier through unilateral task order modifications based upon points earned as determined by the TDO.

#### 2.0 ORGANIZATION

The award-term organization includes the TDO and an Award-Term Review Board (ATRB) consisting of a chairperson, the contracting officer, a recorder, other functional area participants, advisory members, and the performance monitors.

#### 3.0 RESPONSIBILITIES

- a. Term-Determining Official. The TDO approves the award-term plan and any significant changes to it. The TDO reviews the recommendations of the ATRB, considers all pertinent data, and determines the earned award-term points for each evaluation period. The TDO appoints the ATRB chairperson.
- b. Award-Term Review Board Chairperson. The ATRB chairperson chairs the meetings of the ATRB and appoints the non-mandatory members of the board and the performance monitors. The ATRB chairperson briefs the TDO on recommended earned term amounts and the contractor's overall performance and recommends award-term plan changes to the TDO.
- c. Award-Term Review Board. ATRB members review performance monitors' evaluation of the contractor's performance, consider all information from pertinent sources and arrive at the earned award-term points recommendation to be presented to the TDO. The ATRB will also recommend changes to this plan. An assessment of the contractor's performance will be done on a yearly basis, starting with the completion of the Base Period of this task order.
- d. ATRB Recorder. The ATRB recorder is responsible for coordinating the administrative actions required by the performance monitors, the ATRB, and the TDO.
- e. Contracting Officer (CO). The CO is the liaison between contractor and government personnel. Subsequent to the TDO decision, the CO evaluates the award-term points available and modifies the Task Order period of performance, if necessary, to reflect the decision.

f. Performance Monitors. Performance monitors maintain written records of the contractor's performance in their assigned evaluation areas so that a fair and accurate evaluation is obtained.

#### 4.0 AWARD-TERM PROCESSES

- a. Available Award-Term Points. The earned award-term points will be based on the contractor's performance during each evaluation period. The available points for each evaluation period are shown in Annex 2.
- b. Evaluation Criteria. If the CO does not give specific notice in writing to the contractor of any change to the evaluation criteria prior to the start of a new evaluation period, then the same criteria listed for the preceding period will be used in the following award-term evaluation period. Modifications to the plan shall take effect in the next evaluation period.
- c. End-of-Period Evaluations. The ATRB recorder notifies ATRB members and performance monitors 14 calendar days before the end of the evaluation period. The contractor presents its self-assessment to the CO within 30 calendar days after the end of the evaluation period. This written assessment of the contractor's performance throughout the evaluation period may also contain any information that could be reasonably expected to assist the ATRB in evaluating its performance. The self-assessment may not exceed 20 pages. Performance monitors submit their evaluation reports to the ATRB within 30 calendar days after the end of the evaluation period. Copies shall be provided to the contractor; the contractor is then given an opportunity to address the performance monitor evaluations. The ATRB prepares its evaluation report and recommendation regarding earned or unearned award-term points. The ATRB briefs the evaluation report, and recommendation to the TDO within 60 calendar days after the end of the evaluation period. The TDO determines the overall award-term points for the evaluation period within 90 calendar days after each evaluation period. The TDO letter informs the contractor of the earned award-term points. Upon the award of sufficient award term-points, the CO issues a contract modification within 15 calendar days after the TDO's decision is made authorizing an award extension or reduction based on the earned or unearned award-term points.

#### 5.0 AWARD-TERM PLAN CHANGE PROCEDURE

The TDO may unilaterally change this plan prior to the beginning of an evaluation period. In addition, the contractor may recommend changes to the plan no later than 30 days prior to the beginning of the new evaluation period. The contractor will be notified of changes to the plan by a modification to the task order, before the start of the affected evaluation period. Changes to this plan that are applicable to a current evaluation period will be incorporated by the mutual consent of both parties.

## AWARD TERM ORGANIZATION

Term Determining Official:	SEA 05B	
Award Term Review Board Chairperson:	SEA 05 personnel	
Award Term Review Board Members:		
Member(s)	SEA 05 personnel	
Contracting Officer	SEA 0265 or representative	
Recorder	SEA 05 personnel	

Area of Evaluation Performance Monitor(s)	
Cost Performance	SEA 05 personnel
Organization and Management	SEA 05 personnel
Quality of Work/Schedule	SEA 05 personnel

The Government reserves the right to make substitutes for award term organization members and performance monitors.

#### AWARD TERM ALLOCATION BY EVALUATION PERIODS

The award term earned by the contractor will be determined at the completion of evaluation periods shown below. The award term points shown corresponding to each period are the maximum available award term amount that can be earned during that particular period.

<b>Evaluation Period</b>	From	То	Available Award Term Points
FIRST	Task Order Award	12 months thereafter	100
SECOND	Exercise of Option 1	12 months thereafter	100
THIRD	Exercise of Award Term 1	12 months thereafter	100

A score of 85 award term points in an evaluation period = 1 award term option, with possibility of additional ceiling

A score between 85 and 60 award term points = 1 award term option, with no additional ceiling

A score between 40 and 60 award term points = 1 award term option award, with loss of one half of award term ceiling

A score of 40 or below in an evaluation period = no award term period extension and loss of half of any previously awarded term extensions

#### OVERALL GRADE DEFINITIONS AND CORRESPONDING AWARD TERM POINTS:

Unsatisfactory Performance: Contractor's performance of most contract tasks is inadequate and inconsistent. Quality, responsiveness, and timeliness in many areas require attention and action. Corrective actions have not been taken or are ineffective. Award Term Points: 0 - 40

**Marginal Performance:** Special initiatives or innovation add value to the government, raising score of an otherwise unsatisfactory performance to marginal. Conversely, exceptionally poor performance in any given area may render an otherwise satisfactory performance marginal. Award Term Points: 41-60

**Satisfactory Performance:** Contractor's performance of most contract tasks is adequate with tangible and intangible benefits to the Government. Most areas of performance are adequate; these are more or less offset by lower-rated performance in other areas. Award Term Points: 60-85

**Excellent Performance:** Contractor's performance of virtually all contract tasks is consistently noteworthy and provides numerous significant, tangible or intangible, benefits to the Government (e.g., improved quality, responsiveness, increased timeliness, or generally enhanced effectiveness of operations). The few areas for improvement are all minor. There are no recurring problems. Contractor's management initiates effective corrective action whenever needed. Award Term Points: 86-100

## **EVALUATION CRITERIA**

Technical Excellence: 50% of Total

Cost Performance: 20% of Total

Management and Business Process and

Small Business Participation 30% of Total

## TECHNICAL EXCELLENCE

UNSATISFACTORY	SATISFACTORY	EXCELLENT
Contractor leaves questionable situations for Government to resolve.	Contractor follows guidance, questioning and resolving challenges.	Contractor's work of highest caliber incorporating all pertinent data required.
Contractor tends to follow past practices with no variation to meet requirements of the current contract.	Contractor displays knowledge of contract requirements and adapts existing processes to fulfill requirements.	Contractor displays exceptional knowledge of contract requirements and adaptability to work processes.
Deliverables are incomplete, contain inaccuracies and are untimely. Discrepancies are major and require extensive time and effort to correct.	Deliverables are complete, accurate and meet schedule requirements. Discrepancies are minor and easily corrected.	All deliverables are submitted on time or ahead of schedule, exceeding requirements and submitted in a format that is complete, clear, concise, technically accurate and easily understood. Any corrections are very minor in nature and are expeditiously corrected.
Fails to meet "satisfactory" standard for contractually required deliverable schedules. Fails to meet customer expectations for satisfying demands.	For 95% of deliverables, meets contractually required schedule. Meets customer expectations for satisfying demands.	Substantially reduces contractually required deliverable times, consistent with customer priority requests. Exceeds customer expectations for satisfying demands.

## **COST PERFORMANCE:**

UNSATISFACTORY	SATISFACTORY	EXCELLENT
Funds and resources are used inefficiently in pursuing program goals and result in resource management problems. Contractor provides limited measures for controlling staff and subcontracting cost performance to meet program objectives. Average hourly invoiced costs exceed proposed rates by over 20%.	Contractor provides measures for controlling all labor costs during the performance of the contract. Funds and resources are generally used in a cost-effective manner. No major resource management problems are apparent. Average hourly invoiced costs within 20% of proposed rates.	Efforts to reduce staffing costs are noteworthy. Funds and resources are optimally used to provide the maximum benefit for the funds and resources available. Average hourly invoiced costs are within 5% of proposed rates unless they reflect a variance in the required labor category utilization, documented in advance.
No apparent effort is made to control travel or material costs.	Contractor takes the initiative to reduce travel and material costs, where feasible.	Efforts to reduce travel and material costs are noteworthy. Contractor is responsive to cost control measures implemented by the Government.
Financial reporting is sometimes late or inaccurate. Problems and/or trends may be addressed. When provided, analyses of problems or trends are generally accurate.	Financial reporting is clear and accurate. Problems and/or trends are addressed, and an analysis is also submitted.	Financial reporting is clear, accurate, and pro-active. Trends are addressed thoroughly and savings are clearly documented. Contractor provides detailed cost analysis and recommendations to Government for resolution to problems identified. Corrective plans are implemented and effective.
Contractor invoices are sometimes submitted over 30 days past the period covered. Invoices are sometimes rejected for accuracy or other concerns.	Contractor invoices are submitted within the specified period. Invoices are clear and accurate.	Contractor invoices are clear and accurate and are submitted within 21 days of the end of the specified period.

## MANAGEMENT AND BUSINESS PROCESS

UNSATISFACTORY	SATISFACTORY	EXCELLENT
Contractor fails to identify problems in a timely manner. Solutions, when and if implemented, have a negative impact on cost and schedule.	Problems are identified by the contractor in a timely manner. Contractor provides sufficient information on alternate solutions. Solutions are implemented with limited adverse impact to estimated cost and schedule.	Contractor practices proactive management to identify and anticipate problems prior to adverse impact. Contractor provides organized and detailed alternatives including risk assessments, trade off analysis between cost, schedule and performance, plan of action and implementation schedule. Solutions are implemented with no impact to estimated cost and schedule.
Lines of communication fail to facilitate timely exchange of information, both technical and contractual in order to meet project goals.	Lines of communication facilitate timely exchange of information, both technical and contractual in order to meet project goals.	Lines of communication are well defined, clearly understood, and always facilitate rapid exchanges of information, both technical and contractual, in order to meet project goals.
The contractor is unable to reliably identify and subcontract with qualified vendors. Subcontractor payments are often (>25%) late.	The contractor effectively executes the required purchasing and subcontract management actions. Subcontractor payments are sometimes (<25%) late.	The contractor provides responsive and compliant purchasing and subcontract management services. It reliably (for >90% of actions) makes payment on subcontractor invoices within the agreed period.
The contractor delivers less than half of the small business subcontracting (measured as a percentage of total cost to the government) proposed for this task order.	The contractor delivers at least half of the small business subcontracting proposed for this task order.	The contractor meets or exceeds its goal for small business subcontracting proposed for this task order.

#### CONTRACTOR SELF-ASSESSMENT REPORTING

The following metrics will be provided as part of the contractor prepared self assessment for each End-of-Period Evaluation.

**Average Labor Rate Delivered:** This is to be calculated as the total hours delivered divided into the total Cost Plus Fixed Fee for labor (CLINS 0001 & 0004) as reflected in the contractor's invoices for the period evaluated.

**Invoice History:** Provide, for each invoice submitted during the period evaluated:

- a) Date of Invoice.
- b) Period Covered.
- c) Current period cost and fee booked in the contractor's accounting system.
- d) Cumulative contract to date cost and fee booked in the contractor's accounting system.
- e) Amount of current period cost and fee invoiced.
- f) Cumulative contract to date cost and fee invoiced.
- g) Estimated cost and fee incurred for the current period.
- h) Estimated cost and fee incurred for the contract to date.
- i) Analysis of variance between incurred, booked, and invoiced amounts.

Subcontractor Payments: Provide the following information for the period evaluated:

- a) Number of subcontractor invoices received
- b) Number of subcontractor invoices rejected at least once.
- c) Average time to complete payment for a valid invoice
- d) Number of invoices paid within subcontract terms
- e) Number of invoices paid in excess of subcontract terms
- f) For e), the average and maximum days late

**Small Business Subcontractor Utilization:** Provide the most recently submitted SF294 data on task order subcontracting performance. If the most recent report predates the end of the period evaluated by more than 3 calendar months, provide an update as of the end of the evaluated period. In each case provide additional data quantifying the utilization of large, small, and the various special classes of small business as a percentage of the cost and fee invoiced for the period reported and cumulatively for the contract to date.

## SEQUENCE OF EVENTS - AWARD TERM PROCESS

End-of-Period (EOP) Evaluations: End-of-Period Evaluations shall be provided at the end of the Base task order period and at the end of Option Period 1 and Award Term Period 1.

SCHEDULE	EVENT
14 days prior to EOP	Recorder notifies each ATRB member and performance monitor.
	Performance Monitors submit evaluation reports to ATRB.
30 days after EOP	
	ATRB forwards a copy to Contractor.
30 days after EOP	Contractor submits self-assessment to CO. Copy will be forwarded to ATRB.
	ATRB briefs evaluation report and recommendation to the TDO.
60 days after EOP	
	Contractor has opportunity to brief TDO.
90 days after EOP	TDO informs contractor and CO of the earned award term points.
15 days after TDO's decision	CO issues a contract modification reflecting award term extension, if earned.

## **Section I - Contract Clauses**

In accordance with those contained in the Seaport E Multiple Award Contract (MAC).

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(NAVSEA VARIATION) (MAR 2000)

(a) The Government may extend the term of this contract by written notice(s) to the Contractor within the periods specified below. If more than one option exists, each option is independent of any other option, and the Government has the right to unilaterally exercise any such option whether or not it has exercised other options.

Item	Option Item(s) Latest Exercise Date
4002AA	12 MATOA
4002AB	12 MATOA
6002AA	12 MATOA
6002AB	12 MATOA

- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any option(s) under this clause, shall not exceed five (5) years, however, in accordance with paragraph (g) of the requirement of this contract entitled "LEVEL OF EFFORT" (NAVSEA 5252.216-9122), if the total manhours delineated in paragraph (a) of the LEVEL OF EFFORT requirement, have not been expended within the period specified above, the Government may require the Contractor to continue to

perform the work until the total number of manhours specified in paragraph (a)of the aforementioned requirement have been expended.

### **FAR 52.244-2 -- Subcontracts (June 2007)**

- (a) Definitions. As used in this clause—
- "Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with <u>Part 44</u> of the Federal Acquisition Regulation (FAR).
- "Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract
- "Subcontract" means any contract, as defined in FAR <u>Subpart 2.1</u>, entered into by a subcontractor to furnish supplies or services for performance of the prime contractor a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.
- (b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.
- (c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

- (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
- (2) Is fixed-price and exceeds—
- (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
- (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.
- (d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

CONTRACTS WITH ANY FIRM NOT INCLUDED IN PARAGRAPH (J). FOR ADDING TEAM MEMBERS TO THE TASK ORDER AFTER AWARD, THE TASK ORDER CONTRACTING OFFICER'S APPROVAL IS REQUIRED. THE TASK ORDER CONTRACTING OFFICER WILL DETERMINE THE DOCUMENTATION TO BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL.

- (e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:
- (i) A description of the supplies or services to be subcontracted.
- (ii) Identification of the type of subcontract to be used.
- (iii) Identification of the proposed subcontractor.
- (iv) The proposed subcontract price.
- (v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
- (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
- (vii) A negotiation memorandum reflecting—
- (A) The principal elements of the subcontract price negotiations;
- (B) The most significant considerations controlling establishment of initial or revised prices;
- (C) The reason cost or pricing data were or were not required;
- (D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;
- (E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
- (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

- (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c), or (d) of this clause.
- (f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—
- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.
- (g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-apercentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).
- (h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.
- (i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR <u>Subpart 44.3</u>.
- (j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations

# **Section J - List of Attachments**

Attachment 1: FADS - Financial Accounting Data Sheet for Base Award (SCN)

Attachment 2: DD 254 Contract Security Classification Specification, dated 24 October 2016.

Attachment 3: DD 254 Contract Security Classification Specification, Revision 1, dated 19 August 2019.

Attachment Number	File Name	Description
	DDForm254Rev1dtd19Aug2019.pdf	Attachment 3: DD 254 Contract Security Classification Specification, Revision 1, dated 19 August 2019
	Task_Order_Financial_Accounting_Data_Sheet.pdf	Attachment1: Financial Accounting Data (\$233,506 (SCN))
		Attachment 2: DD 254 Contract Security Classification Specification, dated 24 October 2016