EXHIBIT R-2, RDT&E Budget Item .	Justification			DATE: February 2006								
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev		LEMENT (PE		NO. tions System	ıs							
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011					
Total PE Cost	272.587	256.291	218.460	193.192	291.472	177.293	185.671					
C2270 Expeditionary Indirect General Support Weapon Systems	16.707	18.131	15.095	17.187	19.982	18.440	18.089					
C2272 Intelligence C2 Systems	21.450	26.619	26.672	22.059	19.010	22.234	23.434					
C2273 Air Operations C2 Systems	108.891	86.065	47.341	34.693	20.968	23.008	26.375					
C2274 Command & Control Wargare Systems	14.937	5.896	3.847	3.616	4.189	4.720	3.734					
C2275 Joint Tactical Radio Systems	9.812	7.838	14.612	13.870	12.158	8.872	8.087					
C2276 Communications Switching & Control Systems	3.331	6.127	4.494	4.298	3.499	0.841	0.880					
C2277 System Engineering & Integration	8.088	9.537	8.919	9.237	9.417	9.741	9.967					
*C2278 Air Defense Weapons Systems	20.247	16.001	6.423	10.940	6.374	5.490	5.071					
* C2315 Training Devices/Simulators	4.173	8.806	0.0	0.0	0.0	0.0	0.0					
*C2510 MAGTF CSSE & SE	17.278	17.453	35.311	20.874	26.271	17.047	25.696					
C3098 Fire Support Systems	0.001	0.0	0.0	0.0	0.0	0.0	0.0					
C3099 Radar Systems	29.761	26.818	55.746	56.418	169.604	66.900	64.338					
C9276 Radar and Marine Corps Ship Maneuver	1.433	0.0	0.0	0.0	0.0	0.0	0.0					
C9632 Advanced Ferrite Antenna (AFA)	2.040	0.0	0.0	0.0	0.0	0.0	0.0					
C9633 Miniaturized Combat ID System	0.963	0.0	0.0	0.0	0.0	0.0	0.0					
C9634 Marine Corps Wideband Communications	4.103	0.0	0.0	0.0	0.0	0.0	0.0					
C9635 USMC Hitch Hiker	1.648	0.0	0.0	0.0	0.0	0.0	0.0					
C9637 Marine Airborne Re-Trans Sys (MARTS)	3.280	0.0	0.0	0.0	0.0	0.0	0.0					
C9638 Covert Sight for Urban Warfare	1.445	0.0	0.0	0.0	0.0	0.0	0.0					
C9639 Improved Ground Based Transportable Radar	2.036	0.0	0.0	0.0	0.0	0.0	0.0					
C9640 USMC Electronic Battlefield Fusion	0.963	0.0	0.0	0.0	0.0	0.0	0.0					
C9999 FY-06 Congressional Adds	0.0	27.000	0.0	0.0	0.0	0.0	0.0					
	0.0	0.0	0.0	0.0	0.0	0.0	0.0					

R-1 SHOPPING LIST - Item No. 186

Exhibit R-2, RDTE,N Budget Item Justification (Exhibit R-2, page 1 of 134)

EXHIBIT R-2, RDT&E Budget Item Justif	DATE:					
	February 2006					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT (PE) NAME AND NO.					
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Systems					

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

This program element provides funding to develop the command and control (C2) support and information infrastructures for the Fleet Marine Force and supporting establishment. Doctrinally, the C2 support system and the information infrastructure form two parts of a triad of capabilities which permits command and control systems to be transformed into a complete operating system. The third element of the triad is command and control organization and is not covered in this program element. USMC command and control is divided into seven functional areas and one supporting functional area as follows: intelligence C2, fire support C2, air operations C2, radio systems C2, combat service support C2, warfare C2, radar systems C2, and C2 support (information processing and communications).

Within this program element, subprojects have been grouped by C2 functional area for more efficient planning. Air defense weapons systems have been added to facilitate planning and a separate project is used for systems assigned to the supporting establishment. Subprojects which support the commander's decision processes have been collected into the Command Post Systems project since these systems must work in close cooperation to ensure effective C2 of Marine Air Ground Task Forces.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

#### Note:

- C2278 \$3.7M of FY06 Funds will be used to Forward Finance FY 07 for Gripstock
- \*\* Funds for Project C2315 were realigned to PE 0206623M in FY07.

#### B. PROGRAM CHANGE SUMMARY

<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
273.870	237.081	210.955
9.844	27.000	
-4.139		14.600
-5.754		
-1.234	-7.790	-7.095
272.587	256.291	218.460
	9.844 -4.139 -5.754 -1.234	9.844 27.000 -4.139 -5.754 -1.234 -7.790

#### CHANGE SUMMARY EXPLANATION:

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

<sup>\*\*\*</sup>C2150 \$2.3572M of FY06 Funds will be used to Forward Finance FY07 for GCSS

EXHIB	BIT R-2a, RDT&E Project Justificatio	n				DATE:		
	-						February 200	6
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NU	MBER AND NA	ME		PROJECT NUI	MBER AND NA	ME	
RDT&E, N /BA-7 Operational Sys Dev	Communication	ons Systems		C2270 Expedi	tionary Indired	t Fire General	<b>Support Weapor</b>	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		16.707	18.131	15.095	17.187	19.982	18.440	18.089
RDT&E Articles Qty				·				

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

Systems assigned to this project are to be used by commanders and their staffs to process, fuse, and tailor information to assist decision-making and enhance situational awareness. They will integrate and share information from sources both internal and external to the Marine Air-Ground Task Force (MAGTF) to provide a shared understanding of the battlespace. Maneuver Command and Control (C2) is the executive layer of decision support that retrieves and fuses information from functional areas. It provides an integrated representation of the battlespace or a specific area of concern. The subprojects below develop systems that report unit status and location to the Tactical Combat Operations (TCO) System, and disseminate maneuver information throughout the battlespace.

- 1. **Advanced Field Artillery Tactical Data System (AFATDS)** will consist of fire support command and control software fielded on Marine Corps common hardware. AFATDS will provide the MAGTF with an automated ability to rapidly integrate all supporting arm assets into maneuver plans. Provides digital fire support C2 automation to MAGTF Fire Support Coordination Centers, Fire Direction Centers, and Supporting Arms Coordination Centers (afloat).
- 2. MAGTF Software Baseline (MSBL)/ Command and Control Personal Computer (C2PC). MAGTF Software Baseline (MSBL) is an evolutionary software acquisition program that provides common software functionality to enhance and improve the capability and interoperability between multiple Marine Corps MAGTF C4ISR systems. The common software functionality provides the warfighter situational awareness and allows the Commander to successfully operate in a joint/combined environment. This common software functionality is accomplished through two separate but interrelated baselines software development efforts. The Common Operating Environment (COE) Unix baseline, which supports Unix based server systems and the Command and Control Personal Computer (C2PC) baseline which supports Windows based tactical workstations/systems used at the company and above levels. A "light" version of C2PC is being developed for tactical workstations/systems used at the platoon and below level.
- 3. Tactical Command Operations (TCO) will provide systems to the command post which support Maneuver C2. Maneuver C2 is the executive layer of decision support that pulls and fuses information from other functional areas.
- 4. **The Data Automated Communications Terminal (DACT)** is the Marine Corps' Blue Force Tracking Program of Record. It is the primary source of all tactical ground tracks below the Marine battalion, and is the primary provider of Position Location Information (PLI) into the Combat Operations Center (COC) and to Joint forces viewing the Common Operational Picture (COP). It is the foundational Marine data input and messaging device, building the COP from the platoon up to the battalion and regiment level. Furthermore, DACT is one tool in the Joint Combat ID toolbox that the Marine Commander uses to reduce the potential for fratricide. This initiative addresses shortcomings in the currently-fielded and planned DACT systems as identified during OEF / OIF. The Mounted DACT (M-DACT) (IOC 2nd Qtr FY03) consists of the Ruggedized Handheld Computer (RHC) with Command and Control Personal Computer (C2PC) software integrated with various tactical vehicle platforms and communications systems through the use of a Vehicle Modification (VM) Kit. It is mounted in vehicles from the battalion to the mechanized platoon (HMMWV, AAV, LAV, and Tanks). The acquisition objective of 1074 systems has been procured. The Dismounted DACT (D-DACT)
- IOC 2nd Qtr FY05 is a smaller, lighter handheld device having greater battery life, consisting of the Rugged Personal Digital Assistant (R-PDA) with Windows Command and Control CE (C2CE) software. The Dismounted DACT is intended for the dismounted user at the platoon level. 1108 systems of the acquisition objective of 1944 have been procured. Future DACT improved capabilities for replacement systems will meet stipulated Operational Requirements and OIF-derived Requirements to provide Blue Force Tracking and automated communications support for commanders in tactical operations. New capabilities will include Non Line of Sight (NLOS) and enhanced communication paths; improved Graphic User Interface (GUI) software and a larger screen, and Selective Availability Anti-Spoofing Module (SAASM) GPS integration.
- 5. Target Location Designation and Hand-Off System (TLDHS) Provides fire support observers/controllers (OCs) with the ability to: observe their area of interest, quickly and accurately locate ground targets, and digitally request and coordinate target engagements by field artillery (FA), close air support (CAS), and naval surface fire support (NSFS). TLDHS will also provide the capability to designate targets for laser-guided munitions and laser spot trackers. TLDHS is comprised of and integrates two major subsystems: the Targeting Subsystem and the Target Hand-Off Subsystem. USMC MS III (Fielding)for TLDHS was 2Q04.

EXHIB	IT R-2a, RDT&E Project Justification		DATE:	
DDD ODDIATION (DLID OFT A OTI) (IT)	PROGRAM ELEMENT NUMBER AND NAME	_	PROJECT NUMBER AND NA	February 2006
PPROPRIATION/BUDGET ACTIVITY		=	C2270 Expeditionary Indirec	
DT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications	Systems	C2270 Expeditionary maired	t Fire General Support Wea
B. ACCOMPLISHMENTS/ PLANNED PROG	RAM:	E) / 2005	FV 0000	F)/ 000F
COST (\$ in Millions)		FY 2005 <b>0.272</b>	FY 2006	FY 2007 <b>0.170</b>
ccomplishment/Effort Subtotal Cost DT&E Articles Qtv		0.272	0.213	0.170
TCO: Program management and engineeri	ing gunnort			
	пу ѕирроп.	FY 2005	FY 2006	FY 2007
COST (\$ in Millions)		0.244	0.204	0.164
DT&E Articles Qtv		0.244	0.204	0.164
TCO: System testing and integration to dev	velon additional functional canabilities			
	reliop additional functional capabilities.	EV 2005	EV 2006	EV 2007
COST (\$ in Millions)		FY 2005 <b>0.215</b>	FY 2006 <b>0.185</b>	FY 2007 <b>0.149</b>
DT&E Articles Qtv		0.215	0.105	0.149
TCO: Integrate software changes into new	system and perform testing			
COST (\$ in Millions)	System and perform testing.	FY 2005	FY 2006	FY 2007
ccomplishment/Effort Subtotal Cost		0.253	0.283	0.228
DT&E Articles Qty		0.233	0.203	0.220
TCO: Testing and validations of advanced	concepts and technologies.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
ccomplishment/Effort Subtotal Cost		0.000	1.209	0.000
DT&E Articles Qty				
C2PC: Software Development				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
ccomplishment/Effort Subtotal Cost		1.200	1.026	1.026
		1.200	1.020	1.020
DT&E Articles Qty reprogrammed	" I I I I I I I I I I I I I I I I I I I	0000 + 1 100		
	field and support COE compliant versions of MSBL and		quirements in the six Warfighting fun	ctions
cuses primarily on the integration, inclusion and COST (\$ in Millions)	incorporation of Fire Support, Maneuver and Intel capal	FY 2005	FY 2006	FY 2007
ccomplishment/Effort Subtotal Cost		0.245	0.411	0.411
DT&E Articles Qty		0.243	0.411	0.411
MAGTF C4I BASELINE/C2PC: Engineering	a Support			
	у очероп	E) / 000E	FV 0000	F)/ 0007
COST (\$ in Millions)		FY 2005 <b>0.520</b>	FY 2006 <b>0.961</b>	FY 2007 <b>0.961</b>
ccomplishment/Effort Subtotal Cost		0.520	0.961	0.961
DT&E Articles Qty	In a second Occupant			
MAGTF C4I BASELINE/C2PC: Program M	ranagement Support			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
ccomplishment/Effort Subtotal Cost		6.369	3.326	2.442
DT&E Articles Qty				

EXHI	BIT R-2a, RDT&E Project Justification		DATE:	-···-			
				February 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAM				
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Sys		C2270 Expeditionary Indirect				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.200	0.000	0.000			
RDT&E Articles Qty							
MAGTF C4I BASELINE/C2PC: Conduct (	C2PC Code Quality Analysis.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.100	0.000	0.000			
RDT&E Articles Qty							
MAGTF C4I BASELINE/C2PC: Conduct (	C2PC Study Analysis.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.020	0.000	0.000			
RDT&E Articles Qty							
MAGTF C4I BASELINE/C2PC: NMCI Co.	st						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.100	0.000	0.000			
RDT&E Articles Qty							
MAGTF C4I BASELINE/C2PC: MCSC Pr	ogram Office Travel						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.085	1.537	0.818			
RDT&E Articles Qty							
AFATDS: Development of BUCS and LW	/TDS SW						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.500	0.000	0.000			
RDT&E Articles Qty							
AFATDS: Field Integration Team (FIT) tes	sting, software development, and FMF interoperability support		•				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.000	0.506	0.244			
RDT&E Articles Qty							
AFATDS Program management, enginee	ring support and hardware development.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.032	0.000	0.036			

EXHIB	IT R-2a, RDT&E Project Justification		DATE:	
				February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAM	1E
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications	Systems	C2270 Expeditionary Indirect	Fire General Support Weapo
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.536	2.107	1.853
RDT&E Articles Qty				
AFATDS: Development of improved intero	perability with USMC and Joint systems. Enhancement t	o EMT and C2PC int	erface.	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		1.292	1.010	1.965
RDT&E Articles Qty				
AFATDS: Development of SWBII and futur	e software. Increased functionality, interoperability, and	ease of use. Better in	nterface with USMC and USN system	ns.
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.580	1.200
RDT&E Articles Qty				
DACT: DACT FMF test support.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.050	0.050
RDT&E Articles Qty				
DACT: DACT Exercise Support	<u> </u>			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.339	1.046	1.008
RDT&E Articles Qty				
DACT: DACT Development	•			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		1.215	0.650	0.000
RDT&E Articles Qty				
DACT: Protocol Implementation				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.607	0.600
RDT&E Articles Qty				
DACT: DACT Training Development			<u> </u>	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.020	0.020	0.020
RDT&E Articles Qty				
DACT: DACT Technical Support Plan				_

	RDT&E Project	Justification				D	ATE:	February 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT NUME	BER AND NAM	E		PROJECT NUME	MBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	0206313M Ma					C2270 Expedition	nary Indirect	Fire General S	upport Weap		
0007 (0 : 147)				E)/ 000		E) / 001	FY 2006 FY 2007				
COST (\$ in Millions)				FY 200		FY 200					
Accomplishment/Effort Subtotal Cost				0.000	1	0.450	)	0.00	00		
RDT&E Articles Qty  DACT: Dismounted DACT Development											
DACT. Distributiled DACT Development											
COST (\$ in Millions)				FY 200	)5	FY 200	06	FY 2007			
Accomplishment/Effort Subtotal Cost				2.950	1	)	0.00	00			
RDT&E Articles Qty											
TLDHS: Test Development and integration support.			,								
COST (\$ in Millions)				FY 200		FY 200		FY 20			
Accomplishment/Effort Subtotal Cost				0.000	1	1.750	)	1.75	50		
RDT&E Articles Qty											
<b>TLDHS:</b> Test Development and integration support.											
(U) Total \$				16.707	<u>1</u>	<u>18.13</u>	<u>l</u>	15.0	<u>95</u>		
(U) PROJECT CHANGE SUMMARY:		FY 2005	FY 2006	FY 2007							
(U) FY 2006 President's Budget:		10.586	18.407	18.523							
(U) Adjustments from the President's Budget: (U) Congressional Program Reductions (U) Congressional/OSD Program Reductions											
(U) Congressional Rescissions											
(U) Congressional Increases											
(U) Reprogrammings		6.229									
(U) SBIR/STTR Transfer		-0.103									
		-0.005	0.276	2.420							
(U) Minor Affordability Adjustment			-0.276	-3.428							
(U) FY 2007 President's Budget:		16.707	18.131	15.095							
CHANGE SUMMARY EXPLANATION:											
(U) Funding: See Above.											
(U) Schedule: Not Applicable.											
(U) Technical: Not Applicable.											
(U) C. OTHER PROGRAM FUNDING SUMMARY:											
Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cos		
PMC BLI# 463100 TCO	3.145	0.184	0.413	0.407	0.208	0.218	0.229	Cont	Co		
PMC BLI# 463100 AFATDS	0.315	3.968	4.620	5.238	0.856	3.394	3.464	Cont	Co		
PMC BLI# 463100 DACT	2.316	6.753	7.851	2.036	7.017	5.104	3.128	Cont	Co		
	0.000	1.429	1.520	0.914	1.016	1.016	2.034	Cont	Co		
PMC BLI#463100 TLDHS PMC BLI# 463100 GCCS	3.641	4.004	4.405	4.618	4.528	4.875	5.006	Cont	Co		

EXHI	EXHIBIT R-2a, RDT&E Project Justification					
			February 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NU	MBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Systems	C2270 Exped	itionary Indirect Fire General Support Weapor			

#### (U) D. ACQUISITION STRATEGY:

- (U) TCO: Contracting is via General Services Administration schedules with various vendors and is for software maintenance and COTS evaluation and integration. Performance base reviews are conducted quarterly by the PMO.
- (U) MSBL: Funds applied to Northrop Grumman Information Technology (NGIT), San Diego, CA for development of MSBL client in MS Windows environment and development of client for foot mobile Marines in Windows CEOSS environment. Funds applied to Titan Corporation, Dumfries, VA and NGIT, Stafford, VA under the CEOSS contract for program management and engineering support. Funds applied to MCR Federal for C2PC Life Cycle Cost Estimate development. Funds applied to SPAWAR, Charleston, SC for build, test, and support COE compliant versions of GCC-J in support of six Warfighting functions.
- (U) AFATDS: AFATDS is a Cost Plus Award Fee contract through Army CECOM, Ft. Monmouth, N. J. R&D efforts will be a combined effort between the software developer (Raytheon), the Army PM and the USMC of software enhancements for the next planned versions of AFATDS (V6.3.2 and V7).
- (U) DACT: The Program develops software and hardware for two operational domains. The Mounted DACT (M-DACT) (IOC 2nd Qtr FY03) consists of the Ruggedized Handheld Computer (RHC) with Command and Control Personal Computer (C2PC) software integrated with various tactical vehicle platforms and communications systems through the use of a Vehicle Modification (VM) Kit. It is mounted in vehicles from the battalion to the mechanized platoon (HMMWV, AAV, LAV, and Tanks). The acquisition objective of 1074 systems has been procured. The Dismounted DACT (D-DACT) (IOC 2nd Qtr FY05) is a smaller, lighter handheld device having greater battery life, consisting of the Rugged Personal Digital Assistant (R-PDA) with Windows Command and Control CE (C2CE) software. The Dismounted DACT is intended for the dismounted user at the platoon level. 1108 systems of the acquisition objective of 1944 have been procured.
- (U) TLDHS: The acquistion of components (software/hardware) for the TLDHS initiative wil maximize the use of existing COTS, GOTS, NDI and GFE. Software development is conducted utilizing a sole source small-business contract.

#### E. Major Performers:

#### TACTICAL COMBAT OPERATIONS (TCO)

- FY 05 SPAWAR, CHARLESTON, S.C. Provide funds to EMA, INC, Charleston, S.C. for Testing and Validation of new workstation concept, integrate software changes into new system, and perform testing.
- FY 06 SPAWAR, CHARLESTON, SC Provide funds to EMA, INC, Charleston, SC for testing of new workstation concept, integration of new software, and final acceptance testing. Nov 05.
- FY 07 SPAWAR, CHARLESTON, SC Provide funds to EMA, INC, Charleston, SC for testing of new server concept, integration of new software, and final acceptance testing.

#### MAGTF SOFTWARE BASELINE (MSBL)

- FY 05 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), San Diego, CA. Software development C2PC and C2CE (C2PC Light). contract award date: Feb 05 SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. contract award date: JUN 05 Ocean Systems Engineering Corporation (OSEC), Stafford, VA Training Development
  - NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), Stafford, VA. Engineering support. contract award date: APRIL 05.
  - TITAN CORPORATION, Stafford, VA. Program Management Support, contract award date: Oct 04
  - MCTSSA, software testing
  - Naval Post Graduate School, C2PC Study Analysis. Estimated contract award date: Feb 05
- FY 06 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), San Diego, CA. Software development C2PC and C2CE (C2PC Light). Estimated contract award date: Dec 05 SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Estimated contract award date: Nov 05 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), Stafford, VA. Engineering support. Estimated contract award date: Oct 05 TITAN CORPORATION, Stafford, VA. Program Management Support. Estimated contract award date: Oct 05
- FY 07 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), San Diego, CA. Software development C2PC and C2CE (C2PC Light). Estimated contract award date: Dec 06 SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Estimated contract award date: Dec 06 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), Stafford, VA. Engineering support. Estimated contract award date: Oct 06 TITAN CORPORATION, Stafford, VA. Program Management Support. Estimated contract award date: Oct 06

	EXHIB	T R-2a, RDT&E Project Justification	DATE:
	PRIATION/BUDGET ACTIVITY , N /BA-7 Operational Sys Dev	PROGRAM ELEMENT NUMBER AND NAME 0206313M Marine Corps Communications Systems	February 2006  PROJECT NUMBER AND NAME  C2270 Expeditionary Indirect Fire General Support Weap
	CED FIELD ARTILLERY TACTICAL DAT		
	Ocean Systems Engineering Corporation NORTHROP GRUMMAN MISSION SYS MCOTEA, Quantico VA. Test software. MCTSSA, Software testing. Award Nov RAYTHEON, Fort Wayne IN. Develop a MCOTEA, Quantico VA. Test software. MCTSSA, Software testing. Award Oct CRAYTHEON, Fort Wayne IN. Develop a MCOTEA, Quantico VA. Test V6.3.2 software V6.3.2 sof	n (OSEC), Stafford, VA Training Development TEMS (NGMS), Stafford, VA. Engineering support.  05 nd test software. Oct 06. Award Dec 06. 06. nd test software. Nov 07. tware. Award Nov 07.	
<b>DATA A</b> FY 05	MCTSSA, Software testing. Award Nov  UTOMATED COMMERCIAL TERMINAL  NORTHROP GRUMMAN, San Diego, CA	(DACT)	
E) / 00	Titan Corporation, Staffort, VA Program NORTHROP GRUMMAN Mission System	Support ns (NGMS), Stafford, VA. Program Support.	
FY 06	Raytheon, Modem Development Titan Corporation, Staffort, VA Program	(OSEC), Stafford, VA Training Development	
FY 07	Titan Corporation, Staffort, VA Program	(OSEC), Stafford, VA Training Development	
TARGE FY05	T LOCATION DESIGNATION AND HAND N/A	-OFF SYSTEM (TLDHS)	
FY06 FY07	TBD TBD		

Exhibit R-3 Cost A	nalysis			DATE:				Febru	ary 2006			
APPROPRIATION/	BUDGET AC	TIVITY PROGRAM ELEMENT			PROJEC	T NUMBE	R AND NA	AME				
RDT&E, N/BA-7 O	perational S	sys Dev 0206313M Marine Corps Co	mmunica	tions Sys	C2270 E	xpeditiona	ry Indired	ct Fire Gen	neral Sup	port Weapo	n System	
	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
TCO	WR/RCP	SPAWAR. Charleston, SC	1.328	0.498	11/04	0.417	11/05	0.334	11/06	Cont	Cont	
C2PC	RCP	Northrop Grumman, San Diego, CA	0.000	0.000		1.209	02/06	0.000	01/00	Cont	Cont	
MAGTF C4I BASELINE	RCP	SPAWAR, Charleston, SC	6.060	1.400	11/04	1.026	02/06	1.026	11/06	Cont	Cont	
MAGTF C4I BASELINE	RCP	Northrop Grumman, San Diego, CA	26.201	2.980	02/05	3.326	02/06	2.442	10/06	Cont	Cont	
MAGTF C4I BASELINE	RCP	Ocean Sys Eng Corp (OSEC)Stafford	1.364	0.245	10/04	0.411	10/05	0.411	10/06	Cont	Cont	
MAGTF C4I BASELINE	RCP	Titan Corporation, Stafford, VA	2.170	0.538	10/04	0.614	10/05	0.614	10/06	Cont	Cont	
MAGTF C4I BASELINE	WR	MCSC, Quantico, VA	0.180	3.389						Cont	Cont	
MAGTF C4I BASELINE	RCP	Carnegie Melon University	0.448	0.200	10/04					0.000	0.648	
MAGTF C4I BASELINE	RCP	Naval Post Graduate School	0.100							0.000	0.100	
MAGTF C4I BASELINE	WR	NMCI	0.020	0.020	10/04					0.000	0.040	
MAGTF C4I BASELINE	RCP	Knowldege Connection, Inc Stafford, V	A			0.210	10/05	0.210	10/06	Cont	Cont	
MAGTF C4I BASELINE	WR	Marine Corps Tactical Systems Support	t Activity (	MCTSSA)		0.132	02/06	0.132	10/06	Cont	Cont	
MAGTF C4I BASELINE	WR	Marine Corps Systems Command PG-	10			0.005	02/06	0.005	10/06	Cont	Cont	
AFATDS	WR	SPAWAR. Charleston, SC		0.015	10/05							
AFATDS	WR	MCSC (MCTSSA), Quantico, VA	0.280	0.000		0.034	11/05	0.036	11/06	Cont	Cont	
AFATDS	CPFF/MIPR	CECOM, Ft. Monmouth,NJ	2.915	1.865	11/04	5.126	11/05	4.880	11/06	Cont	Cont	
DACT	тм	Raytheon, Fort Wayne, IN	3.199	0.000		0.650	11/05			Cont	Cont	
DACT	FFP	Northrop Grumman, San Diego CA	1.570	0.450	11/04	0.450	11/05			Cont	Cont	
DACT	WR	FMF, MCB Camp Pendleton/MCTSSA	0.320	0.000		0.650	11/05	1.270	11/06	Cont	Cont	
DACT	FFP	OSEC, Stafford, VA		0.600	10/04	0.607	11/05	0.600	11/06	Cont	Cont	
DACT	FFP	SPAWAR. Charleston, SC		0.090								
DACT	UNK	TBD				1.046	12/05	1.008	11/06	Cont	Cont	
AFATDS	RCP	Titan Corporation, Stafford, VA		0.058	10/04							
AFATDS	RCP	Ocean Sys Eng Corp (OSEC)Stafford		0.441	10/04							
TLDHS	RCP	MCSC, Quantico, VA		1.596	10/04							
TLDHS	MP	SPAWAR. Charleston, SC		0.041	10/04							
TLDHS	SS/IDIQ	TBD				1.000	01/06	1.000	01/07	Cont	Cont	
Subtotal Product	Dev			14.426		16.913		13.968		Cont	Cont	

Exhibit R-3 Cost Ar	nalysis			DATE:				Febru	uary 2006			
APPROPRIATION/E		CTIVITY PROGRAM ELEMENT		l.	PROJEC	T NUMBE	R AND N	AME				
RDT&E, N /BA-7 Op	perational S	Sys Dev 0206313M Marine Cor	ps Communica	tions Sys	C2270 E	xpeditiona	ary Indire	ct Fire Ge	neral Sup	port Weap	on System	1
,	Contract	Performing	Total		FY 05	1	FY 06		FY 07			Target
	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
TLDHS	RCP	NSWC Crane	5.069	0.750	04/05	0.070	12/05	0.150	12/06	0.000	6.039	
Subtotal Support				0.750		0.070		0.150		Cont	Cont	
• • • • • • • • • • • • • • • • • • • •				0.750		0.070	1	0.130	<b>'</b>	Cont	Cont	
Remarks:												
	Contract	Performing	Total	1	FY 05		FY 06		FY 07		1	Target
	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete		Contract
TCO	WR	MCTSSA, Camp Pndltn, CA	0.261	0.000	12/04	0.180	12/05	0.180	12/06	Cont		
TCO	WR/RCP	SPAWAR. Charleston, SC	0.000			0.288		0.197	11/06	Cont		
TLDHS	WRR	NAWC, China Lake, CA	0.144	0.000		0.150	12/05	0.070	12/06	0.000	0.364	
TLDHS	MIPR	JITC, Ft. Huachuca	0.000	0.075	10/04	0.030	10/05	0.030	10/06	0.000	0.135	
TLDHS	WRR	NSWC Dahlgren	0.638			0.500	12/05	0.500	12/06	0.000	1.776	
TLDHS	WR	MCOTEA		0.350	11/04							
AFATDS	WR	MCOTEA		0.066	11/04							
DACT	WR	MCOTEA		0.434	11/04							
Subtotal T&E				1.531		1.148		0.977	•	Cont	Cont	
Remarks:	T-					T		·		ı		T
	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Cost Categories	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Subtotal Manager	nent			0.000		0.000	,	0.000		0.000	0.000	
			·						•			
Remarks:												
Remarks:												

#### **UNCLASSIFIED** EXHIBIT R-4/4a, Schedule Profile/Detail DATE: February 2006 APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME PROJECT NUMBER AND NAME C2270 Expeditionary Indirect Fire General Support RDT&E, N /BA-7\_Operational Sys Dev 0206313M Marine Corps Communications Sys Weapon System **MSBL** 2006 2007 2008 ID 0 Task Name Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 **C2PC Milestone Chart** 2 Contract Award 7.0.0.0 3 111 Preliminary Design Review 7.0.0.0 **Ⅲ** ◆ Critical Design Review 7.0.0.0 4 Contractor Delivery 6.1.1 P2 5 111 6 111 Contractor Delivery 7.0.0.0 111 SPAWAR-IV&V Testing 7.0.0.0 111 Release to DISA 7.0.0.0 8 MCTSSA-FEDoS 7.0.0.0 9 111 10 111 Contract Award 7.1.0.0 - Tentative 111 Preliminary Design Review 7.1.0.0 11 111 Critical Design Review 7.1.0.0 12 н Contractor Delivery 7.1.0.0 13 111 SPAWAR-IV&V Testing 7.1.0.0 14 111 Release to DISA 7.1.0.0 15 16 111 MCTSSA-FEDoS 7.1.0.0 Release to USMC 7.0.0.0 17 **111** Program Funding Summary To Compl FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 **Total Cost** (APPN, BLI #, NOMEN) (U) RDT&E,N MSBL/C2PC 8.754 6.933 4.840 6.165 6.363 6.521 6.617 Cont Cont

EX	HIBIT R-4/4a, Sched	ule Profile/Det	tail				DATE:	Fah
DPRIATION/BUDGET ACTIVITY	PROGRAI	PROGRAM ELEMENT NUMBER AND NAME  0206313M Marine Corps Communications Sys			PROJECT			
E, N /BA-7 Operational Sys Dev	0206313M				G2270	C2270 Expeditionary Indirect Fire Weapon System		
MSBL SCHEDULE DETAIL		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
C2PC SOFTWARE RELEASE	<u> </u>	4Q	3Q	1Q	1 1 2007	1 1 2000	1 1 2003	

EXHIBIT R-2a	, RDT&E Project Justification			DATE:				
						February 20	006	
APPROPRIATION/BUDGET ACTIVITY	APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps C	Communication	n Systems	C2272 Intelligence C2 Systems				
COST (\$ in Millions)	·	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		21.450	26.619	26.672	22.059	19.010	22.234	23.434
RDT&E Articles Qty								

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

(U) Intelligence Command and Control (C2) supports the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence. It ensures that all-source tactical intelligence is tailored to meet specific mission requirements. The systems below collect and convert raw intelligence data on the battlefield into processed information and deliver the processed products to the Intelligence Analysis Systems (IAS) for analysis and dissemination.

Tactical Exploitation of National Capabilities (TENCAP) is a program designed to enhance the ability of tactical Marine Corps forces to exploit the capabilities of national intelligence-gathering systems. Congressionally directed, it requires close liaison with the intelligence community and involves complex and highly-sensitive activities.

Topographic Production Capability (TPC) is an integrated, independently deployed, self-contained terrain analysis system designed for data acquisition, manipulation, analysis and output, providing commanders and staff with geospatial intelligence (GEOINT) support at the Marine Expeditionary Force (MEF) and the Marine Expeditionary Wing (MEW) levels. The TPC configurations consist of Commercial-off-the-Shelf (COTS)/Government-off-the-Shelf (GOTS) software packages, servers, workstations, large-format printing/plotting devices and large-format scanning devices, all mounted in transit cases. The TPC provides critical, timely, and accurate digital and hardcopy geospatial information to support mission planning and execution. The TPC provides the capability to collect, process, exploit, analyze, produce, disseminate, and use all-source geospatical information as a foundation for a Common Operational Picture (COP) for the Marine Air Ground Task Force (MAGTF) Commander. The TPC is used by the Topographic Platoon of the MEF and provides deployable modules down to the Major Subordinate Command (MSC) and the Marine Expeditionary Unit (MEU). It supports the Commander, Joint Task Force or Marine Component Commander. The TPC provide data collection, analysis and integration; and decision-aid development support.

Joint Surveillance Target Attack Radar (JSTARS) connectivity program will research and integrate a client software connectivity solution which will allow the JSTARS Moving Target Indicator (MTI), Fixed Target Indication (FTI) and Synthetic Aperture Radar (SAR) data to be passed from the JSTARS Common Ground Station (CGS) to lower echelons within the MAGTF. Additionally, The Marine Corps will continue future MTI, CDL and MTI sensor capabilities and Internet Protocol Version 6 (IPv6) research and development.

Coastal Battlefield Reconnaissance and Analysis (COBRA) system is a passive multispectral sensor system capable of operating in a Manned Aircraft and an Unmanned Aerial Vehicle (UAV). Imagery recorded on the UAV or disseminated via data link is analyzed by the COBRA processing station. COBRA algorithm processing provides near real-time automatic minefield detection with Differential Global Positioning System (DGPS) location accuracy.

Joint System Imagery Processing System Tactical Exploitation Group (JSIPS-TEG) - The TEG System is the only tactical imagery exploitation system in the USMC and is one of the four systems comprising the Distributed Common Ground\Surface System-Marine Corp (DCGS-MC). It is made up of two modular and scaleable echelon-tailored configurations: the TEG-Main (TEG-M) and the TEG Remote Workstation (TEG-RWS). The TEG provides a mobile, tailorable, tactically deployable capability to receive and exploit imagery, and disseminate reports and secondary imagery products for use in all aspects of operational planning. The TEG is also interoperable with the Army's Tactical Exploitation System (TES), the USAF Intelligence Systems Reconnaissance Manager (ISRM), the DCGS-Navy (DCGS-N) and other USMC C4I systems.

Counterintelligence (CI) and Human Intelligence (HUMINT) Equipment Program (CIHEP) provides the MAGTF with integrated, standardized, and interoperable information (automated data processing), communication, and specialized equipment to conduct the full spectrum of tactical CI/Force Protection, HUMINT, and technical collection operations in accordance with (IAW) applicable national oversight directives.

CIHEP provides each CI/HUMINT Company (CIHCo) with a suite of state-of-the-market equipment comprised of commercial-off-the-shelf, government-off-the-shelf, and non-developmental items (COTS/GOTS/NDI). It integrates audio, video, imagery, communications, technical surveillance and computer equipment into lightweight, modular, scalable, deployable packages. CIHEP enhances the capability to collect, receive, process, and disseminate CI/HUMINT information from overt, sensitive, technical, tactical, and Force Protection, in the service, joint, and combined forces area of operations.

EXHIBIT R-2a, RD	T&E Project Justification	DATE:	
			February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Systems		C2272 Intelligence C2 Systems

Team Portable Collection System - Multi-Platform Capable (TPCS-MPC) - The TPCS- MPC will provide the MAGTF commander with a modular and scaleable carry on/off suite of equipment capable of conducting Signals Intelligence (SIGINT) operations onboard organic non-dedicated Marine Corps air, ground, and water borne platforms. The TPCS-MPC will be highly modular, mission configurable, multi-platform system incorporating plug-and-play technologies. The system will provide state-of-the-art, versatile air/ground/water borne SIGINT and EW support to the MAGTF through the use of lightweight, flexible mission equipment suites capable of detecting, identifying, locating, and exploiting current and emerging communications technologies, intercepting non-communication signals, and improving the system's geolocation accuracy.

Tactical Remote Sensor System (TRSS-PIP) - TRSS is a suite of hand emplaced and air-delivered unattended sensors, ground relays, and sensor monitoring stations, which are used by the Intelligence Battalions, Ground Sensor Platoons (GSPs). It provides the MEF/MAGTF Commander with an organic capability to conduct unattended, all-weather, semi-covert, ground surveillance of distant areas within his Area of Operations (AO). Through the use of seismic, acoustic, magnetic, infra-red, and imaging sensors, this suite provides an additional surveillance capability of personnel and/or vehicular activity, during tactical pre-assault, assault and post assault operations. TRSS covers gaps in the overall intelligence collection effort and reduces the requirement to employ Marines behind enemy lines for extended periods of time.

MAGTF Secondary Imagery Dissemination System (MSIDS) is the only ground prospective Family of Systems (FoS) that provides organic tactical digital imagery collection, transmission and receiving capability to the MAGTF Commander. MSIDS is comprised of components necessary to enable Marines to capture, manipulate, annotate, transmit or receive images in Near Real Time (NRT), internally with subordinate commands that are widely separated throughout the area of operations and externally with high adjacent commands. MSIDS capability resides with the MAGTF G/S-2 sections and Ground Reconnaissance units. The MSIDS FoS extends the digital imaging capability to all echelons within the MEF, down to and including battalions and squadrons. Captured images are capable of being forwarded throughout the MAGTF through the use of Base Station Workstation/Communication Interface (OW/CI) or existing C4ISR architecture. MSIDS FoS is currently employed in every location world-wide where the Marine Corps participates in military operations. MSIDS is currently, or has recently, been employed in Iraq, Kuwait, Afghanistan, Haiti, Philippines, and Horn of Africa.

Intelligence Analysis Systems (IAS) supports the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence; it ensures that tactical intelligence is tailored to meet specific mission requirements.

Global Command and Control System Integrated Imagery and Intelligence (GCCS I3) is a joint program that is designed to enhance the operational Commander's situation awareness and track management through the use of a standard set of integrated, linked tools and services that maximize commonality and interoperability across the tactical theater, and national communities. GCCS-I3 operates in joint and service specific battlespace and is interoperable, transportable, and compliant with the DoD mandated Common Operating Environment (COE).

**Technical Control Analysis Center (TCAC).** The primary mission of the TCAC is to provide the Radio Battalions (RadBn) with an automated Signals Intelligence (SIGINT) processing, analysis, and reporting capability. The TCAC system is designed to receive collected intelligence from tactical, theater and National level producers and provide a multi-source fused intelligence production capability to support the Marine Air Ground Task Force (MAGTF) commander via the Intelligence Analysis System (IAS), as well as the National Security Agency (NSA) and other National consumers.

Intelligence Broadcast Receiver (IBR) provides Marine tactical commanders access to National level Near Real-Time intelligence data provided over the Integrated Broadcast Service. IBR is employed across the MAGTF echelons through the following Host Systems; Intelligence Analysis System; Tactical Air Operations Center; Technical Control and Analysis Center; Tactical Air Command Center; Joint STARS Common Ground Station; Tactical Electronic Reconnaissance Processing and Evaluation System and Common Air Command and Control Systems and Joint Stars Work Station.

Intelligence System Readiness (ISR) - provides timely and targeted solutions that enable the MAGTF Commander to accomplish the mission by rapid technology insertion, quick response training, logistics and provid interim support to mission essential legacy systems that are not otherwise supported through the POM process. By utilizing the Field User Evaluation (FUE) Process, the ISR program enhances the Marine Corps Intelligence Architecture by mitigating operational shortfalls through Commerical-Off-The-Shelf (COTS), Government-Off-The-Shelf (GOTS) and Non-Developmental Item (NDI) solutions. In this way, ISR provides proof-of-concept prototypes and focused Research and Development (R&D) efforts to support the Marine Corps Intelligence Architecture and shorten the time required to fill gaps and field sytems. The ISR program Team also trains Marines to maximize new systems and capabilities.

EXHIBIT R-2a	a, RDT&E Project Justification	DATE:		
			February 2	006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	<u>.</u>	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Sy		C2272 Intelligence C2 Syste	
	RIT II and TROJAN SPIRIT LITE are merging into a s			
	igh Mobility Multi-Purpose Wheeled Vehicle (HMMW			
	ecret Collateral levels to USMC intelligence units. The			
	e System-Marine Corps, formerly known as Distribute			
	ghter needs for ISR support, with the Global Informat			
	revillance and Reconnassiance (ISR) Enterprise end			
	stems (FOS). The DIB will provide the tools, standa			
	ice (IMINT), Signal Intelligence (SIGINT), Measureme			
	vironment with the interoperability to afford individual			neir respective missions. The
Marine Corps will conduct DIB integration rese	each and development to meet a congressionally man	ndated implementation	deadline.	
(U) B. ACCOMPLISHMENTS/PLANNED PRO	OGRAM:			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.030	0.028	0.035
RDT&E Articles Qty				
	echnical support for technical refresh and update of p	orogram hardware/softw	are upgrades.	
COST (\$ in Millions)	· · · ·	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.077	0.091	0.091
RDT&E Articles Qty				
CIHEP: Program Management Support	for the technical refresh and update of program hard	dware/software upgrade	S.	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.040	0.156	0.158
RDT&E Articles Qty				
GCCS-I3: Logistic Support.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.030	0.000	0.000
RDT&E Articles Qty				
GCCS-I3: Program Documentation				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.580	1.097	1.112
RDT&E Articles Qty				
GCCS-I3: Software Engineering Support	rt		•	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.417	0.314	0.318
RDT&E Articles Qty		<del>-</del>		
GCCS-I3: Contractual Support - Infrastr	ructure		-1	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.049	0.000	0.000
RDT&E Articles Qty		V.V TV	0.000	0.000
GCCS-I3: Engineering/Acq Logistics Su	IDDOL		1	<u> </u>
2000 io. Enginosinig// toq Eoglotios Oc	<u>.k</u>			

R-1 SHOPPING LIST - Item No. 186

Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 16 of 134)

EXHIBIT R-	2a, RDT&E Project Justification	DATE:		
			February 200	06
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication		C2272 Intelligence C2 System	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.064	0.000	0.000
RDT&E Articles Qty				
GCCS-I3: Program Testing				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.500	0.574	0.583
RDT&E Articles Qty				
IAS MOD KIT: Management, Enginee	ering and Acquisition Logistic Support			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.425	0.460	0.455
RDT&E Articles Qty				
	are solutions for system applications and migration	over to Win XP OS.		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.860	1.040	1.000
RDT&E Articles Qty				
IBR: Engineering and technical service	e support.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.069	0.097	0.087
RDT&E Articles Qty				
IBR: Contract and Program Support.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.533	0.150	0.150
RDT&E Articles Qty			11100	
ISR: Program Management and Tech	nnical Support for the ISR Program.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.600	0.550
RDT&E Articles Qty				
	of new technology initiatives to the Operating Force	es.		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.266	0.236
		0.000	0.200	0.20

EXHIBIT R-2	a, RDT&E Project Justification	DATE:		
A DDD ODD IATION (DUDOST A OTIVITY	DDGGDAM ELEMENT NUMBER AND NAME		February 200 PROJECT NUMBER AND NAME	06
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev	PROGRAM ELEMENT NUMBER AND NAME 0206313M Marine Corps Communication	n Systoms	C2272 Intelligence C2 System	ne
COST (\$ in Millions)	0200313M Marine Corps Communication	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.261	0.186	0.259
RDT&E Articles Qty		0.201	0.180	0.239
	upport for development and integration of client so	ftware that will reside on	existing MAGTF system and utilize	e JSTARS data.
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.186	0.504
RDT&E Articles Qty				
JSTARS: Future MTI capability into JS	STARS ground elements.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.108	0.000
RDT&E Articles Qty				
JSTARS: Common Data Link Capabil	ty.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.389	0.000	0.000
RDT&E Articles Qty				
JSTARS: Future MTI Sensor capabilit	y.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.034	0.073	0.000
RDT&E Articles Qty				
JSTARS: IPv6 integration research.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.447	0.445	0.710
RDT&E Articles Qty				
JSIPS-TEG: Development and integra	tion of enhanced TEG/TEG-RWS functionality to i	nclude SCI capability.		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.225	0.300	0.371
RDT&E Articles Qty				
JSIPS-TEG: Development and integra	tion of required upgrades/interfaces to accommod	ate emerging airborne im	nagery sensor.	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.157	0.090	0.080
RDT&E Articles Qty				
JSIPS-TEG: Develop, maintain and im	prove Precision Targeting software.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.086	0.130
RDT&E Articles Qty				
10100 750 5	X interfaces to include potential merger of current	10TADO/000		

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Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 18 of 134)

EXHIBIT R-2	a, RDT&E Project Justification	DATE:		
			February 200	)6
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication	•	C2272 Intelligence C2 System	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.198	0.104	0.210
RDT&E Articles Qty				
JSIPS-TEG: Development and integra	ation of video capture and exploitation capability.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.081	0.138	0.183
RDT&E Articles Qty				
JSIPS-TEG: Development and integra	ation of mandated DCGS/DIB interfaces and comur	nication architectures.		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.100	0.094
RDT&E Articles Qty		3.000		
	table and reduced form-factor Comon Data Link (CI	DL) capability.		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.738	0.492	0.563
RDT&E Articles Qty	<del>-</del>	0.730	0.432	0.303
	ا nagement and Infrastructure/Team IMINT shared o	poete		
• •				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.084	0.100
RDT&E Articles Qty				
	tion of mandated Joint interoperability and architect			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.160	0.206	0.210
RDT&E Articles Qty				
	chnical support for product development of program	n hardware and softwar	re refresh.	
MSIDS: Program Management and ted	chnical support for product development of program		re refresh.	FY 2007
MSIDS: Program Management and ted COST (\$ in Millions)	chnical support for product development of program	n hardware and softwar FY 2005 0.061		FY 2007 0.041
MSIDS: Program Management and ted COST (\$ in Millions) Accomplishment/Effort Subtotal Cost	chnical support for product development of program	FY 2005	FY 2006	
MSIDS: Program Management and ted COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty		FY 2005 0.061	FY 2006	
MSIDS: Program Management and ted COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty MSIDS: Program Management and ted	chnical support for product development of program	FY 2005 0.061 gram refresh.	FY 2006 0.041	0.041
MSIDS: Program Management and ted COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty MSIDS: Program Management and ted COST (\$ in Millions)		FY 2005 0.061 gram refresh. FY 2005	FY 2006 0.041 FY 2006	0.041 FY 2007
MSIDS: Program Management and ted COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty MSIDS: Program Management and ted COST (\$ in Millions) Accomplishment/Effort Subtotal Cost		FY 2005 0.061 gram refresh.	FY 2006 0.041	0.041
MSIDS: Program Management and ted  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  MSIDS: Program Management and ted  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty	chnical support for Technical and Evaluation of prog	FY 2005 0.061 gram refresh. FY 2005	FY 2006 0.041 FY 2006	0.041 FY 2007
MSIDS: Program Management and tec  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  MSIDS: Program Management and tec  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TCAC: Software development keeping		FY 2005 0.061 gram refresh. FY 2005 0.856	FY 2006 0.041 FY 2006 0.912	0.041 FY 2007 1.511
MSIDS: Program Management and ted  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  MSIDS: Program Management and ted  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TCAC: Software development keeping  COST (\$ in Millions)	chnical support for Technical and Evaluation of prog	FY 2005 0.061 gram refresh. FY 2005 0.856	FY 2006  0.041  FY 2006  0.912  FY 2006	0.041 FY 2007 1.511 FY 2007
MSIDS: Program Management and tec  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  MSIDS: Program Management and tec  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TCAC: Software development keeping	chnical support for Technical and Evaluation of prog	FY 2005 0.061 gram refresh. FY 2005 0.856	FY 2006 0.041 FY 2006 0.912	0.041 FY 2007 1.511

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Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 19 of 134)

EXHIBIT R-2	a, RDT&E Project Justification	DATE:		
			February 200	06
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication		C2272 Intelligence C2 System	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.290	0.617	1.032
RDT&E Articles Qty				
	merging national data dissemination capabilities.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.015	0.000
RDT&E Articles Qty				
	ts by providing the Fleet Marine Force with TENCA	AP simulation, visualiza		ation capabilities.
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.061	0.000	0.100
RDT&E Articles Qty				
	ing exploitation, automated and manual target reco	T		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.319	0.354	0.357
RDT&E Articles Qty				
TPC: Contractor Support for Integratio	n and Re-engineering Support			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		1.661	0.000	1.500
RDT&E Articles Qty				
TPCS-MPC: EDM Design.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		1.500	0.000	0.500
RDT&E Articles Qty		1.500	0.000	0.300
TPCS-MPC: System development.	I			
•		<b>5</b> 1/ 0005		=\( \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.027	0.057	0.049
RDT&E Articles Qty				
TPCS-MPC: Training development and	test support.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	2.200	1.100
RDT&E Articles Qty				
TPCS-MPC: Program support and mana	gement.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.950	0.000	0.000
RDT&E Articles Qty				
TPCS-MPC: Contractor advisory assista	nce service.			

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Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 20 of 134)

	2a, RDT&E Project Justification	DATE:		
			February 200	06
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	<u>.</u>	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication		C2272 Intelligence C2 System	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.348	0.350	0.350
RDT&E Articles Qty				
TPCS-MPC: Operational Test and Evaluation	uation (OT&E).			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.065	0.175	0.000
RDT&E Articles Qty				
TRSS-PIP: Logistic and Admin suppo	ort.		<u> </u>	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.702	0.000	0.000
RDT&E Articles Qty				
TRSS-PIP: Software development of	HHPM and Low Cost Imager; Improved Air Delivered	d Sensor (IADS) II; En	ncoder Transmitter Unit (ETU); Wind	lows 2000 migration; and RS
vewr 3.1 field verfication/version 4.0.		, , ,	, ,	,
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		2.236	0.900	0.000
RDT&E Articles Qty				
TRSS-PIP: Engineering support.				
COST (\$ in Millions)		FY 2005	FY 2006	EV 0007
,				FY 2007
Accomplishment/Effort Subtotal Cost		1.901	0.000	1.445
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	-	1.901	0.000	=
RDT&E Articles Qty	ed Ground Miniaturized Sensors (UGMS) and AADS			=
RDT&E Articles Qty	ed Ground Miniaturized Sensors (UGMS) and AADS	electronic component	ts.	1.445
RDT&E Articles Qty  TRSS-PIP: Development of Unattende	ed Ground Miniaturized Sensors (UGMS) and AADS	electronic component	ts. FY 2006	1.445 FY 2007
RDT&E Articles Qty TRSS-PIP: Development of Unattende Accomplishment/Effort Subtotal Cost	ed Ground Miniaturized Sensors (UGMS) and AADS	electronic component	ts.	1.445
RDT&E Articles Qty TRSS-PIP: Development of Unattende Accomplishment/Effort Subtotal Cost RDT&E Articles Qty		electronic component	ts. FY 2006	1.445 FY 2007
RDT&E Articles Qty  TRSS-PIP: Development of Unattende  Accomplishment/Effort Subtotal Cost		electronic component	ts. FY 2006	1.445 FY 2007
RDT&E Articles Qty  TRSS-PIP: Development of Unattender  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TRSS-PIP: Air Certification of Advance  COST (\$ in Millions)		electronic component FY 2005 0.000	FY 2006 0.000	1.445 FY 2007 0.705
RDT&E Articles Qty TRSS-PIP: Development of Unattender Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Air Certification of Advance COST (\$ in Millions) Accomplishment/Effort Subtotal Cost		electronic component FY 2005 0.000  FY 2005	FY 2006  FY 2006	1.445 FY 2007 0.705
RDT&E Articles Qty TRSS-PIP: Development of Unattender Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Air Certification of Advance COST (\$ in Millions) Accomplishment/Effort Subtotal Cost	ed Air Delivered Sensor (AADS) store.	electronic component FY 2005 0.000  FY 2005	FY 2006  FY 2006	1.445 FY 2007 0.705
RDT&E Articles Qty TRSS-PIP: Development of Unattender Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Air Certification of Advance COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	ed Air Delivered Sensor (AADS) store.	electronic component FY 2005 0.000  FY 2005	FY 2006  FY 2006	1.445 FY 2007 0.705
RDT&E Articles Qty TRSS-PIP: Development of Unattender Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Air Certification of Advance COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Software Development of Accomplishment (\$ COST (\$ in Millions))	ed Air Delivered Sensor (AADS) store.	electronic component FY 2005 0.000  FY 2005 0.918	FY 2006 0.000 FY 2006 1.000	1.445  FY 2007 0.705  FY 2007 1.300
RDT&E Articles Qty TRSS-PIP: Development of Unattender Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Air Certification of Advance COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Software Development of Advance Cost	ed Air Delivered Sensor (AADS) store.	electronic component FY 2005 0.000  FY 2005 0.918  FY 2005	FY 2006  0.000  FY 2006  1.000  FY 2006	1.445  FY 2007 0.705  FY 2007 1.300

APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TRSS-PIP: Support IOT&E and Increment II  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TROJAN SPIRIT: Development of P3I upgra		FY 2005 0.000 FY 2005 0.000	February 2006 PROJECT NUMBER AND NAME C2272 Intelligence C2 Systems FY 2006 0.500  FY 2006 0.420	FY 2007 0.000
RDT&E, N /BA-7 Operational Sys Dev  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TRSS-PIP: Support IOT&E and Increment II  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TROJAN SPIRIT: Development of P3I upgra	efforts.	FY 2005 0.000 FY 2005	FY 2006  FY 2006  FY 2006	FY 2007 0.000 FY 2007
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Support IOT&E and Increment II  COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TROJAN SPIRIT: Development of P3I upgra	efforts.	FY 2005 0.000 FY 2005	FY 2006 0.500 FY 2006	FY 2007 0.000 FY 2007
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TRSS-PIP: Support IOT&E and Increment II  COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TROJAN SPIRIT: Development of P3I upgra		0.000 FY 2005	0.500 FY 2006	0.000 FY 2007
RDT&E Articles Qty  TRSS-PIP: Support IOT&E and Increment II  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TROJAN SPIRIT: Development of P3I upgra		FY 2005	FY 2006	FY 2007
TRSS-PIP: Support IOT&E and Increment II  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  TROJAN SPIRIT: Development of P3I upgra				
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TROJAN SPIRIT: Development of P3I upgra				
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty TROJAN SPIRIT: Development of P3I upgra	ahas			
RDT&E Articles Qty  TROJAN SPIRIT: Development of P3I upgra	andes	0.000	0.420	
TROJAN SPIRIT: Development of P3I upgra	l		0.420	0.422
	ades			
COST (\$ in Millions)	uucs.			
		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	2.314	1.480
RDT&E Articles Qty				
DCGS-MC - USMC DCGS Integrated Backbo	one (DIB).			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	2.315	1.480
RDT&E Articles Qty				
DCGS-MC - Application Interface (API) and A	Application Process Development.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.583	0.867
RDT&E Articles Qty				
DCGS-MC - Engineering and Technical Serv	ices.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.497	0.118
RDT&E Articles Qty				
DCGS-MC - Studies, analysis and evaluation	i.			
•				

EXHIBIT R-2a, I	RDT&E Project Justification		DATE:	
				February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AN			PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Con	nmunication S	ystems	C2272 Intelligence C2 Systems
U) PROJECT CHANGE SUMMARY:	FY2005	FY2006	FY2007	
(U) FY 2006 President's Budget:	22.299	27.025	22.440	
(U) Adjustments from the President's Budget:				
(U) Congressional Prog Reduction				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-0.828		5.000	
(U) SBIR/STTR Transfer	-0.025			
(U) Minor Affordability Adjustment	0.004	-0.406	-0.768	
(U) FY 2007 President's Budget:	21.450	26.619	26.672	

## CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

Ε/	(HIBIT R-2a, RDT&E Proje	ct Justification		D	ATE:		February 2006	;		
APPROPRIATION/BUDGET ACTIVITY		ELEMENT NUMBER AN		<b>'</b>		ROJECT NUMBER				
RDT&E, N /BA-7 Operational Sys (U) C. OTHER PROGRAM FUND	Dev 0206313N	Marine Corps Cor	nmunication S	Systems	C:	2272 Intelligen	ce C2 Systems	S	<b>T</b> =	
Line Item No. & Name	ING SOMMANT.	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl t	al Cos
PMC BLI 471400 TRSS PIP	TRSS-PIP	8.459	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.459
PMC BLI 474700 Intell Support Eq	TRSS-PIP	0.000	9.289	2.666	5.886	10.402	7.699	13.000	Cont	Con
PMC BLI 474700 Intell Support Eq	CIHEP	1.437	1.426	1.601	1.761	1.862	1.935	1.970	Cont	Con
PMC BLI 474700 Intell Support Eq	DCGSI	0.000	1.303	3.240	0.529	0.612	6.203	0.574	Cont	Con
PMC BLI 474700 Intell Support Eq	JSIPS	0.982	3.401	0.267	0.000	1.283	1.813	0.299	0.000	8.045
PMC BLI 474700 Intell Support Eq	TPCS	2.637	7.641	4.660	3.149	0.301	0.000	0.000	0.000	18.388
PMC BLI 474700 Intell Support Eq	MSIDS	1.338	1.614	1.697	1.762	1.718	1.757	1.794	Cont	Con
PMC BLI 474700 Intell Support Eq	IBR	2.024	1.320	0.401	0.420	0.422	0.429	0.434	Cont	Con
PMC BLI 474700 Intell Support Eq	TPC	1.268	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.268
PMC BLI 474700 Intell Support Eq	RREP	1.940	3.992	0.034	1.019	5.191	0.100	1.294	Cont	Con
PMC BLI 474700 Intell Support Eq	TSCM	0.000	1.159	0.000	1.323	0.000	1.448	0.000	Cont	Con
PMC BLI 474900 MOD KITS Intell	IAS MOD Kit	2.107	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.10
PMC BLI 465200 Mod Kits	IAS MOD Kit	0.000	3.635	5.253	2.618	1.469	2.706	1.720	Cont	Con
PMC BLI 474900 Mod Kits Intell	TCAC	1.491	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.49
PMC BLI 465200 Mod Kit	TCAC	0.000	0.933	3.904	0.945	1.127	0.000	0.772	Cont	Con
PMC BLI 474900 Mod Kits Intell	JSTARS	3.408	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.408
PMC BLI 465200 Mod Kit	JSTARS	0.000	4.181	0.024	3.728	1.624	1.487	2.498	Cont	Con
PMC BLI 474900 Mod Kits Intell	TERPES	0.820	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.82
PMC BLI 465200 Mod Kit	TERPES	0.000	2.982	0.000	3.182	0.000	0.000	0.000	0.000	6.16
PMC BLI 474900 Mod Kits Intell	ISR	1.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.01
PMC BLI 465200 Mod Kit	ISR	0.000	3.980	3.645	1.466	2.424	2.022	3.591	Cont	Con
PMC BLI 463300 Radio Systems	TROJAN LITE	0.962	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.962
PMC BLI 474700 Intell Support Eq	TROJAN SPIRIT	0.000	7.300	3.094	4.011	0.656	0.108	0.113	Cont	Con
PMC BLI 474700 Intell Support Eq	JWICS	0.000	0.723	0.781	0.801	0.822	0.845	0.867	0.867	5.70
PMC BLI 474700 Intell Support Eq	TVCS	5.700	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.
PMC BLI 474700 Intell Support Eq	USMC Terrain Analysis (Ta	AP) 0.996	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.996

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UNCLASSIFIED

Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 24 of 134)

EXHIBIT R-2a, RD	T&E Project Justification	DATE:	
		February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Systems	C2272 Intelligence C2 Systems	

### (U) Related RDT&E:

- (U) PE 0301301L (Department of Defense Intelligence and Information Systems/Military Intelligence Integrated Data System/Integrated Data Base I and II)
- (U) PE 0604270A (Intelligence and Electronic Warfare Common Sensor (IEWCS), TACJAM-A)
- (U) PE 0305885G (Tactical Cryptologic Program)
- (U) PE 0603730A (Tactical Surveillance System Advanced Development), Army TENCAP, Project D560
- (U) PE 0603766A (Tactical Electronic Surveillance System Advanced Development), Army TENCAP, Project D907
- (U) PE 0604740A (Tactical Surveillance System Engineering Development), OSD TENCAP, Project D662
- (U) PE 0902398M (United States Special Operations Command), Chariot Program
- (U) PE 0605867N (SEW Surveillance/Reconnaissance Support), Project Z1034
- (U) ACQUISITION STRATEGY JSTARS: JSTARS will utilize ongoing Army and Navy JSTARS contracts for development of client software, future CDL, MTI and MTI Sensor capabilities. IPv6 research will be conducted in conjunction with other services and agencies. Incremental Development Plan (IDP) efforts will continue to the JSTARS software baseline. SPAWAR-Charleston, SC will oversee the integration and testing of these development efforts, ensuring USMC Command, Control, Communications, Computers and Intelligence (C4I) architecture capability. On-site contractor logistical support will be provided through the General Dynamics Intelligence, Information Command and Control, Equipment and Enhancements (ICE2) Equipment Logistics Support Contract out of Warner-Robbins Air Force Base, GA. Post Deployment Software Support (PDSS) will be provided through the Communications-Electronics Command (CECOM), Ft Monmouth, NJ and SPAWAR-Charleston, SC. Surveillance Control Data Link (SCDL) antenna and Ground Data Terminal (GDT) support will be through Cubic Defense Systems, San Diego, CA, via a General Dynamics support contract.
- (U) ACQUISITION STRATEGY JSIPS TEG: The TEG Program Office leverages the advantages of its multi-service common software baseline and inherent Joint service interoperability. Development and acquisition is divided between three prime contractors: Northrop Grumman Electronic Systems, Baltimore, MD (NGB) (through a classified contract); Space and Naval Warfare Systems Center, Charleston, SC (SSCC), and MTC Services Corporation. The MTC-operated Integrated Team Solutions Facility (ITSFAC) provides facilities to conduct integration, interoperability, and security certification and accreditation testing of USMC intelligence systems, system training, and program managment support.
- (U) ACQUISITION STRATEGY TPCS: TPCS, the ever-increasing sophistication of target threats and information technology necessitates an evolutionary acquisition approach. TPCS will make incremental improvements through maximum use of COTS, GOTS and NDI. These technology insertions and product improvements will ensure the Radio Battalions maintain cutting edge technologies and collection capabilities.
- **(U) ACQUISITION STRATEGY TRSS:** The TRSS are typically Non-Developmental Item (NDI) integration efforts, making maximum use of the efforts of hardware and software initially developed by other DoD organizations and programs. The initial phases of each Increments are cost-plus fixed-fee efforts, while the production phase, which encompasses the production, fielding, training and initial support of the systems, are firm-fixed price efforts.
- (U) ACQUISITION STRATEGY TENCAP: Work will be led in-house. Necessary contractor support will be acquired using already existing contracts.
- (U) ACQUISITION STRATEGY CIHEP: CIHEP will use existing 8A contractor, Action Systems, the developer of the original system for test, evaluation and integration of planned refresh items for the ADP and Imagery Module. US Army IMA will be used for test, evaluation, and integration of planned refresh items for the TSS, Audio and Miscellaneous modules. CIHEP will coordinate acquisitions of communications equipment with PM Comm for planned upgrades to the Communications Module.
- **(U) ACQUISITION STRATEGY MSIDS:** A complete refresh of systems commenced in 3QTR FY02 and reached Full Operational Capability (FOC) in 2QTR FY03. Subsequent "increment refreshes" are under way in order to keep the systems from becoming unreliable and unsupportable. The increment refresh approach will effectively leverage technological advances. Each increment of upgrades will refresh 1/3 of the fielded components.

EXHIBIT R-2a, RD	T&E Project Justification	DATE:		_
•	•		February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Systems		C2272 Intelligence C2 Systems	

- (U) ACQUISITION STRATEGY GCCS-I3: This program promotes and ensures interoperability among USMC Intelligence Systems. Engineering and technical support is provided to PM Intel systems integration efforts for incorporation of the COE and GCCS-I3 software baseline. An Intelligence Integration Facility has been established at the Integrated Team Solution Facility. As such, this facility will be used as the hub for the entire integration effort of the GCCS-I3 initiative. The program is funded for five years beginning in FY02 and, as it is not a procurement effort, there are no life cycle or acquisition phases for which the Marine Corps is responsible.
- (U) ACQUISITION STRATEGY TCAC: The acquisition of components for the TCAC will maximize the use of existing equipment, NDI/COTS/GFE equipment/software. The integration effort for TCAC hardware components will be accomplished under the control of the SSA, MCSC. Software integration and support will be accomplished by contractors under the control of the Project Officer. These activities report to and are directed by the Program Manager, Intelligence Systems, Marine Corps Systems Command (MARCORSYSCOM). Maintenance support will be managed by MARCORLOGBASES Albany and MCSC, Albany and through separate contractual agreements.
- (U) ACQUISITION STRATEGY IBR: In house contracts will be used to conduct engineering studies and test and evaluation activities associated with the Marine Corps implementation of the Integrated Broadcast Service, Common Message Format, ENTR integration and test and evaluation.
- (U) ACQUISITION STRATEGY TPC: The TPC program will reach Full Operational Capability in FY06 with the fielding of TPC to the Marine Corp Intelligence Activity. The TPC will refresh and upgrade the existing TPC equipment as technology advances. As new technology emerges, the current fielded systems will need incremental hardware and software refreshes to sustain operational requirements and to meet the ORD requirement of complianced with the NGA US Imagery and Geospatial Information System. The TPC program uses existing Government contracts for hardware/software development and integration. Full-time contractor support is provided through the Commercial Enterprise Omnibus Support Services (CEOss) contract. Additionall full time engineering and integration support is provided by Northrop Grumman Information Technology TASC through the Information Technology Omnibus Procurement II (ITOP II) contract under the auspices of the MCSC Information Technology Modernization 2000 (ITM2K) Project Office. Maintenance support will be managed by MARCORLOGBASES Albany and MCSC, Albany and through separate contractual agreements.
- (U) ACQUISITION STRATEGY ISR: This program seeks to support a wide range of technology solutions based on the requests received fro mthe Operating Forces and/or PM Intelligence Program of Record. The request must require solution evaluation beyond merely acquisition to be recommended as an ISR candidate. Each rquest will be validated by the ISR team and approved by the Project Officer and PM Intel before solution evaluation begins. The ISR program will use COTS/GOTS/NDI solutions to the greatest extent possible.
- (U) ACQUISITION STRATEGY IAS: The IAS program uses existing Government contracts for hardware and software development and integration. The system is comprised primarily of Commercial Off-the-Shelf (COTS) and Government Off-The-Shelf (GOTS) equipment. The IAS FoS utilizes an evolutionary strategy to ensure periodic incorporation of state-of-the-art technology that meets both current and future Marine Corps intelligence requirements while maintaining system readiness and reliability.
- (U) ACQUISITION STRATEGY TROJAN SPIRIT: Procure and continuously improve USMC TROJAN SPIRIT systems to meet evolving Marine Corps operational needs while maintaining interoperability with the Army TROJAN Network and maintaining, as closely as practical, configuration common to the Army TROJAN SPIRIT systems.
- (U) ACQUISITION STRATEGY DCGSI: The Marine Corps DCGS-MC project officer will leverage off of the USAF DCGS 10.2 Research, Development Test and Evaluation (RDT&E) effort and focus on the development of the DCGS Integrated Backbone (DIB) for the DCGS-MC.Additionally, the DCGS-MC will leverage off of MAGTF Legacy system DIB compliancy efforts.

EXHIBIT R-2a, RD	T&E Project Justification	DATE:	
			February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Systems		C2272 Intelligence C2 Systems

### (U) E. MAJOR PERFORMERS:

### MANPACK SIDS (MP SIDS)

- FY 05 Integrity Data Inc (IDI), Colorado Springs, Colorado. Provide funds for integration and sustainment support.
  - Northrop Grumman Information Technology (NGIT), Stafford, VA Provide funds for engineering and program management support.
  - Navy Systems Management Activity (MTC, Stafford, VA). Provide funds for engineering and program management support.
- FY 06 Integrity Data Inc (IDI), Colorado Springs, Colorado. Continue to provide funds for integration and sustainment support.

  Northrop Grumman Information Technology (NGIT), Stafford, VA Continue to provide funds for engineering and program management support.

  Navy Systems Management Activity (MTC, Stafford, VA). Continue to provide funds for engineering and program management support.
- FY 07 Integrity Data Inc (IDI), Colorado Springs, Colorado. Continue to provide funds for integration and sustainment support.

  Northrop Grumman Information Technology (NGIT), Stafford, VA Continue to provide funds for engineering and program management support.

  Navy Systems Management Activity (MTC, Stafford, VA). Continue to provide funds for engineering and program management support.

### INTELLIGENCE BROADCAST RECEIVER (IBR)

FY 05 COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA. Provide funds to MDA Technologies for IBS Common Message format implementation assessment and Engineering and technical management support.

SPAWAR, Charleston, SC. Provide funds for integration, engineering, program management and contractual support.

- FY 06 COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA Continue to provide funds to MDA Technologies for IBS Common Message format implementation assessment, IBR to JTRS transition assessment and engineering and techical management support.
- FY 07 COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA Continue to provide funds to MDA Technologies for IBS Common Message format implementation assessment and Engineering and technical management support.

### **INTELLIGENCE ANALYSIS SYSTEM (IAS)**

- FY05 SPAWAR, CHARLESTON, S.C. Provide funds for development, upgrades, integration, research and analysis of hardware for system refresh.
  - Navy Systems Management Activity (MTC, Stafford, VA). Continue to provide funds for Integration and hardware upgrade study.
- FY06 SPAWAR, CHARLESTON, S.C. Continue to provide funds for development, upgrades, integration, research and analysis of hardware for system refresh.

  Navy Systems Management Activity (MTC, Stafford, VA). Continue to provide funds for Integration and hardware upgrade study.
- FY07 SPAWAR, CHARLESTON, S.C. Continue to provide funds for development, upgrades, integration, research and analysis of hardware for system refresh.
- Navy Systems Management Activity (MTC, Stafford, VA). Continue to provide funds for Integration and hardware upgrade study.

### **INTELLIGENCE SYSTEM READINESS (ISR)**

- FY 05 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC Services Corporation, Stafford, VA) Provide funding for engineering, testing, evaluation and training support. Naval Operation Other Than War Technology Center (NOOTW-TC), Dahlgren, VA Provide funding for new technology initiatives.
- FY 06 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC Services Corporation, Stafford, VA) Continue to provides funding for engineering, testing, evaluation and training support.
- FY 07 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC Services Corporation, Stafford, VA) Continue to provides funding for engineering, testing, evaluation and training support.

EXHIBIT R-2a, RD	Γ&E Project Justification	DATE:	
			February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Systems		C2272 Intelligence C2 Systems

### TEAM PORTABLE COLLECTION SYSTEM - MULTI-PLATFORM CAPABLE (TPCS-MPC)

- FY05 NSMA (MTC), Stafford, VA, Provide funds for program management and engineering support services MCSC, Quantico, VA, Provide payback funds to PG-10
- FY06 SPAWAR, CHARLESTON, S.C. Continue to provide funds for prime systems integrator for TPCS-MPC EDM. MCOTEA. Provide Operational testing of the TPCS-MPC Ground/Team system. NSMA (MTC), Stafford, VA, Continue to provide funds for program management and engineering support services
- FY07 SPAWAR, CHARLESTON, S.C. Continue to provide funds for prime systems integrator for TPCS-MPC EDM.

  MCOTEA. Provide Operational testing of the TPCS-MPC Ground/Team system.

  NSMA (MTC), Stafford, VA, Continue to provide funds for program management and engineering support services

### GLOBAL COMMAND AND CONTROL SYSTEM INTEGRATED IMAGERY AND INTELLIGENCE (GCCS I3)

- FY 05 MTC Services Corporation (MTC) Stafford, VA. Provide funds for Engineering and Program support services.

  Austin Information System (AIS), Austin, TX. Provide funds for System Integration & inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc. SPAWAR, CHARLESTON, SC. Provide Software Engineering support to include research, design, documentation and testing.
- FY 06 MTC Services Corporation (MTC) Stafford, VA. Continue to provide funds for Engineering and Program support services.

  Austin Information System (AIS), Austin, TX. Continue to provide funds for System Integration & inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc. SPAWAR, CHARLESTION, SC. Continue development, upgrades, integration, research and analysis for system refresh.
- FY 07 MTC Services Corporation (MTC) Stafford, VA. Continue to provide funds for Engineering and Program support services.

  Austin Information System (AIS), Austin, TX. Continue to provide funds for System Integration & inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc. SPAWAR, Charleston, SC. Continue development, upgrades, integration, research and analysis for system refresh.

### TOPOGRAPHIC PRODUCTION CAPABILITY (TPC)

- FY 05 MARCORSYSCOM, (MCSC), Quantico, VA Provide funds to Northrop Grumman Information Technology, TASC, or integration and re-engineering support. Dec 04 FY 06 MARCORSYSCOM, (MCSC), Quantico, VA Continue to provide funds to TBD for continues integration and re-engineering support in support of moderinzation and technology refresh. Dec 05
- FY 07 MARCORSYSCOM, (MCSC), Quantico, VA Continue to provide funds to TBD for continues integration and re-engineering support in support of moderinzation and technology refresh. Dec 06

### JOINT SURVEILLANCE TARGET ATTACK RADAR (JSTARS)

FY 05 SPAWAR, Charleston, S.C. Provide funds for client software connectivity solution, future MTI, CDL, MTI sensor capabilties and Internet Protocol Version 6 (IPv6) research and development.

- MTC Services Corporation (MTC) Stafford, VA. Provide funds for Engineering and Program support services.
- FY 06 SPAWAR, Charleston, S.C. Continue to provide funds for client software connectivity solution, future MTI, CDL, MTI sensor capabilties and Internet Protocol Version 6 (IPv6) research and development.
- FY 07 SPAWAR, Charleston, S.C. Continue to provide funds for client software connectivity solution, future MTI, CDL, MTI sensor capabilties and Internet Protocol Version 6 (IPv6) research and development.

EXHIBIT R-2a, RD	T&E Project Justification	DATE:	
			February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	P	ROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Systems	C	C2272 Intelligence C2 Systems

### JOINT SERVICE IMAGERY PROCESSING SYSTEM-TACTICAL EXPLOITATION GROUP (JSIPS-TEG)

FY05 SPAWAR, Charleston, SC. Provide funds for integration, engineering, program management and contractual support.

ARMY SPACE PROGRAM OFFICE, Washington, DC. Classified contract.

NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), (MTC, Stafford, VA), Provide funds for engineering & technical management support.

MARCORSYSCOM, (MCSC), Quantico, VA (CEOSS) Provide funds for Program and technical support.

FY06 SPAWAR, Charleston, SC. Continue to provide funds for integration, engineering, program management & contractual support.

ARMY SPACE PROGRAM OFFICE, Washington, DC. Classified contract.

NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), (MTC, Stafford, VA), Continue to provide funds for engineering & technical management support.

MARCORSYSCOM, (MCSC), Quantico, VA (CEOSS) Continue to provide funds for Program and technical support.

FY07 SPAWAR, Charleston, SC. Continue to provide funds for integration, engineering, program management & contractual support.

ARMY SPACE PROGRAM OFFICE, Washington, DC. Classified contract.

NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), (MTC, Stafford, VA), Continue to provide funds for engineering \$ technical management support.

### TACTICAL CONTROL AND ANALYSIS CENTER (TCAC)

FY 05 TITAN, Fairfax, VA. Provide funds to develop additional analytical tools, integrate software changes and migrate software baseline to COE 4.x and beyond. Integrate new hardware/software into existing systems.

FY 06 TITAN, Fairfax, VA. Continue to provide funds to develop additional analytical tools, integrate software changes and migrate software baseline and beyond. Integrate new hardware/software into existing systems.

FY 07 TITAN, Fairfax, VA. Continue to provide funds to develop additional analytical tools, integrate software changes and migrate software baseline and beyond. Integrate new hardware/software into existing systems.

### TACTICAL REMOTE SENSOR SYSTEM (TRSS)

FY05 MARCORSYSCOM, Quantico, VA. Funds provided to CEOss for ALA and Engineering support to R&D efforts.

NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), Crystal City, VA. Funds provided for engineering and integration support to R&D efforts.

AIR FORCE ELECTRONIC SYSTEMS CENTER (ESC), Hanscom AFB, MA. Funds provided for development of AADS hardware.

NAVAL SURFACE WARFARE CENTER, Crane Division, Crane, IN. Funds provided for development of UGMS.

NAVAIR, Patuxent River, MD. Funds provided for air certification of AADS.

OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided software development AADS and UGMS.

MARCORSYSCOM (MCSC), Quantico, VA. Funds provided for development of Increment IV efforts.

### TACTICAL REMOTE SENSOR SYSTEM (TRSS)

FY06 NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), Crystal City, VA. Funds provided for engineering and integration support to R&D efforts.

MARCORSYSCOM, Quantico, VA. Funds provided to CEOss for ALA and Engineering support to R&D efforts.

OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided software development AADS and UGMS.

MARCORSYSCOM (MCSC), Quantico, VA. Funds provided for development of Increment III efforts.

MARCORSYSCOM, Quantico, VA. Funds provided for IOT&E of Increment III efforts.

NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), Crystal City, VA. Funds provided for engineering and integration support to R&D efforts.

MARCORSYSCOM, Quantico, VA. Funds provided to CEOss for Engineering support to R&D efforts.

OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided for software development of Increment III efforts

EXHIBIT R-2a, I	RDT&E Project Justification	DATE:		
·	•		February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev 0206313M Marine Corps Communication Systems			C2272 Intelligence C2 Systems	
COUNTERINTELLIGENCE AND HUMAN INTE	LIGENCE (HUMINT) EQUIPMENT PROGRAM (CIHEP)			
	ngineering, Integration and technical support for tech refresh		· · · ·	

- FY06 MARCORSYSCOM (MCSC), Quantico, VA. Continue to provide program management support for tech refresh and upgrade of program hardware and software.

  NSMA, MTC, Stafford, VA Continue to provided for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
- FY 06 ACTION SYSTEMS, Las Cruces, NM. Continue to provide engineering, iIntegration and technical support for tech refresh and upgrade of program hardware and software.
- FY07 MARCORSYSCOM (MCSC), Quantico, VA. Continue to provide program management support for tech refresh and upgrade of program hardware and software.

  NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC, Stafford, VA) Continue to provided for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.

  ACTION SYSTEMS, Las Cruces, NM. Continue to provide engineering, Integration and technical support for tech refresh and upgrade of program hardware and software.

#### TROJAN SPIRIT

FY06 U.S. Army Cerdec I2WD, Ft Monmouth, NJ - Continue to provide funds for P3I prototype, technical and Engineering support to include EOA, DT and OT. FY07 U.S. Army Cerdec I2WD, Ft Monmouth, NJ - Continue to provide funds for P3I prototype, technical and Engineering support.

#### DCGS-I

FY06 USAF 10.2 Contract. Research and development of DCGS Integrated Backbone (DIB) software and integration into Marine Corps legacy systems.

Integrated Teams Solution Facility, Stafford, VA Engineering & technical services, studies, analysis and evaluation for DIB integration, and integration support.

FY07 USAF 10.2 Contract. Research and development of DIB software and integration into Marine Corps legacy systems.

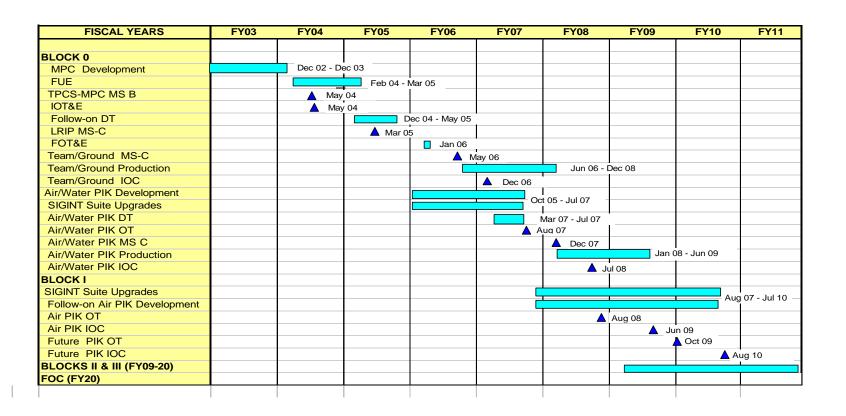
Integrated Teams Solution Facility, Stafford, VA Engineering & technical services, studies, analysis and evaluation for DIB integration, and integration support.

	-	-			DATE:								
Exhibit R-3 Cost Analysis									ebruary 20				
APPROPRIATION/BUDGET	ACTIVITY		PROGRAM ELI				PROJECT			Ē			
RDT&E, N /BA 7 Operations	al Sys Dev	,	0206313M Mai	rine Corps	Communic	ations Sys	C2272 Inte	lligence C	2 Systems	1		1	ı
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item	Method	Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
TENCAP	Various	Titan		14.066	3.481	12/04	3.799	12/05	3.983	12/06	Cont	Cont	
TENCAP	TBD	TBD		0.685	0.061	12/04	0.015	12/05	0.025	12/06	Cont	Cont	
TPCS	MPR	SPAWAR		4.263	0.000		0.000		1.500	11/06	Cont	Cont	
MSIDS	RCP	NSMA (MTC	<del>;</del> )	0.245	0.078	02/05	0.147	02/06	0.151	02/07	Cont	Cont	
CIHEP	RCP	Action Syste	ems	0.127	0.107	02/05	0.028	11/05	0.020	11/06	Cont	Cont	
CIHEP	RCP	USAIMA		0.024	0.000		0.000		0.015	04/07	Cont	Cont	
CIHEP	RCP	NGIT		0.012	0.000		0.025	01/06	0.025		Cont		
CIHEP	RCP	MTC Service	e Corp	0.013	0.000		0.025	01/06	0.025	01/07	Cont	Cont	
CIHEP	RCP	MCSC	•	0.230	0.000		0.041	06/06	0.041	06/07	Cont	Cont	
TRSS-PIP	RCP	OSEC		1.192	0.000		0.000		1.250		0.000		
TRSS-PIP	MIPR	ESC		2.580	0.324		0.000		0.000		0.000		
TRSS-PIP	MIPR	NAVAIR		0.600	0.053		0.000		1.300		0.000		
TRSS-PIP	RCP	NSMA (MTC	3)	0.352	1.810		1.500	01/06	1.445		Cont		
TRSS-PIP	RCP	MCSC	/	0.042	3.161	01/05	3.436	01/06	0.705		0.000		
TRSS-PIP	RCP	MCSC (CEC	Oss)	0.000	0.000		0.355	01/06	0.000		0.000		
TRSS-PIP	RCP	NPGS		0.000	0.051	03/05	0.000		0.000		0.000		
TRSS-PIP	MPR	NSWC		0.000	0.297		0.000		0.000		0.000	0.297	
TRSS-PIP	MPR	USMA		0.000	0.036	05/05	0.000		0.000		0.000	0.036	
TRSS-PIP	RCP	MCLB		0.000	0.021	03/05	0.000		0.000		0.000	0.021	
JSTARS	WR/MPR	SPAWAR		0.433	0.295	12/04	0.553	12/05	0.763	12/06	Cont	Cont	
JSTARS	RCP	MTC		0.304	0.389	01/05	0.000				0.000	0.693	
TROJAN SPIRIT	FFP	CERDEC		0.000	0.000		0.320	12/05	0.322	12/06	Cont	Cont	
DCGSI	RCP	NSMA (MTC	<del>;</del> )	0.000	0.000		1.080	12/05	0.985		Cont		
DCGSI	WR	USAF	,	0.000	0.000		4.629	11/05	2.960	11/06	Cont	Cont	
JSIPS - TEG	MPR	ASPO		1.331	1.540		0.892	02/06	1.323		Cont		
JSIPS - TEG	RCP	NSMA (MTC	3)	4.459	0.250	02/05	0.634	11/05	0.776	11/06	Cont	Cont	
JSIPS - TEG	MPR	SPAWAR		0.489	0.000		0.259	10/05	0.286	11/06	Cont	Cont	
JSIPS - TEG	RCP	MCSC (CEC	Oss)	0.000	0.056	10/04	0.054	10/05	0.056	10/06	Cont	Cont	
Subtotal Product Develor	ment			31.447	12.010		17.792		17.956		Cont	Cont	

					DATE:								
Exhibit R-3 Cost Analysis					DATE.			ı	February 20	06			
APPROPRIATION/BUDGET	ACTIVITY		PROGRAM EL	EMENT		PROJECT NUMBER AND NAME							
RDT&E, N /BA 7 Operationa	al Svs Dev	,	0206313M Ma	rine Corps	Communic	ations Svs	C2272 Inte	lliaence C	2 Systems				
Cost Categories		Performing		Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item		Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location		Cost	Cost		Cost	Date	Cost	Date	Complete		Contract
COBRA	RCP	various		0.419			0.000		01/00		0.000		
TPC	RCP	MCSC		0.961	0.319		0.354		0.357	12/06	Cont		
TPCS	RCP	NSMA (MTC	C)	0.763	4.138	02/05	2.257	02/06	1.649	02/07	Cont	Cont	
TPCS	MIPR	MCOTEA	,	0.000	0.348	02/05	0.350	02/06	0.350	02/07	Cont	Cont	
TRSS	RCP	MCSC		0.000	0.069	09/05	0.000		0.000		0.000	0.069	
MSIDS	RCP	NGIT		0.000	0.082	01/05	0.059	01/06	0.059	01/07	Cont	Cont	
IAS MOD KIT	MPR	SPAWAR		0.581	0.425	10/04	0.460	01/06	0.455	01/07	Cont	Cont	
IAS MOD KIT	RCP	NSMA (MTC	<u></u>	0.358	0.500		0.574		0.583	01/07	Cont	Cont	
GCCS I3	RCP	NSMA (MTC	<u></u>	1.365	0.488		0.314		0.318		Cont		
GCCS 13	MPR	SPAWAR		0.050	0.580	12/04	1.097	12/05	1.112	12/06	Cont	Cont	
GCCS I3	RCP	MCSC (CEC	OSS)	0.000	0.048	12/04	0.156	12/05	0.158	12/06	Cont	Cont	
GCCS 13	MPR	JITC		0.000	0.064	12/05	0.000		0.000		0.000	0.064	
TCAC	RCP	NSMA (TITA	AN)	0.819	0.856		0.912		1.511	01/07	Cont	Cont	
IBR	RCP	CSC/MDA		0.811	0.860	12/04	1.137	12/05	1.087	12/06	Cont	Cont	
IBR	WR	SPAWAR		0.040			0.000		0.000		Cont	Cont	
ISR	RCP	NSMA (MTC	C)	0.000	0.533	07/05	1.016	01/06	0.936	01/07	Cont	Cont	
Subtotal Support				6.167	9.379		8.686		8.575		Cont	Cont	
Remarks:													
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item		Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Requirements)		Location		Cost	Cost	Date	Cost	Date	Cost	Date		Cost	Contract
TROJAN SPIRIT	MIPR	CERDEC		0.000			0.100		0.100	12/06	0.000		
Subtotal T&E				0.000			0.100		0.100		Cont	Cont	
Remarks:	ı	I				I	1	I		I	I		
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or System/Ite		Activity &		PY s	FY 05	Award		Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete		Contract
MSIDS	RCP	NGIT			0.061	01/05	0.041	01/06	0.041	01/07	Cont		
Subtotal Management				0.000	0.061		0.041		0.041		Cont	Cont	
	1	<u> </u>		0.000	0.001	<u> </u>	0.041	<u> </u>	0.041	<u> </u>	Cont	Cont	<u> </u>
Remarks: Total Cost	1	ı		37.614	21.450	T	26.619	T	26.672	T .			1
		i .		27611	. 21 15N	1	1 26 610	1	1 26 672	1	Cont	Cont	1

	Exhibit R-4/4a Schedule Profile/Detail						
		February 2006					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT	NUMBER AND NAME				
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2272 Int	telligence C2 Systems				

## **TPCS**



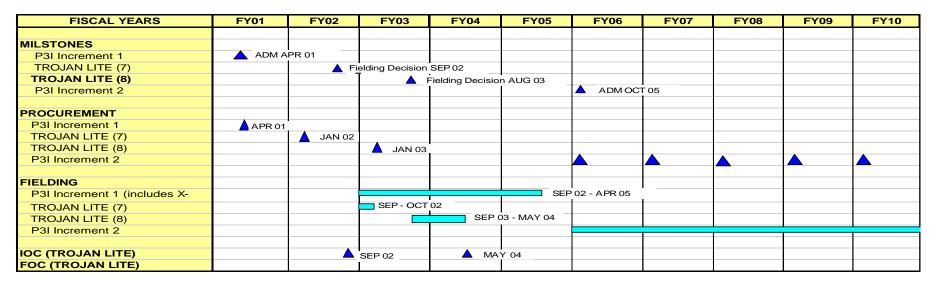
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 T	o Compl	Total Cost
(U) RDT&E,N	4.486	2.607	3.499	2.806	1.501	1.539	1.598	Cont	Cont
(U) PMC BLI 474700 Intell SupporTPCS	2.637	7.641	4.660	3.149	0.301	0.000	0.000	0.000	18.388

	Exhibit R-4/4a Schedule Profile/Detail						
	February 2006						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT	NUMBER AND NAME				
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2272 Int	elligence C2 Systems				

TPCS-MPC SCHEDULE DETAIL	2004	2005	2006	2007	2008	2009	2010	2011
MS B EDM Dev and Demo	3Q							
DT/FUE	1Q3Q							
IOT & E	3Q							
MS C LRIP		2Q						
FOT &E			2Q					
Team/Ground MS-C FRP			3Q					
Ground/Team PIK IOC				1Q				
Air/Water PIK OT				4Q				
Air/Water PIK MS C					1Q			
Air/Water PIK IOC					3Q			
AIR PIK OT					4Q			
AIR PIK IOC						3Q		
FUTURE PIK OT							1Q	
FUTURE PIK IOC							4Q	
BLOCKS II & III						1Q		
				1				
						1		

	February 2006				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT	NUMBER AND NAME		
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2272 Int	elligence C2 Systems		

### TROJAN SPIRIT LITE



<u>Line Item No. &amp; Name</u> (APPN, BLI #, NOMEN)	<u>FY 2005</u>	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 To	Compl	<u>Total Cost</u>
(U) RDT&E,N	0.000	0.420	0.422	0.424	0.425	0.426	0.428	Cont	Cont
(U) PMC BLI 463300 Radio Syster TROJAN LITE	0.962	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.962
(U) PMC BLI 474700 Intell SupporTROJAN SPIRIT	0.000	7.300	3.094	4.011	0.656	0.108	0.113	Cont	Cont

R-1 SHOPPING LIST - Item No. 186

I /BA 7 Operational Sys Dev	02003131	3M Marine Corps Communications Sys  FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007						C2272 Intelligence C2 Systems				
TROJAN SPIRIT		FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011	
MILESTONES												
P31 Increment 1 Fielding Decision												
- TROJAN LITE (7) Fielding Decision		4Q										
- TROJAN LITE (8) Fielding Decis	on		4Q									
P31 Increment 2 Fielding Decision						1Q						
PROCUREMENT												
P31 Increment 1 Fielding Decision												
- TROJAN LITE (7) Fielding Decis	on	2Q										
- TROJAN LITE (8) Fielding Decis	on	29	2Q									
P31 Increment 2 Fielding Decision						1Q					1Q	
FIELDING						1.5					. ~	
P31 Increment 1 Fielding Decision		4Q			3Q							
- TROJAN LITE (7) Fielding Decision		4Q	1Q		•							
- TROJAN LITE (8) Fielding Decision			4Q	3Q								
P31 Increment 2 Fielding Decision						1Q						
OC (TROJAN LITE)		4Q										
FOR (TROJAN LITE)				3Q								

EXHIBIT R-2a	EXHIBIT R-2a, RDT&E Project Justification							
						February 200	6	
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUM	BER AND NAME		
RDT&E, N /BA-7 Operational Sys Dev	DT&E, N /BA-7 Operational Sys Dev 0206313M Marine Corps Communications Sys				C2273 Air Operations C2 Systems			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost		108.891	86.065	47.341	34.693	20.968	23.008	26.375
RDT&E Articles Qty								

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

- (U) Air Operations C2 coordinates and plans Navy and Marine air combat operations and interfaces with joint and combined forces air operations. It also interfaces with fire support C2. The systems in this project are used to detect aircraft and missiles, process the detected information, deliver the processed information to the Advanced Tactical Air Command Central (ATACC), and conduct the air battle.
- 1. The Aviation Radar (AN/TPS-59(V)(3) is a "congressionally mandated" national asset. It is the only fielded ground-based sensor which can detect and track long range Air Breathing Targets (ABT) within 300 nautical miles, as well as Tactical Ballistic Missiles (TBM) at ranges of 400 nautical miles for 60 degrees and up to one million feet in elevation. Highly Expeditionary Long Range Air Surveillance Radar (HELRASR) is the modernization initiative to replace the AN-TPS 59 Radar.
- 2. The Common Aviation Command and Control System (CAC2S) will provide a common baseline of equipment, computer hardware, and software required to perform the mission of the Marine Air Command and Control System (MACCS). CAC2S will provide a capability that allows operators to integrate Marine aviation into joint and combined air/ground operations.
- 3. The Composite Tracking Network (CTN), will provide the MAGTF Commander a ground based sensor netting solution that defends friendly forces from incoming aircraft and cruise missiles by correlating sensor measurement data (target position, speed, and heading) from local and remote radars in the Cooperative Engagement Capability (CEC) network. By providing accurate, composite, real-time surveillance tracks, CTN will improve air situational awareness and maximize the effectiveness of our surface launched anti-air weapons at extended ranges. Moreover, CTN lays the foundation for Integrated Fire Control (IFC).
- 4. The Critical Infrastructure will develop a new capability for video teleconferencing capability via service intranet capabilities.
- 5. The Joint Combat Identification Evaluation Team (JCIET) is a superb opportunity to conduct quality assurance testing of service's systems operating in a Joint environment. It conducts assessments in a number of venues including: Military Operations in Urban Terrain (MOUT) exercises, Advanced Concept Technology Demos (ACTD), Joint Training exercises, Combined Armed Training Exercises (CAXs) and Weapons Tactics Instruction Events (WTIs). Its mission is to improve Tactics, Techniques and Procedures (TTP) across all Combat Identification mission areas. (It is not an acquisition program; therefore it does not have specific milestone dates.)
- 6. The MACCS Bridge Supplemental will provide the software development, non-recurring engineering, and testing and integration efforts in support of MACCS Commercial Off The Shelf refresh efforts.
- 7. The Marine Air Command and Control System (MACCS) Sustainment consists of various command and control agencies designed to provide the Aviation Combat Element (ACE) commander with the ability to monitor, supervise and influence the application of Marine aviation assets in support of MAGTF operations. The MACCS Sustainment provides funding to keep these fielded systems ready, relevant and capable until their functions are replaced by the Common Aviation Command and Control System (CAC2S).
- 8. "SIAP is the product of fused, common, continual, unambiguous tracks of airborne objects within the surveillance area." The Joint Single Integrated Air Picture (SIAP) Systems Engineer Organization (JSSEO) will identify the most effective and efficient means to achieve a SIAP that satisfies the warfighter needs. The JSSEO is not limited to just material solutions in this effort; all aspects will be considered to produce the SIAP, including tactics, techniques and preedures and changes to Service operations.
- 9. Theater Battle Management Core Systems (TBMCS) provides the commander the automated tools necessary to generate, disseminate, and execute the Air Tasking Order (ATO), as mandated by the Chairman, Joint Chiefs of Staff in July 1993. It is an evolutionary acquisition, allowing for the rapid development/fielding of hardware and software to meet today's rapidly advancing technology. It is fielded to all four Marine Tactical Air Command Squadrons (MTACS) and the supporting establishment with Marine Aviation Weapons and Tactics School (MAWTS) and the Battlestaff Training Facility (BSTF) sharing a system.

EXHIBIT R-2	a, RDT&E Project Justification	DATE:						
	-,		February 200	6				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME					
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications S		C2273 Air Operations C2 Systems					
	ps and transitions two Command and Control Imperative Advan							
	ations ((JT COMMs) ATDs) into various Marine Corps and Join							
	nanced ergonomic physical design; evaluation of advanced mult							
	lopment to support systems integration and advanced battlefield							
and hardware developments as PIPs to the established	MAGTF C4I baseline. Unit Operations Center (UOC) will pro-	ovide a facility and com	ponents for the integration of curr	rent and planned battlefield				
Note: Currently \$5.1M in FY05 is on the FY2005	Omnibus reprogramming (FY05-38PA). FY05 Supplement	ntal Funding Received	d: \$3.7M					
(U) B. ACCOMPLISHMENTS/PLANNED PROG		J	•					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		1.963	0.000	0.000				
RDT&E Articles Qty								
AN/TPS-59 Sustainment : Develop Engineeri	ing Change Proposals for software improvements and Diminish	ing Manufacturing Sour	ces issues.					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.555	0.000	0.000				
RDT&E Articles Qty								
AN/TPS-59 Sustainment : Development of Fa	ar Field radar Repeater to support system rebuilds at Barstow.							
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		4.037	4.382	3.985				
RDT&E Articles Qty								
CAC2S: Program management support.								
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		23.378	10.284	10.502				
RDT&E Articles Qty								
	lel (EDM) hardware and software development, design of host p	processing system, and	conduct software integration of Jo	int mandated applications,				
developmental testing and evaluation and baseline sta	bilization.							
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		39.796	31.694	9.527				
RDT&E Articles Qty								
CAC2S: System development, GFE, and testing	ng in accordance with continued sensor interface/integration, co	mmunications interface/	interoperability development.					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.050	0.289	0.000				
RDT&E Articles Qty								
	Funding for this program in FY07 and beyond is found in Proj	ect C2278 within this P	E.					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007				
Accomplishment/Effort Subtotal Cost		0.500	1.000	0.000				
RDT&E Articles Qty								
	ng for this program in FY07 and beyond is found in Project C22	278 within this PE.	·					
•	7 7							

EXHIBIT R-2	2a, RDT&E Project Justification	DATE:		
	•		February 200	6
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	1	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications		C2273 Air Operations C2	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.559	0.025	0.000
RDT&E Articles Qty				
JCIET: Program management support. Fund	ing for this program in FY07 and beyond is found in Project O			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		1.704	2.785	0.781
RDT&E Articles Qty				
	erface design development for CTN interfaces to Marine Air C	Command and Control	System (MACCS) Family of Systems	s (FoS) - CAC2S,
CLAWS and SLAMRAAM, and AN/TPS-59 and G/	ATOR.	E) / 000E	5,0000	E)/ 000E
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		2.629	3.541	0.757
RDT&E Articles Qty				
	An in the state of the sta			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.103	0.400	0.200
RDT&E Articles Qty				
CTN: Testing and Evaluation: Developmenta	l Testing. Operational assessment, and Interoperability Test	and Evaluation (IOT&I	E) support. Certification of MACCS	Family of Systems (FoS)
interfaces.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.430	0.464	0.511
RDT&E Articles Qty				
CTN: Program management support.		E)/ 000E	F)/ 0000	EV 0007
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty		1.466	0.000	0.000
CRITICAL INFRASTRUCTURE: VTC Coo	n Engineering			
	p Engineering.	F)/ 000F	F)/ 0000	EV.0007
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		7.225	3.923	2.960
RDT&E Articles Qty				
MACCS SUSTAINMENT: Hardware obsole	scence upgrades for the TAOM, SAAWF, TIU, MCIU, ADCI	P, CIS and CDLS.		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		2.959	4.063	1.795
RDT&E Articles Qty				
•	e sustainment for the TAOM, ADCP and CDLS.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		6.262	17.571	10.442
RDT&E Articles Qty				
			1	

EXHIBIT R-2	a, RDT&E Project Justification	DATE:					
			February 2006				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	_	PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communicatio		C2273 Air Operations C2 Systems				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		1.115	1.250	1.300			
RDT&E Articles Qty							
SIAP: Engineering and analysis for SIAP syste	em engineer Support.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.237	0.300	0.325			
RDT&E Articles Qty							
<b>TBMCS</b> : USMC TBMCS development.							
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.169	0.188	0.191			
RDT&E Articles Qty							
TBMCS: MCTSSA TBMCS software support.							
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.200	0.214	0.225			
RDT&E Articles Qty							
TBMCS: Program management support.	·						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.075	0.075	0.077			
RDT&E Articles Qty							
TBMCS: Test and Evaluation for TBMCS Up	grades Joint Interoperability.		-				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		5.100	0.000	0.000			
RDT&E Articles Qty							
UOC: Issue 71201 OMNIBUS effective 15 A	ug 05		<u> </u>				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		7.051	2.440	1.946			
RDT&E Articles Qty							
UOC: Continue engineering and manufacturing	development effort of production representative modules.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.571	0.503	0.478			
RDT&E Articles Qty							
UOC: Program Management Support	•						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		0.757	0.674	1.339			
RDT&E Articles Qty							
UOC:Configuration analysis for CSSE, CE, and	I FICCS Unit Operations Centers to include UOC Universa	l Communications Inte	erface Module (UCIM).				
(U) Total \$		108.891	86.065	47.341			
(ε) τουτψ		100.031	00.003	4/.341			

EXHIBIT R-2a, RD	T&E Project Justification		DATE:						
	•		February 2006						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME						
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications S	ys	C2273 Air Operations C2 Systems						
(U) PROJECT CHANGE SUMMARY:	<u>FY2005</u>	FY2006							
(U) FY 2006 President's Budget:	93.339	87.444	44 48.374						
(U) Adjustments from the President's Budget:									
(U) Congressional/OSD Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	17.840		-1.351						
(U) SBIR/STTR Transfer	-2.217								
(U) Minor Affordability Adjustments	-0.071	-1.379	79 0.318						
(U) FY 2007 President's Budget:	108.891	86.065	65 47.341						
CHANGE SUMMARY EXPLANATION:									
· · · · · · · · · · · · · · · · · · ·									

(U) Funding: Includes a \$9.700 adjustment in FY05 to realign COBRA to the correct project. The UOC program has \$5.1M on external deferral in FY05 and \$3.7M from the FY05 Supplemental.

(U) Schedule: Schedule changes have been reflected in exhibit R-4/4a, Schedule Profile/Detail for the UOC, CTN, CAC2S programs.

(U) Technical: Not Applicable.

### (U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC, BLI #465000, AN/TPS-59	0.000	5.306	4.576	6.261	6.458	4.887	2.823	Cont	Cont
(U) PMC, BLI #465100, AN/TPS-59	27.277	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.277
(U) PMC, BLI #464000, Air Ops C2 Systems	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
(U) PMC, BLI #464000, CAC2S	0.000	3.708	35.531	38.790	57.879	37.007	38.023	Cont	Cont
(U) PMC, BLI #464000, CTN	0.000	0.000	0.000	6.565	17.840	24.596	27.930	Cont	Cont
(U) PMC, BLI #464000, MACCS	17.625	7.369	1.892	1.476	1.776	6.423	1.222	Cont	Cont
(U) PMC, BLI #464000,TBMCS	3.436	6.287	3.633	3.781	3.864	3.495	3.568	Cont	Cont
(U) PMC, BLI #419000, UOC	180.253	0.902	7.574	2.088	8.608	8.998	9.451	Cont	Cont

EXHIBIT R-2a, RDT&I	EXHIBIT R-2a, RDT&E Project Justification				
			February 2006		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PRO	JECT NUMBER AND NAME		
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C22	273 Air Operations C2 Systems		

#### (U) D. ACQUISITION STRATEGY:

- (U) **AN/TPS-59 Radar**: The Program Office intends to address Diminishing Manufacturing Sources (DMS) issues by continuing with the Post Production Support Program (PPSP) started in POM 02 initiative, and they will also begin R&D efforts that will modernize the radar with advanced technology and performance capabilities. A Business Case Analysis (BCA) was completed which incorporated two independent obsolescence/DMS studies that identified critical components which will severely impact the system performance and readiness by FY07. Based upon the BCA, the program office intends to sustain 8 of the 11 systems. The refurbishing and sustaining of 8 systems will enable 3 active units (2 per MEF), and 1 reserve unit to have a system with current technology, extend system life cycle and lower the radars' overall operating cost. The remaining 3 systems will transition during the modernization effort.
- (U) CAC2S: The Systems Development and Demonstration (SDD) phase was implemented after the successful completion of the established Program Definition Risk Reduction (PDRR) phase exit criteria. The SDD phase includes the development and verification of the engineering development model representative of the basic common communications, sensor interface and processing, and display components. The SDD contract contains options for the Production and Deployment Phase (Phased Pricing Fixed Fee). The Production Phase will rely on available commercial items and other equipment meeting the open systems architecture requirement.
- (U) CRITICAL INFRASTRUCTURE: The program will be executed under Government Works contract by evaluating proposals that will be compatible with Defense Video Services-Global (DVS-G) and service programs.
- (U) MACCS SUSTAINMENT: The family of systems that comprise the MACCS Sustainment program include all of the currently fielded Air Command and Control assets. These include the Tactical Air Operations Module (TAOM), Communications Data Link System (CDLS), Sector Anti-Air Warfare Facility (SAAWF), Air Defense Communication Platform, Direct Air Support Central Airborne (DASCA), Direct Air Support Central Airborne System (DASCAS), TAOM Interface Unit (TIU), Multi-Channel Interface Unit (MCIU), Communication Interface System (CIS), Joint Tactical Information Distribution System (JTIDS), and Joint Range Extension (JRE).
- (U) **CTN**: The USMC's CTN acquisition strategy is to participate in the USN's program procurement and testing, making necessary modifications to support the Marine Corps' requirement.
- (U) SIAP is a systems engineering effort that will be utilized to reduce risk and increase interoperability for legacy and future C4ISR systems.
- (U) **TBMCS**: TBMCS is an ACAT 1AC, USAF Program with joint interest/oversight. It was mandated by the Chairman, Joint Chiefs of Staff in July 93 for Air Tasking Order (ATO) Interoperability among all Services. The USMC will not be letting any competitive contracts for TBMCS, but following the USAF lead, utilizing USAF TBMCS contracts and fielding only the joint modules of TBMCS. As USMC unique requirements are identified and funded, they will be provided to the USAF (to include funding) for inclusion within TBMCS utilizing the USAF cost plus fixed fee contract.
- (U) UOC: The UOC Combat Operations Center (COC) is a Competitively Awarded Contract for design (cost type) and Firm Fixed Price production options.

EXHIBIT R-2a, RDT&E	EXHIBIT R-2a, RDT&E Project Justification				
			February 2006		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	F	PROJECT NUMBER AND NAME		
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Sys	(	C2273 Air Operations C2 Systems		

#### (U) E. Major Performers:

#### **UNIT OPERATIONS CENTER (UOC)**

FY05 - FY07 General Dynamics Decision Systems, Scottsdale AZ. System development, demonstration, integration, test and evaluation. Apr 04.

FY05 - FY07 SPAWAR, Charleston SC. Support Services. Jan 05

#### COMMON AVIATION COMMAND AND CONTROL SYSTEM (CAC2S)

FY05 - FY07 Raytheon E-Systems, San Diego, CA. System development, demonstration, integration, test and evaluation. May 04.

#### COMPOSITE TRACKING NETWORK (CTN)

FY05 - FY07 NSWC Crane, IN. Mobility platform integrator. Jan 04

FY05-FY07 Lockheed Martin, Syracuse NY. Radar integration. Jan 04

FY05-FY07 Science Applications International Corporation, St. Petersburg, FL. Terminal and antenna design and development. Jan 04

FY05-FY07 Raytheon Corporation, St Petersburg, FL. Interface design and development. Jan 04

#### CRITICAL INFRASTRUCTURE

FY05 SPAWAR, Charleston SC. Product Development. Mar 03.

#### MACCS SUSTAINMENT

FY05 - FY07 Northrop Grumman Electronic Systems, Woodland Hills, CA. TAOC Engineering and CETS services. Jan 04

FY05 - FY06 Mission Research Corporation, Fort Worth, TX. CDLS Engineering and Software services. May 04

FY05 - FY07 Carisle Research Incorporated, Van Nuys, CA. TAOM Software Sustainment services. Oct 03

FY05 - FY06 Naval Surface Warfare Center, Crane, IN. ADCP, CIS, DASCAS, CDLS Engineering services. Oct 03

#### SINGLE INTEGRATED AIR PICTURE (SIAP)

FY05 - FY07 RNB Technologies, Inc., Stafford, VA Engineering services. Jan 04

#### AN/TPS-59 SUSTAINMENT

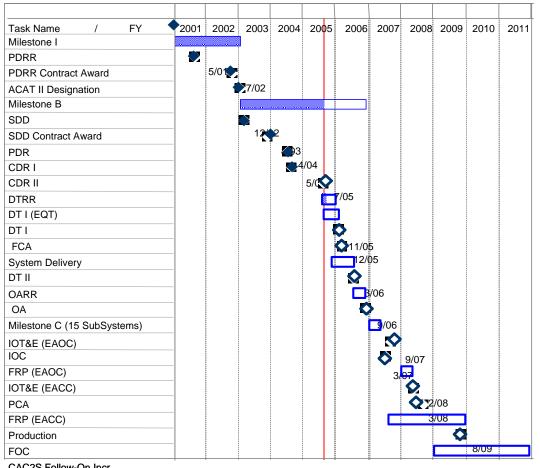
FY05 Lockheed Martin Corp., Syracuse, NY. Develop ECPs for software improvements and DMS issues. Mar 05.

FY05 Contractor TBD. Develop Far Field Radar Repeater to support system rebuilds at Barstow. Jun 05.

Exhibit R-3 Cost Analysis				DATE: February 2006								
APPROPRIATION/BUDGET ACTIVI	TY	IPROGRAM EL	EMENT		PROJEC	T NUMBER	AND NAM	ME Febr	uary 200	O		
RDT&E, N /BA 7 Operational Sys		0206313M Ma		s Communi								
Cost Categories		Performing	Total		FY 05	•	FY 06		FY 07			
o con canogemen		Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
		Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
AN/TPS-59 SUSTAINMENT		Lockheed Martin, NY	0.000	2.518	07/05					0.000	2.518	
CAC2S	RCP	Raytheon, San Diego, CA	63.647	54.595	07/05	23.719	02/06	20.679	01/07	Cont	Cont	
CAC2S	WR	SPAWAR	47.824	2.482	01/05	0.300	01/06	0.300	01/07	Cont	Cont	
CAC2S	WR	Center	2.320			0.600		0.520		Cont	Cont	
CAC2S	MIPR	Redstone Arsenal	0.000		07/05					0.000	1.147	
MACCS SUSTAINMENT	RCP	NGES, Woodland Hills, CA	2.127	4.111	01/05	1.986	01/06			0.000	8.224	
MACCS SUSTAINMENT	CPFF	CRL, Van Nuys, CA	0.000	2.693	05/05	2.800	01/06	0.905	01/07	Cont	Cont	
SIAP	RCP	MCSC, Quantico, VA	15.791	7.377	01/05	18.821	01/06	11.742	01/07	Cont	Cont	
TBMCS	MIPR	ESC, Hanscom AFB	0.723			0.300	01/06	0.325	01/07	Cont	Cont	
TBMCS	MIPR	Greater Hampton, VA	0.000		11/04					0.000	0.100	
CTN	WR	NSWC, Crane, IN	3.106	0.410	10/04	1.406	01/06	0.586	01/07	Cont	Cont	
CTN	RCP	Raytheon Col, FL	1.490			0.275	01/06			0.000	1.765	
CTN	RCP	SAIC, San Diego, CA	2.478	3.000	02/05	4.624	01/06	0.547	01/07	Cont	Cont	
CTN		NSWC, Crane, IN	0.000							0.000	0.080	
UOC	WR	SPAWAR	4.897			1.012		0.790		Cont	Cont	
UOC		General Dynamics	8.623		01/05	2.101	02/06	2.565	01/07	Cont	Cont	
CRITICAL INFRASTRUCTURE	WR	SSC Charleston	2.474		05/05					0.000	3.940	
Subtotal Product Development	ļ		155.500	87.642		57.944		38.959		Cont	Cont	
Note: Currently \$5.1M in FY05 is on	the FY20	05 Omnibus reprogramming	(FY05-38F	PA). FY05 St	upplement	tal Funding F	Received:	\$3.7M				
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
		Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
		Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
CAC2S		MCSC, Quantico, VA	0.860	0.174	01/05	0.336		0.280	01/07	Cont	Cont	
CAC2S	WR	MCSC, Quantico, VA	1.624		01/05	1.000		1.000		Cont	Cont	
CAC2S	WR	MCTSSA, CPndltn,CA	0.000			0.050		0.035		Cont	Cont	
CAC2S	WR	NSWC, Crane, IN	0.600	0.225	01/05	0.210	01/06	0.200	01/07	Cont	Cont	
CAC2S	WR	JITC	0.080	0.127	01/05	0.150	01/06			0.000	0.357	
CAC2S	RCP	Raytheon, Bedford, MA	0.000	1.659	01/05	1.835	01/06			0.000	3.494	
CAC2S	MIPR	GSA, Alexandria, VA	0.000	0.146	04/05					0.000	0.146	
JCIET	WR	MCSC, Quantico, VA	0.121	0.189	10/04	0.190	01/06			0.000	0.500	
JCIET	WR	NSWC, Crane, IN	0.319	0.100	08/05	0.325	01/06			0.000	0.744	
JCIET	RCP	Anteon, Stafford, VA	0.753	0.800	10/04	0.799	01/06			0.000	2.352	
JCIET	RCP	CACI, Chantilly, VA	0.000	0.020	11/04	0.000				0.000	0.020	
MACCS Sustainment	WR	NGES, Woodland Hills, CA	0.000		07/05	2.540	02/06	3.070	03/06	Cont	Cont	
MACCS Sustainment	RCP	MRC, Ft Worth, TX	0.000		07/05					0.000	0.300	
MACCS Sustainment	WR	Hill AFB, Utah	0.000		10/04	0.160	01/06	0.180	01/07	Cont	Cont	
MACCS Sustainment	WR	NSWC, Crane, IN	0.000		10/04	0.500		0.600		Cont	Cont	
TBMCS		MCTSSA, CPndltn,CA	0.083			0.030		0.032		Cont	Cont	
TBMCS	WR	NSWC, Crane, IN	0.050	0.090	01/05	0.105	01/06	0.105	01/07	Cont	Cont	

					DATE:			DATE:							
Exhibit R-3 Cost Analysis APPROPRIATION/BUDGET ACTIVI	TV	IDDOCDAM EL	EMENT		February 2006 PROJECT NUMBER AND NAME										
		PROGRAM EL													
RDT&E, N /BA 7 Operational Sys	Dev	0206313M Ma	irine Corp	s Communi	CZZIS P	ur Operatioi	is CZ Sy	stems							
Cost Categories	Contract	Performing	Total	1	FY 05	1	FY 06		FY 07		1				
Cost Categories		Activity &	PY s	FY 05	Award	FY 06	Award		Award	Cost to	Total	Target Value			
Subtotal Support (Cont.)	& Type	Location	Cost		Date	Cost	Date		Date	Cost to	Cost	of Contract			
TBMCS	WR	MCSC, Quantico, VA	0.055		09/05	0.053		0.054		Cont	Cont	or Contract			
CTN	WR	CG 1st MAW	0.033		03/03	0.000	01/00	0.018		Cont					
CTN	WR	NAWC, Pax	0.000		10/04			0.010	0 17 01	0.000					
CTN	RCP	Booze Allen	0.000		04/05					0.000					
CTN	WR	MCSC, Quantico, VA	0.085		01/05	0.040		0.045		Cont					
CTN	MIPR	Anteon,	0.100		01/05	0.121	01/06	0.133	01/07	Cont					
Subtotal Support Remarks:			4.744	7.502		8.444		5.752		Cont	Cont				
Remarks.															
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07						
Cost Categories	Method	Activity &	PY s	FY 05	Award	FY 06	Award		Award	Cost to	Total	Target Value			
	& Type	Location	Cost	Cost	Date	Cost	Date		Date		Cost	of Contract			
CTN	WR	MCTSSA, CPndltn,CA	0.003		Date	0.018		0.021	01/07	Cont		or contract			
CTN	WR	MACS-24	0.087			0.018		0.021	01/07	Cont					
CTN	****	MCOTEA TESTING	0.081			0.264		0.352	01/07	Cont					
CTN	WR	NWAS, Corona, CA	0.494			0.20	0.700	0.030		Cont	Cont				
CTN	RCP	Lockheed Martin	0.000		05/05			0.000	0 17 0 1	0.000					
CTN	RCP	MITRE, Bedford, MA	0.000		00,00			0.030	01/07	Cont					
CAC2S	RCP	CECOM (MCOTEA)	0.013		01/05	13.840	03/06	1.000		Cont					
CAC2S	MIPR	WSMR NM	0.000		04/05					0.000					
CAC2S	WR	NSWC, Crane, IN	0.000		02/05					0.000					
TBMCS	WR	NSWC, Crane, IN	0.100			0.075	01/06	0.077	01/07	Cont	Cont				
UOC		MCOTEA TESTING	0.000	0.500						Cont	Cont				
Subtotal T&E			0.778	2.098		14.215		1.531		Cont	Cont				
Remarks:															
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07						
		Activity &	PY s	FY 05	Award	FY 06	Award		Award	Cost to	Total	Target Value			
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date		Cost	of Contract			
TBMCS	CPFF	NGIT, Stafford, VA	0.519		09/05	0.214		0.225		Cont	Cont				
CAC2S	IDIQ	NGIT, Stafford, VA	9.774		01/05	3.200				0.000					
CAC2S	RCP	MITRETEK	1.146	1.100	07/05	1.120	01/06			0.000	3.366				
CTN	IDIQ	NGIT, Stafford, VA	0.879	0.757	07/05	0.424	01/06	0.466	01/07	Cont	Cont				
UOC	IDIQ	NGIT, Stafford, VA	3.396		01/05	0.504	01/06	0.408	01/07	Cont	Cont				
Subtotal Management			15.714	6.549		5.462		1.099		Cont	Cont				
Remarks: Issue 71201 OMNIBUS	effective	15 Aug 05	13.714		]	3.402	<u> </u>	1.033		John	Oont	<u> </u>			
	1		470 700	5.100		00.005	ı	47.044		0-1	0				
Total Cost			176.736	108.891		86.065		47.341		Cont	Cont				

		DATE:
Exhibit R-4/4a Sched	February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Systems Development	0206313M Marine Corps Communications Sys	C2273 Air Operations C2 Systems



CAC2S Follow-On Incr

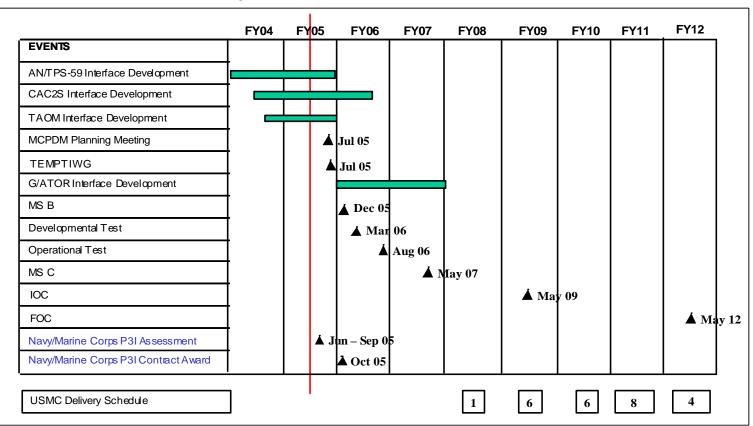
Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl Tot	al Cost
(APPN, BLI #, NOMEN)									
(U) RDT&E,N, C2273, CAC2S	67.211	46.360	24.014	18.827	6.966	0.334	0.000	Cont	Cont
(U) PMC, BLI #464000, CAC2S	0.000	3.708	35.531	38.790	57.879	37.007	38.023	Cont	Cont

		DATE:
Exhibit R-4/4a Schedu	ıle Profile/Detail	February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Systems Development	0206313M Marine Corps Communications Sys	C2273 Air Operations C2 Systems

CAC2S SCHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone I (FY01)									
Milestone B	1st Qtr								
PDRR (FY01 - FY12)									
SDD	1Q++++++	+++++++	+++++++	+++++4Q					
DT			4th Qtr						
ОТ				3rd Qtr					
Long Lead Items				3rd Qtr					
Milestone C				4th Qtr					
Production					1st Qtr++++	+++++++	+++		
IOC					2nd Qtr				
FOC						4th Qtr			

		DATE:			
Exhibit R-4/4a S	Exhibit R-4/4a Schedule Profile/Detail				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME			
RDT&E, N /BA 7 Operational Systems Development	0206313M Marine Corps Communications Sys	C2273 Air Operations C2 Systems			
	OTN				

CTN



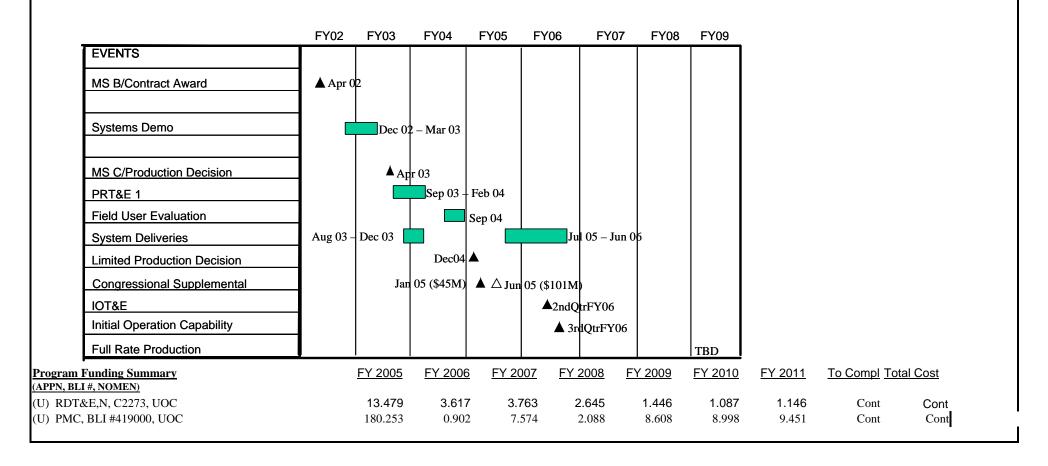
Program Funding Summary (APPN, BLI #,	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl To	otal Cost
(U) RDT&E,N, C2273, CTN (formally CEC)	4.866	7.190	2.249	6.300	7.872	19.413	23.336	Cont	Cont
(U) PMC, BLI #464000, CTN	0.000	0.000	0.000	6.565	17.840	24.596	27.930	Cont	Cont

		DATE:
Exhibit R-4/4a Schedu	ıle Profile/Detail	February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Systems Development	0206313M Marine Corps Communications Sys	C2273 Air Operations C2 Systems

CTN SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Milestone A (1st Qtr FY02)							
Concept & Technology Development							
Milestone B			1st Qtr				
System Development and Demonstration							
DT			2nd Qtr				
IOT&E			4th Qtr				
Milestone C				3rd Qtr			
Production				4th Qtr*****	******	*****	*****
Delivery					3rd Qtr*******		
ioc						3rd Qtr	

		DATE:
Exhibit R-4/4a Schedu	February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Systems Development	0206313M Marine Corps Communications Sys	C2273 Air Operations C2 Systems

# UOC Program Schedule



		DATE:
Exhibit R-4/4a Schedu	February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Systems Development	0206313M Marine Corps Communications Sys	C2273 Air Operations C2 Systems

UOC SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone B (2nd Qtr FY 02)			2000			2000		
System Development and Demonstration	2nd Qtr							
IOT&E			2nd Qtr					
Milestone C	3rd Qtr							
LRIP Deliveries	2nd Qtr							
IOC			3rd Qtr					
Full Rate Production						TBD		
Production Deliveries			3rd Qtr++++	+++++++	+++++++	++++++		
Hardware/Software Development		3rd Qtr +++	+++++++	+++++++	+++++++	-++++		
Engineering Support Services		3rd Qtr +++	++++++++					

EXHIBIT R-2a, RI	OT&E Project Justification			DATE:				
				Februar	y 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT N	JMBER AND NAM	ИΕ	PROJECT NUMB	ER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev 0206313M Marine Corps Communications Sys			C2274 Comm	and & Contro	ol Warfare S	ystems		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		14.937	5.896	3.847	3.616	4.189	4.720	3.734
RDT&E Articles Qty								

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

(U) Command and Control (C2) Warfare Project includes the following tactical electronic intercept, direction finding, and electronic attack systems:

Tactical Electronic Reconnaissance Processing and Evaluation System (TERPES) is used to process, sort, analyze, display and correlate electronic surveillance and electronic attack data collected by EA-6B aircraft and maintains the Tactical Electronic Orders of Battle.

Mobile Electronic Warfare Support System, Product Improvement Program (MEWSS-PIP) will be used to collect and process communication and non-communication signals and provide electronic attack capability from a mobile ground platform.

Radio Reconnaissance Equipment Program (RREP) provides the Radio Battalions, Radio Reconnaissance Platoons (RRP) with mission unique Signals Intelligence/Ground Electronic Warfare (SIGINT/EW) Equipment suites. Continuing with an evolutionary acquisition approach, the third suite RREP-SS-2 will provide the RRPs with the capability to conduct SIGINT/EW operations in support of Marine Air Ground Task Force (MAGTF) Commanders during advance force special operations, and other special purpose missions where the use of conventional Radio Battalion assets are not feasible. RREP-SS-2 is a rugerized, modular; man packable system specifically designed utilizing emerging NDI/COTS/GOTS technology for RRP operations, particularity those conducted under the most austere conditions. The RREP SS-3 will be fielded in the 4th Qtr FY04. It will have the added capability to intercept advanced wireless

targets identified by the NSA to be operated from remoted positions. SS-3 will extend its life cycle to six years and product improvements will focus on new software and DSP technologies which may be incorporated into the existing system. This approach allows the program to utilize the major components for the entire life-cycle while still keeping pace with emerging Threats and technologies.

Communication Emmitter Sensing and Attacking System (CESAS)/(FLAMES) a system of COTS/GOTS designed to support the MAGTF Commander in conducting operations. It provides the capability to effectively sense/detect and attack, through the use of electromagnetic energy, the enemy's communication systems in support of the Commander's Command and Control Warfare plan. The system will replace for the existing AN/ULQ-19 and will assume the mission of sensing and denying the enemy the use of the electromagnetic spectrum, thereby disrupting his command and control system. Though primarily HMMWV-mounted, CESAS will also be capable of both seaborne and airborne deployment and employment, enhancing the Radio Battalion's ability to support Expeditionary Maneuver Warfare. The CESAS operate within the bandwidth of 20 to 1500 MHz (Threshold) 2MHz to 2500 MHz (Objective) against enemy emitters that use modern modulation schemes.

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	2.794	0.030	0.000
RDT&E Articles Qty			
<b>CESAS</b> - Perform integration efforts of AN/USQ-146(V) 5 and Spiral Development.			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.900	0.250	0.080
RDT&E Articles Qty			
	•		

**CESAS** - Research and Development Directed Energy and Directional Attack Antennas.

EXHIBIT R-2a, RI	DT&E Project Justification	DATE:				
		Februa				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.700	0.400	0.500		
RDT&E Articles Qty						
<b>CESAS</b> - Research and Development of techniques, to	actics and procedures.					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.395	0.650	0.250		
RDT&E Articles Qty						
CESAS - MCOTEA Testing Support						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.880	0.174	0.196		
RDT&E Articles Qty						
CESAS - Testing for CESAS and Radio Threads	•		•			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.520	0.030	0.023		
RDT&E Articles Qty						
CESAS - Program Management Support.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.808	0.000	0.000		
RDT&E Articles Qty						
CESAS - TTP Development and Operational Analysis	S					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		1.060	0.000	0.000		
RDT&E Articles Qty						
MEWSS PIP: System software enhancements and Pr	re-Planned Product Improvement (P3I).					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.000		
RDT&E Articles Qty						
MEWSS PIP: ELINT System enhancements.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.300	0.461	0.000		
RDT&E Articles Qty						
MEWSS PIP: Operational Readiness enhancements.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		1.113	1.200	0.722		
RDT&E Articles Qty		·				

**TERPES**: Research for TERPES software applications, hardware and software integration research, investment for R&D equipment and facilities; work to integrate the newer integrated broadcast receivers (IBR)s and Joint Tactical Terminal (JTT).

EXHIBIT R-2a, RDT&E Projec	t Justification		D	ATE:		
				Februa		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUME				BER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corp	s Communic			and & Control Warfare S	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost			FY 20 <b>1.51</b>		FY 2006 <b>1.945</b>	FY 2007 <b>1.050</b>
			1.31	U	1.945	1.050
RDT&E Articles Qty	41	1.112 24 4	EA CD I	1.0 1.11.1	(ICAD) II I III : C. (	EEDD/EGD 1: (' )
<b>TERPES</b> : Research TERPES software to provide improvements in	the interfaces and interopera	bility with the	EA-6B Improv	ed Capabilitie	s (ICAP) II and III aircraft, (	EPP/1SP application);
improve overall system performamance (Tactical Data Correlation).					T	
COST (\$ in Millions)			FY 20		FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.33	66	0.362	0.252
RDT&E Articles Qty						
TERPES: Program Management Support.						
COST (\$ in Millions)			FY 20		FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.10	2	0.394	0.774
RDT&E Articles Qty						
RREP: Research and development of the RREP SS-3 PIP to include	e integration of EA.					
COST (\$ in Millions)			FY 20	005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.17	<b>'</b> 1	0.000	0.000
RDT&E Articles Qty						
RREP: MCOTEA, Development Testing.						
COST (\$ in Millions)			FY 20	005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			3.34	8	0.000	0.000
RDT&E Articles Qty						
Next Generation Mobile Elect: MCOTEA, Development Testing.						
(U) Total \$			<u>14.9</u> 2	<u>37</u>	<u>5.896</u>	<u>3.847</u>
(U) PROJECT CHANGE SUMMARY:	FY2005	FY2006	FY2007			
(U) FY 2006 President's Budget:	11.358	5.989	3.829			
(U) Adjustments from the President's Budget:						
(U) Congressional/OSD Program Reductions						
(U) Congressional Rescissions						
• • •						
(U) Congressional Increases	3.585					
(U) Reprogrammings	3.363					
(U) SBIR/STTR Transfer	0.004		0.040			
(U) Minor Affordability Adjustments	-0.006	-0.093	0.018			
(U) FY 2007 President's Budget:	14.937	5.896	3.847			
CHANGE SUMMARY EXPLANATION:						
(U) Funding: See Above.						
(U) Schedule: Not Applicable.						
(U) Technical: Not Applicable.						

Exhibit R-2a, RDTE,N Project Justification (Exhibit R-2a, page 54 of 134)

	EXHIBIT R-2a, RDT&E	Project Justification	on		1	DATE: <b>February</b>	2006			
_	PRIATION/BUDGET ACTIVITY E, N /BA-7 Operational Sys Dev		_	BER AND NAME		PROJECT NUMBE C2274 Commar	R AND NAME	Warfare Sy	stems	
(U) C.	OTHER PROGRAM FUNDING SUMMARY:									
	Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	<b>Total Cost</b>
(U)	PMC BLI 463600 Modification Kits MEWSS	2.665	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.665
(U)	PMC BLI 465200 Modification Kits MEWSS	0.000	1.332	0.209	0.000	0.000	0.000	0.000	0.000	1.541
(U)	PMC BLI 474700 Intell Suppt Eq RREP	1.940	3.992	3.816	1.019	5.191	0.100	1.294	0.000	17.352
(U)	PMC BLI 474900 Mod Kits INTEL TERPES	0.820	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.82
(U)	PMC BLI 465200 Mod Kit TERPES	0.000	2.982	0.000	3.182	0.000	0.000	0.000	0.000	6.164
(U)	PMC BLI 463600 FLAMES (CESAS)	2.642	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.642
(U)	PMC BLI 465200 Mod Kit FLAMES (CESAS)	0.000	5.315	4.421	0.149	1.356	0.000	0.000	0.000	11.241

#### (U) Related RDT&E:

(U) (U) PE 0305885G (Tactical Cryptologic Program)

#### (U) D. ACQUISITION STRATEGY:

TERPES: The acquisition of components for the TERPES upgrade refreshes will maximize the use of existing equipment, NDI/COTS/GOTS/GFE equipment and software. The integration effort for TERPES hardware and software will be accomplished through the TERPES System Support Activity, Naval Air Warfare Center - Weapons Division, Pt. Mugu, CA. These efforts are directed by the Program Manager for Intelligence Systems, MAGTF C4ISR Product Group, Marine Corps Systems Command. This strategy accomplishes several goals: standardization of equipment, and software; use equipment that can be acquired and fielded quickly, reduction of logistics requirements, and reduce cost of software maintenance.

**MEWSS PIP:** The MEWSS PIP provides an Electronic Warfare support system that leverages from the Army CECOM Intelligence Electronic Warfare Common Sensor (IEWCS) program. Developmenal and fielding efforts of the block upgrades focus on incorporating technology enhancements into the fielded system and providing specified block capabilities to the fleet as they become available. The MEWSS PIP leverages, when available COTS/GOTs/NDI solutions to obsolescence, operational readiness and supportability.

**RREP:** The RREP will incorporate and integrate cutting edge technologies through the use of Commercial off the Shelf (COTS) components to include Marine Corps Common Hardware components and Government off the Shelf (GOTS) DII COE compliant software. Contract is Cost Plus Fixed Fee (CPFF).

CESAS: Acceleration of the CESAS effort and designation of CESAS as a Program of Record was undertaken as part of the Defense Emergency Response Funding initiative (DERF). Funds were applied to the program in FY-2 and together with FY03 DERF funds, an initial AN/ULQ-19 replacement capability was provided to the fleet in the Feb 04 for filed user evalluation purposes. Three (3) AN/USQ-146(V) 3 units were procured from Rockwell Collins and integrated into the HMMWV platforms. SSCC performed the integration effort. Two (2) prototypes were used for DT in Aug 03 with assistance from MCOTEA. OA was conducted in Dec 03 with a success rate. Upon completion of OA, SSCC incorporated ECP and modifications identified during OA in the prototype units. Two (2) prototypes were provided to 3rd RADBN in Feb 04 for FUE, production will begin in FY05 meeting the IOC and FOC in FY07.

EXHIBIT R-2a, RDT&E Project	Justification	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2274 Command & Control Warfare Systems

#### (U) E. MAJOR PERFORMERS:

#### MOBILE ELECTRONIC WARFARE SUPPORT SYSTEM, PRODUCT IMPROVEMENT PROGRAM (MEWSS-PIP)

FY05 LOCKHEED MARTIN, Owego NY Provide funds for software enhancements and P3I support.

SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Legacy MEWSS readiness enhancements.

NSMA, MTC, Stafford, VA. Provide funding for system engineering and program management support.

SPAWAR, Charleston, SC. Provide funding for block upgrade research, development, and integration efforts.

FY06 LOCKHEED MARTIN, Owego NY Continue to provide funds for software enhancements and P3I support.

SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Legacy MEWSS readiness enhancements.

NSMA, MTC, Stafford, VA. Continue to provide funding for system engineering and program management support.

SPAWAR, Charleston, SC. Continue to provide funding for block upgrade research, development, and integration efforts.

#### TACTICAL ELECTRONIC RECONNAISSANCE PROCESSING AND EVALUATION (TERPES)

FY05 NAVAL AIR WARFARE CENTER (NAWC), Pt Mugu CA. Provide funds for hardware, software and integration research.

LOCKHEED MARTIN, Denver CO. Provide funds for research on TERPES software applications to provide improvement in the interfaces and interoperability with the EA-6B and mission planning systems.

MARCORSYSCOM, (CEOSS), Titan Corporation, Reston, VA. Provide funds for software integration and testing.

NSMA, (MTC), ITsFAC, Stafford, VA. Provide integration facility and program management support.

FY06 NAVAL AIR WARFARE CENTER (NAWC), Pt Mugu CA. Continue to provide funds for hardware, software and integration research.

LOCKHEED MARTIN, Denver CO. Provide funds for research on TERPES software applications to provide improvement in the interfaces and interoperability with the EA-6B and mission planning systems.

MARCORSYSCOM, (CEOSS), Titan Corporation, Reston, VA. Continue to provide funds for software integration and testing.

NSMA, (MTC), ITsFAC, Stafford, VA. Continue to provide integration facility and program management support.

FY07 NAVAL AIR WARFARE CENTER (NAWC), Pt Mugu CA. Continue to provide funds for hardware, software and integration research.

LOCKHEED MARTIN, Denver CO. Continue to provide funds for research on TERPES software applications to provide improvement in the interfaces and interoperability with the EAMARCORSYSCOM, (CEOSS), Titan Corporation, Reston, VA. Continue to provide funds for software integration and testing.

NSMA, (MTC), ITsFAC, Stafford, VA. Continue to provide integration facility and program management support.

#### RADIO RECONNAISSANCE EQUIPMENT PROGRAM (RREP)

FY05 NSMA, (MTC), ITsFAC, Stafford, VA. Provide integration facility and program management support.

FY06 NSMA. (MTC), ITsFAC, Stafford, VA. Continue to provide integration facility and program management support.

FY07 NSMA, (MTC), ITsFAC, Stafford, VA. Continue to provide integration facility and program management support.

					DATE:								
Exhibit R-3 Cost Analysis					Februa	ry 2006							
APPROPRIATION/BUDGET	ACTIVITY		PROGRAM	<b>ELEMENT</b>			PROJECT	Γ NUMBEF	R AND NAM	1E			
RDT&E, N /BA 7 Operationa	I Sys Dev		0206313M	Marine Cor	ps Commu	nication	C2274 Cc	mmand &	Control Wa	arfare Sys	tems		
Cost Categories	Contract Method & Type	Performing Activity & Location		Total PY s Cost	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to	Total Cost	Target Value of Contract
MEWSS	RCP	NSMA (MT	C)	16.061	0.514	11/04					Cont	Cont	
MEWSS	WR	SPAWAR,	S.C	2.241	0.301		0.461	11/05			Cont	Cont	
Next Gen Mobile Elect	RCP	MCLB		0.000	3.348	01/05							
TERPES	RCP	Lockheed N	/lartin	3.349	0.900	01/05	1.133	12/05	0.763	12/06	Cont	Cont	
TERPES	WR	NAWC, Pt.	Mugu CA	4.418	0.290	10/04	0.500	10/05	0.300	10/06	Cont	Cont	
TERPES	RCP	NAWC, Pt.		0.000	0.320	02/05	0.000	01/00	0.000	01/00	Cont	Cont	İ
TERPES	RCP	NCMA (MT		0.000		12/04	1.200	12/05	0.509	12/06	Cont		İ
TERPES	RCP	NSMA (AIE	S)	0.000		11/04	0.312	11/05	0.200	11/06	Cont	Cont	İ
RREP	RCP	NSWC. Cra		0.756		1	0.394	01/06	0.774	01/07	Cont		
RREP	RCP	NSMA (MT		0.000		02/05	0.001	0.,00	J	0.,01	23110	23110	
CESAS	RCP	SPAWARS	- /	0.500		12/04	0.030	12/05			Cont	Cont	
CESAS	CPFF	CTI		0.000		12/04	0.650	12/05	0.250	12/06	Cont	Cont	
CESAS	RCP	MCLB		0.060		12/04	0.250	12/05	0.080	12/06	Cont		
CESAS	MPR	NAVAIR		0.400		12/04	0.400	12/05	0.500	12/06	Cont	Cont	
Subtotal Product Developm		INAVAIIX		27.785		12/04	5.330		3.376		Cont		
Remarks:	ent			21.100	11.077		5.550	<u>' </u>	3.370		Cont	Cont	
Remarks:													
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
TERPES	RCP	NSMA (MT	- /	0.526	0.336	11/04	0.362	11/05	0.252	11/06	Cont	Cont	
CESAS	RCP	NSMA (MT	C)	0.350		10/04	0.174	11/05	0.196	11/06	Cont	Cont	
CESAS	RCP	MCSC		0.322	0.520	10/04					Cont	Cont	
MEWSS	RCP	NSMA (MT	C)	0.000	0.545	11/04							
Subtotal Support				1.198	2.281		0.536	6	0.448		Cont	Cont	
Remarks:													
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
RREP	REALIGN	MCOTEA		0.000		11/04							
Subtotal T&E	1	1		0.000	0.171	L	0.000	)	0.000	L	0.000	0.171	
Remarks:													
Cost Categories	Contract	Performing		Total		FY 05		FY 06		FY 07			
	Method	Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
	& Type	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
CESAS	RC	MCSC		0.000	0.808	11/04	0.030	12/04	0.023	12/05	Cont	Cont	
Code to to I Maria a maria ant				0.000	0.808		0.030		0.023		Cont	Cont	
Subtotal Management				•	•					•			
Subtotal Management Remarks:													
				28.983	14.937	1	5.896	sl .	3.847		Cont	Cont	Ι

Exhibit 4/4a Schedule Profile/Detail

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT

RDT&E, N /BA 7 Operational Sys Dev

DATE:
February 2006
PROJECT NUMBER AND NAME:
C2274 Command & Control Warfare Systems

**UNCLASSIFIED** 

## MEWSS Schedule



	FY03	FY04	FY05	FY06	FY07	FY08	FY09	1
	F103	F104	F103	F100	F107	F106	F109	
IOT&E Deficency Analysis								
IOT&E Fixes								
DT								
Delivery & Training	•							
MEWSS PIP Op Assessment								
OA Quicklook Report			-					
Production Decision (MS-C)								
Contractor Logistics Support								
Basing & Fielding Decision		<b>A</b>						1
MEWSS PIP IOC		<b>A</b>						
MEWSS PIP FOC								1
Legacy Repairs & CLS								
Legacy Upgrades								
2 7 10								
				1		1	1	

Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)									
(U) RDT&E,N	1.360	0.461	0.000	0.000	0.000	0.000	0.000	0.000	1.821
(U) PMC BLI 463600 Modification Kits MEWSS	2.665	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.665
(U) PMC BLI 465200 Modification Kits MEWSS	0.000	1.332	0.209	0.000	0.000	0.000	0.000	0.000	1.541

Exhibit 4/4a Schedu	lle Profile/Detail	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME:
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communication Systems	C2274 Command & Control Warfare Systems

FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
4Q	1Q/2Q						
	2Q/3Q						
		2Q					
		4Q					
		2Q					
		4Q					
		2Q					
		4Q					
		4Q					
		3Q/4Q					
			1Q 3Q	!			
	FY 2002 4Q	4Q 1Q/2Q	4Q 1Q/2Q 2Q/3Q 2Q 4Q 4Q 2Q 4Q 4Q 4Q 3Q/4Q	4Q 1Q/2Q 2Q/3Q 2Q 4Q 4Q 2Q 4Q 4Q 4Q 4Q 4Q 3Q/4Q	4Q 1Q/2Q 2Q/3Q 2Q 4Q 2Q 4Q 2Q 4Q 4Q 4Q 4Q 4Q 3Q/4Q	4Q 1Q/2Q 2Q/3Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q	4Q 1Q/2Q 2Q/3Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q 2Q

Exhibit 4/4a Schedu	lle Profile/Detail	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME:
RDT&E, N /BA 7 Operational Svs Dev	0206313M Marine Corps Communication Systems	C2274 Command & Control Warfare Systems

### RREP MILESTONE SCHEDULE

EVENT	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
SS-3 MS-B	3Q								
SS-3 MS-C		4Q							
SS-3 IOC/FOC				2/3Q	1Q				
SS-3 PIP IOC/FOC						1Q			
SS-4 MS B						2Q			
SS-4 MS C								2Q	
SS-4 IOC/FOC									1Q

Program Funding Summary (APPN, BLI #, NOMEN)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	0.273	0.394	0.774	0.734	0.910	0.733	0.832	0.000	4.650
(U) PMC BLI 474700 INTELLIGENCE SUP EQUIP RREP	1.940	3.992	0.034	1.019	5.191	0.100	1.294	0.000	13.57

	Exhibit 4/4a Sc	hedule Profile/Detail					DATE: Februa	ry 2006			
PRIATION/	BUDGET ACTIVITY	PROGRAM ELEMENT					PROJECT NU	IMBER AND N			
	7 Operational Sys Dev						C2274 Command & Control Warfare Systems				
	RREP UPGRADE SCHEDU	JLE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
	SS-3 MS B		3Q								
	SS-3 MS-C			4Q							
	SS-3 IOC/FOC					2-3Q					
	MS-B AND MS-C for SS-3 PIP	will not take place RRF	P will become a se	ries of inder	endent effo	rts to spiral i	n technology				
	INIO D / NAD INIO O IOI OO O I II	wiii not take place. TKKL	Will become a se	nes or macp	chacht cho	Tto to opiiai ii	reconnology	<u>.</u>			

EXHIBIT R-2a, RDT&E Pro	ject Justification			DATE:				
					February 200	6		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT NU	MBER AND N	AME	PROJECT NU	IMBER AND N	NAME	
RDT&E, N /BA-7 Operational Sys Development	0206313M	Marine Corps	Communicati	on Systems	C2275 Joint 7	Tactical Radio	o Systems	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		9.812	7.838	14.612	13.870	12.158	8.872	8.087
RDT&E Articles Qty								

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

- (U) **Joint Tactical Radio System JTRS** is a Family of Joint Multi-Channel/Multi-Mode, Software-Defined, Reprogrammable Tactical Radio Systems. JTRS provides a high capacity line of sight (LOS) and beyond line of sight (BLOS) plain and secure voice, data, and video while operating in frequency bands from 2 MHz to 2 GHz. It also provides network connectivity across the radio frequency (RF) spectrum and providing the means for required tactical digital information exchanges.
- Block 1: Interim Handheld/Manpack and Data Radios. Includes 3 radio systems: the High Frequency Man-pack Radio (HFMR), the Tactical Handheld Radio (THHR), and software upgrades/maintenance for Enhanced Position Location Reporting System (EPLRS) radios.
- Block 2: Ground Vehicular/Rotary Wing, scaleable to 6 Channels (US Army Cluster 1): Expeditionary Maneuver Warfare Air Ground Over the Horizon (EMW A/G OTH) Communications Vehicle (initially replacing systems beyond lifecycle: AN/MRC-138, AN/VRC-83), and C2 platforms that require multiple channels in multiple bands (LAV-C2 (Light Armored Vehicle Command and Control Variant, Unit Operations Center (UOC), and EFV (Expeditionary Fighting Vehicle) formerly AAAV.
- Block 3: Handheld/Man-pack, 1 or 2 Channels (USSOCOM Cluster 2): Multipurpose Handheld and Manpacks (initially replacing systems beyond lifecycle: AN/PRC-68, PRC-104, PRC-113). These radios should be available in FY06-FY07.
- Tactical Elevated Antenna Mast System (TEAMS) is a single HMMWV mounted 100' telescoping antenna mast replacing the two AN/MRC- 142 50' antennas. TEAMS provides a safer more efficient mast to allow up to twice the current height capability to overcome obstructions caused by over head canopy and obstructing ridges which eliminates the need to set up additional relay sites. TEAMS will be employed with AN/MRC-2 then JTRS when the AN/MRC-142 is replaced by JTRS.
- (U) Integrated Intra-Squad Radio Systems (IISR) Integrated Intra-Squad Radio is a short-range radio that utilizes advanced wireless LAN technology and spread spectrum techniques to provide a hands free intercommunication capability while ensuring a low probability of interception and detection. The IISR consists of a small radio unit powered by 2 AA batteries, a wireless PTT switch, a lightweight headset compatible with the current combat helmet, and a heavy-duty nylon pouch. The dual version integrates with the AN/PRC-148 using an additional Push-to-talk (PTT) switch to provide the user control of two radios with one headset/microphone.
- (U) Tactical Satellite Comm Terminal LIGHTWEIGHT MULTIBAND STATELLITE TERMINAL (LMST)/GROUND MOBILE FORCES (GMF) is a tri-band Super High Frequency (SHF) satellite terminal mounted in transit cases and transported by HMMWVs. They will augment the existing Ground Mobile Force (GMF) satellite terminals. Additionally, across the FYDP, in accordance with the LMST Acquisition Strategy and Baseline, a quantity of 21 existing GMF terminals (TSC-93) will be upgraded and refurbished with enhanced components in order to extend their useful life. The GMF upgrades will occur concurrent with additional LMST transit case terminal procurements.
- (U) Legacy Communications/Electronics Modifications and Sustainment encompass post production sustainment of fielded tactical communication and networking systems and service life extension programs (SLEP) of aging communications equipment reaching the end of their life cycle. The post production sustainment provides necessary engineering and logistic support to maintain the existing operational capability above threshold operational readiness. The support provides equipment specialists, configuration management, supply support coordination and control, depot maintenance control and warranty administration.
- Networks: The following systems require SLEP/supportability upgrades: The Unit Level Circuit Switch (ULCS), which consists of the TTC-42, SB-3865 and SB-3614 require sustainment and modifications to continue the operating forces networking/switching capability until TSM is fielded. The AN/TSQ-227 Digital Technical Control (DTC) upgrades are driven by DoD mandated interoperability and security requirements, which includes technology insertion and evolutionary equipment improvements.
- (U) Wireless: The following systems require SLEP/supportability upgrades: These are the AN/TRC-170 Troposhperic Scatter Microwave Radio Terminal and the AN/PSC-5 "ShadowFire" upgrade. The AN/TRC-170 provides secure digital trunking between major nodes of the TRI-TAC communications network with a range of over 100 miles and will reach its end of service life in FY05. The FY05 upgrade allows for the fielded AN/PSC-5 to support past FY04.

EXHIBIT R-2a, RDT&E Project	EXHIBIT R-2a, RDT&E Project Justification			
			February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND N	AME	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Development	0206313M Marine Corps Communicati	ion Systems	C2275 Joint Tactical Radio Systems	

- (U) Command & Control On-the-move Network, Digital Over-the-horizon Relay (CONDOR) is a direct result of after action reports from Operations Iraqi Freedom and Enduring Freedom. The equipment suite will enable and provide on-the-move (OTM), over-the-horizon (OTH) connectivity between Tactical Data Radio networks (such as EPLRS networks). A CONDOR GW equipment suite consists primarily of a SATCOM modem, a mobile SATCOM antenna, a router, LAN encryption equipment, and a shock-mounted transit case. No vehicles are being procured. The CONDOR GW equipment suite will be installed on existing vehicles.
- (U) SHF Wideband Replacement (HC3) will be the Marine Air Ground Task Force (MAGTF) commanders primary SATCOM method of transmitting and receiving wideband voice, video, and data. The HC3 will be used at all levels of the MAGTF to support the commanders critical communication requirements. At the Regiment and below the focus will be on Comm-on-the-Move (COTM) and Comm-on-the-Pause (COTP) communications while at the Division/FSSG/Wing and above the transportable version will be incorporated as well. HC3 will be embedded in tactical vehicles such as the Expeditionary Fighting Vehicle (EFV) and the Light Armored Vechicle (LAV). As a result, it will play a vital role in command and control in all phases of an operation.
- (U) Wireless Cable Replacement WCR The Wireless Cable Replacement (WCR) Initiative will procure a line of sight, unattended repeater capable of data rates ranging from 4.6 Mb/s to 155 Mb/s. This repeater will wirelessly remote data and telephone services from command and control centers to transmission systems such as the AN/MRC-142 and the AN/TRC-170. OIF Lessons-Learned revealed that fiber optic cables were highly susceptible to damage, leading to loss of service to the supported commander and staff. The WCR initiative fulfills the WCR Requirement within the Digital Wideband Transmission System (DWTS) Required Operational Capability (ROC) CCC 256.1.2, change 6 dated 28 Jan 04. The subject and purpose of the DWTS ROC is the official requirement for the AN/TRC-170, AN/MRC-142(A&B), and the WCR in the Marine Corps.
- (U) MILSTAR Advanced Satellite Terminal (SECURE MOBILE ANTI-JAM RELIABLE TACTICAL TERMINAL (SMART-T)) This terminal operates with MILSTAR compatible communications payloads and transmits and extremely high frequence (EHF) uplink signal and receives a super high frequency (SHF) downlink signal to provide the MAGTF commander with robust, low probability of intercept, jam resistant communications.

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

(U) B. ACCOMPLISHMEN I S/PLANNED PROGRAM:			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.115
RDT&E Articles Qty			
JTRS: Migration/Integration Studies and Analysis. Manpack/Handheld	d JTRS.		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	1.998	0.000	0.775
RDT&E Articles Qty			
JTRS: Program Support and Management.			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	2.000	0.000	0.000
RDT&E Articles Qty			
JTRS/CONDOR: IMMARSAT connection fees.			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.000	0.000	1.592
RDT&E Articles Qty			
JTRS: Gnd Vehicular (Cluster 1) Early Operational Assessment (EOA	), Developmental and Operational Testing (DT/OT)	•	
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	2.261	0.014	0.577
RDT&E Articles Qty			
JTRS: Technical and Engineering Support.			

EXHIBIT R-2a, RDT&E Pro	oject Justification	DATE:		
			February 200	6
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NU	IMBER AND NAME	PROJECT NUMBER AND N	NAME
RDT&E, N /BA-7 Operational Sys Development	0206313M Marine Corps	Communication Systems	s C2275 Joint Tactical Radio	o Systems
COST (\$ in Millions)	· · · · · · · · · · · · · · · · · · ·	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.570
RDT&E Articles Qty				
JTRS: Contract Advisory and Assistance Services.		•		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.100	0.000
RDT&E Articles Qty				
IISR: Concept and Technical Development		•		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.100	0.000
RDT&E Articles Qty				
IISR: Operational Test and Evaluation		1	-	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	1.366	1.853
RDT&E Articles Qty				
SHF Wideband Replacement (HC3): USMC integrati	on efforts.		-	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	1.100	0.000
RDT&E Articles Qty				
TSCT (LMST): Ka-Band Upgrade Effort.		<del>,</del>	-	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.125	0.000	0.500
RDT&E Articles Qty				
TSCT (LMST): LMST load test			•	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.200	0.200
RDT&E Articles Qty				
TSCT (LMST): Contract support costs.			•	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.240	0.000	0.000
RDT&E Articles Qty				
UCIM (LMST): Integration support		.!		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	2.123	1.670
RDT&E Articles Qty		0.000	220	11070
Legacy Comm/Elec (Networks): Develop and test con	anonent ungrades for integration into	legacy network equipment (I	II CS/DTC)	
	iponem apgrades for integration into			E)/ 0007
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.381	0.123
RDT&E Articles Qty			70 / PGC 5)	
Legacy Comm/Elec (Wireless): Develop and test comp	ponent upgrades for integration into	legacy radio systems (TRC-17	/0 / PSC-5)	

EXHIBIT R-2a, RDT&E Pro	ject Justification	DATE:		
•	-		February 200	6
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT N	UMBER AND NAME	PROJECT NUMBER AND N	
RDT&E, N /BA-7 Operational Sys Development	0206313M Marine Corp	s Communication Systems	C2275 Joint Tactical Radio	Svstems
COST (\$ in Millions)	ļ	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	1.042	0.195
RDT&E Articles Qty				
CONDOR: Spiral Development Studies and Integration	Development	•		
COST (\$ in Millions)	1	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.250	0.747	0.789
RDT&E Articles Qty				
CONDOR: Program Support, Logistics Support & Mana	agement.			
COST (\$ in Millions)		FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.500
RDT&E Articles Qty				
CONDOR: Point of Presence Vehicle (PoP-V) Engineer	ring Development Model (EDM) M	Ianufacturing		
COST (\$ in Millions)	8 ( )	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	1.500
RDT&E Articles Qty				
<b>CONDOR:</b> Jump Command and Control Vehicle (JC <sup>2</sup> -	V) FDM Manufacturing			
COST (\$ in Millions)	V) EDWI Wanutacturing	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.215	0.253
RDT&E Articles Qty		0.000	0.2.0	0.200
CONDOR: Technical, Engineering Support and Contra	ct Advisory Assistance Services			
COST (\$ in Millions)	et Havisory, Hissistance Services	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.300	0.538
RDT&E Articles Qty				
CONDOR: Gateway OT				
COST (\$ in Millions)		FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		1.060	0.000	0.000
RDT&E Articles Qty				
CONDOR: Integration of Condor Gateway capability in	to ITVs.			
COST (\$ in Millions)		FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.753
RDT&E Articles Qty				
CONDOR: Point of Presence Vehicle (PoP-V) DT/OT				
COST (\$ in Millions)		FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.000	0.000	0.578
RDT&E Articles Qty				
<b>CONDOR:</b> Jump Command and Control Vehicle (JC <sup>2</sup> -	V) DT/OT			
COST (\$ in Millions)		FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		1.506	0.000	0.263
RDT&E Articles Qty				
<b>CONDOR:</b> Integration, update support documentation a	and contract support costs.			

EXHIBIT R-2a, RDT&E Pro	ject Justification		DATE:		
				February 2000	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELI	EMENT NUM	BER AND NAME	PROJECT NUMBER AND N	IAME
RDT&E, N /BA-7 Operational Sys Development	0206313M Mai	rine Corps C	ommunication Syst	ems C2275 Joint Tactical Radio	Systems
COST (\$ in Millions)			FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost			0.000	0.150	0.158
RDT&E Articles Qty					
CONDOR: MCTSSA interoperability/DISA on-orbit te	sts.	•			
COST (\$ in Millions)			FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost			0.214	0.000	0.000
RDT&E Articles Qty					
CONDOR: KU VSAT Research and Development in st	apport of Condor				
COST (\$ in Millions)					
Accomplishment/Effort Subtotal Cost			0.118	0.000	0.810
RDT&E Articles Qty					
WCR: Contractor Support		•			
COST (\$ in Millions)			FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost			0.000	0.000	0.250
RDT&E Articles Qty					
WCR: Operational Testing, MCOTEA		<u> </u>			
COST (\$ in Millions)			FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost			0.040	0.000	0.050
RDT&E Articles Qty				31000	
WCR: MCTSSA Integration Testing		L			
U) Total \$			9.812	7.838	14.612
U) PROJECT CHANGE SUMMARY:	FY2005	FY2006	FY2007	<u> 1.050</u>	14.012
(U) FY 2006 President's Budget:					
• •	8.536	15.640	14.542		
(U) Adjustments from the NAVCOMPT Budget:					
(U) Congressional/OSD Program Reductions		4.400			
(U) Congressional Rescissions		-4.100			
(U) Congressional Increases	1.348				
(U) Reprogrammings (U) SBIR/STTR Transfer	1.348 -0.067				
(U) Minor Affordability Adjustment	-0.067 -0.005	-3.702	0.070		
(U) FY 2007 President's Budget:	9.812	7.838	14.612		
CHANGE SUMMARY EXPLANATION:	9.012	7.030	14.012		
(U) Funding: See Above.					
(U) Schedule: Not Applicable.					
(U) Technical: Not Applicable.					
(0) Teorifical. Not Applicable.					

EXHIBIT R-2a, RDT&	E Project .	Justification			DATE:				
						F	ebruary 2006	6	
APPROPRIATION/BUDGET ACTIVITY		PROGRAM E	LEMENT NUM	BER AND NA	ME	PROJECT NUI	MBER AND N	AME	
RDT&E, N /BA-7 Operational Sys Development		0206313M M	arine Corps C	ommunicatio	n Systems	C2275 Joint Ta	actical Radio	Systems	
(U) C. OTHER PROGRAM FUNDING SUMMARY	:								
Line Item No. & Name	FY2005	FY2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC, BLI# 464300 Jt Tactical Radio Sys	23.349	7.049	0.000	0.000	0.000	0.000	17.851	Cont	Cont
(U) PMC BLI# 463300 Radio Systems (LMST)	16.938	4.106	11.236	4.870	1.310	1.149	1.400	0.000	41.009
(U) PMC BLI# 463300 LEGACY RADIO SYS	2.354	6.858	17.197	13.674	14.644	6.140	2.078	0.000	62.945
(U) PMC BLI# 463300 CONDOR	0.000	3.649	8.425	8.489	8.303	5.951	0.000	0.000	34.817
(U) PMC BLI# 463300 Wireless Cable Replacement	0.000	0.000	0.004	4.075	3.086	0.000	0.000	0.000	7.165

- (U) Related RDT&E: Not Applicable
- (U) D. ACQUISITION STRATEGY:
- (U) LEGACY COMM ELECTRONICS MOD:
- (U) Wireless: Provide continous sustainment support to fielded equipment and implemented Service Life Extention Programs for equipment reaching its end of life/supportability.
- (U) Tactical Satellite Comm Terminal LMST- Due to funding constraints, the acquisition strategy for the Lightweight Multiband Satellite Terminal and GMF terminals is to procure the minimum amount of LMST terminals for the FMF to satisfy the need for a modern tri-band satellite terminal in the USMC inventory while simulteaneously upgrading the legacy GMF TSC-93 terminals with enhanced components. Upgrading the GMF terminals is in accordance with the LMST acquisition strategy and will attempt to fill the gap in USMC SATCOM capability since funding will not allow for meeting the LMST AAO completely. The LMST upgrade program leverages off the current efforts and integrates the full duplex Ka-band capabilites into existing terminals.
- (U) SHF Wideband Replacement (HC3) is the long-term Development of multi-band replacement terminals synchronized with Tranformational Communications (TC) satellite availability across the DoD. The USMC RDTE funding is for pre-milestone B activities & partnering with industry with Initial studies and transfer of technology between services. And, it will bring capability to test incrementally as selected technologies mature. The early efforts will ensure USMC interests are given equal weight to that of other services as this terminal will replace (approx. 2010/2012) all other DoD SATCOM terminals.
- (U) JTRS JTRS is the next generation radio systems to provide required transformational capabilities while leveraging modern technologies to resolve interoperability and lifecycle computer-based command and control systems. These radios will also support Marine Corps requirements for high-capacity, dynamic, mobile, networked, communictaions as the Marine Corps continues to automate its processes. Integration of these radios into C2 platforms, and begin procurement of Ground Vehicular JTRS to replace aging HF Over the Horizon (OTH) (AN/MRC-138) and UHF Air/Ground (AN/VRC-83) radio systems. The integration of JTRS into the EFV will increase its C4l capability and eliminate the cost of retrofitting the EFV for JTRS Life Cycle Cost Reduction. JTRS will reduce development costs for enhancements to future radio system implementations, reduce maintenance support costs by reducing the number of types of radio systems in the inventory, and reduce operating costs through the employment of multi-function radio systems.

EXHIBIT R-2a, RDT&E Project	DATE:		
		February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND N	AME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Development	0206313M Marine Corps Communicati	ion Systems	C2275 Joint Tactical Radio Systems

- (U) INTEGRATED INTRA-SQUAD RADIO IISR Integrated Intra-Squad Radio is a short-range radio that utilizes advanced wireless LAN technology and spread spectrum techniques to provide a hands-free intercommunication capability while ensuring a low probabilty of interception and detection. The IISR consists of a small radio unit powered by 2 AA batteries, a wireless PTT switch, a lightweight headset compatible with the current combat helmet, and a heavy-duty nylon pouch. The dual version integrates with the AN/PRC-148 using an additional Push-to-talk (PTT) switch to provide the user control of two radios with one headset/microphone.
- (U) Command & Control On-the-move Network, Digital Over-the-horizon Relay CONDOR -- CONDOR was approved as an ACAT Level III program. Commanding Officer MCSC will be the MDA. The MCSC CONDOR project office will pursue a Milestone B decision during 1st QTR FY05 and a Mileston C decision during 1st QTR FY06. The CONDOR GW concept has been developed over the past 12 months by the cooperative efforts of MCSC and ONR (Littoral Combat, Future Naval Capabilities). Having achieved advocate endorsement at the CEAB in August 2003, CONDOR GW is drafting a Technology Transition Agreement (TTA) with ONR for transition to a Program of Record (POR).
- (U) Wireless Cable Replacement WCR The acquisition strategy for WCR involves the testing and procurement of a fully developed and mature COTS product. MCSC WCR will select from 3 or more manufacturers. The final selection will be based on capability, price, and Marine Corps test results.

#### (U) E. MAJOR PERFORMERS:

FY06 TSCT (LMST) HARRIS COMM SYS, MELBOURNE, FL KA-BAND INTEGRATION & UPGRADE, JAN - 06.

FY06 SHF WIDEBAND REPLACEMENT (HC3): PM WIN-T CECOM, FT. MONMOUTH NJ

FY05 JTRS: MITRE PROGRAM SUPPORT, OCT 04.
FY06 JTRS: MITRE PROGRAM SUPPORT, OCT 05.

FY05 JTRS: BOEING, ANAHEIM, CA ,MAJOR H/W SUB, HARRIS, ROCHESTER, NY ,BAE, WAYNE NJ. MAJ S/W SUB TRW SEATTLE, WA, OCT 04.

FY06 JTRS: BOEING, ANAHEIM, CA, MAJOR H/W SUB, HARRIS, ROCHESTER, NY, BAE, WAYNE, NJ. MAJ S/W SUB TRW SEATTLE, WA, OCT 05.

FY07 JTRS: BOEING, ANAHEIM, CA, MAJOR H/W SUB, HARRIS, ROCHESTER, NY, BAE, WAYNE, NJ. MAJ S/W SUB TRW SEATTLE, WA, OCT 06.

FY06 LEGACY: TBD
FY07 LEGACY: TBD
FY06 SHF WIDEBAND
FY07 SHF WIDEBAND
FY06 CONDOR: TBD
FY07 WCR: TBD

Fullibit D. O. Cart Analysis					DATE:				F - L	2000		
Exhibit R-3 Cost Analysis APPROPRIATION/BUDGET ACTIVI	TV	PROGRAM I	ELEMENT			PROJECT	NIIMBED		February 2 ⊏	2006		
		Systems	EFEINIEIN I			C2275 Joi	_					
RDT&E, N /BA 7 Operational Sys Cost Categories	Contract	Performing	Total		FY 05	C22/3 JUI	FY 06	Radio Sy	FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05		FY 06		FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	7.838	Date	Cost	Date	Complete	Cost	of Contract
LMST Ka-Band Upgrade	FFP	Harris Corp, Florida	0.000	0.000		1.100	01/06	0.000		0.000	1.100	
MST Technical Upgrades	FFP	Harris Corp, Florida	0.045	0.000				0.500	TBD	Cont	Cont	
SHF Wideband Replacement	MIPR	PM WIN-T, CECOM	0.000	0.125	04/05	1.366	TBD	1.853	TBD	Cont	Cont	
IISR Concept and Technical Develop	CPAF	TBD	0.000	0.000		0.100	12/05	0.000		Cont	Cont	
LCE (Networks) Development	FFP	TBD	0.000	0.000		2.103	01/06	1.650	01/07	Cont	Cont	
LCE (Wireless) Development	FFP	TBD	0.000	0.000		0.371	01/06	0.113	01/07	Cont	Cont	
CONDOR Integ GW ITV's	FFP	SPAWARS Charleston	0.000	1.060						0.000	1.060	
CONDOR KU VSAT Develop	FFP	Cecom Ft Monmouth	0.000	0.214						0.000	0.214	
CONDOR PoP-V EDM Manufacturin	TBD	TBD	0.000	0.000		0.000		0.675	11/06	Cont	Cont	
CONDOR JC2-V EDM Manufacturing		TBD	0.000	0.000		0.000		1.500	11/06	Cont	Cont	
Studies and Integration												
Development	TBD	TBD	0.000	0.000		1.042	11/05	0.222	11/06	Cont	Cont	
Condor Immarsat Fees	FFP	Scott AFB, IL	0.000	2.000	03/05	0.000		0.000		Cont	Cont	
UCIM Demo	FFP	Naval Research Lab	0.000	0.240	05/05	0.000		0.000		Cont	Cont	
Subtotal Product Development			0.045	3.639		6.082		6.513		Cont	Cont	
Remarks:												
Cost Categories	Contract	Performing	Total	I	FY 05		FY 06		FY 07	1		
(Tailor to WBS, or Sys/Item	Method	Activity &		FY 05		FY 06		FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
JTRS TRAVEL	Allot	MARCORSYSCOM	0.060	0.000	10/04	0.000	10/05	0.040	10/06	Cont	Cont	
JTRS Integration/Migration	FFP	Titan, Stafford, VA	1.520	1.998	10/05	0.000	12/05	0.115	12/06	Cont	Cont	
JTRS Tech & Eng Support	FFP	OSEC, Stafford, VA	0.752	2.261	10/04	0.000	10/05	0.577	10/06	Cont	Cont	
CONDOR Program travel	Allot	MARCORSYSCOM	0.000	0.150	10/04	0.040	10/05	0.040	11/06	Cont	Cont	
CONDOR Technical Support	FFP	Titan, Stafford, VA	0.000	0.000		0.175	10/05	0.184	10/06	Cont	Cont	
CONDOR Integration and update												
Support documentation, Contract											_	
support costs	TBD	TBD	0.000	1.506		0.000	11/05	0.263	11/06	Cont	Cont	
LMST Contractor Support	FFP	NGIT, Stafford, VA	0.000	0.000		0.200	10/05	0.200	10/06	Cont	Cont	
WCR Program Support	FFP	NGIT, Stafford, VA	0.000	0.118	00/00	0.000		0.440	10/06	Cont	Cont	
WCR Contract Adv & Asst	FFP FFP	Titan, Stafford, VA	0.000	0.000		0.000		0.370	10/06	Cont	Cont	
	FFP	OASD	0.000	0.100		0.000 <b>0.415</b>		0.000 <b>2.229</b>		0.000 Cont	0.100 Cont	
CONDOR Phase 1 IDA Support  Subtotal Support			2.332	6.133		(1.415						

Exhibit R-3 Cost Analysis					DATE:							
		T				1			February	2006		
APPROPRIATION/BUDGET ACTIV	/ITY	PROGRAM	ELEMENT.			PROJECT	NUMBER	AND NAM	IE			
RDT&E, N /BA 7 Operational Sys	Dev	Systems			_	C2275 Joi	int Tactica	I Radio Sy	stems			
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	of Contract
ITRS Gnd Veh EOA/DT/OT	WR	MCOTEA	0.150	0.040	10/04	0.000	10/05	0.150	10/06	Cont	Cont	:
TRS Gnd Veh EOA/DT/OT	MIPR	PM WIN-T, CECOM	1.575	0.000	10/04	0.000	10/05	1.442	10/06	Cont	Cont	
ISR Operational T&E	MIPR	TBD	0.000	0.000		0.100	12/05	0.000		Cont	Cont	
CE (Networks) Integration Tests	WR	MCTSSA	0.000	0.000		0.020	12/05	0.020	12/06	Cont	Cont	:
CE (Wireless) Integration Tests	WR	TBD	0.000	0.000		0.010	12/05	0.010	12/06	Cont		
CONDOR Integration Tests	WR	TBD	0.000	0.000		0.150	11/05	0.158	11/06	Cont	Cont	:
CONDOR Gateway OT, JC2-V OT,												
and PoP-V OT	WR	TBD	0.000	0.000		0.300	11/05	1.694	11/06	Cont	Cont	<u> </u>
WCR Integraation Testing	FFP	MCTSSA, CA/TBD	0.000	0.000		0.000		0.050	11/06	Cont	Cont	:
VCR MOT&E	FFP	MCOTEA	0.000	0.000		0.000		0.250	01/07	Cont	Cont	
Subtotal T&E			1.725	0.040		0.580		3.774	ļ	Cont	Conf	:
Tailor to WBS, or Sys/Item	Method & Type	Activity & Location	PY s Cost	FY 05 Cost	Award Date	FY 06 Cost	Award Date	FY 07 Cost	Award Date	Cost to Complete	Total Cost	Target Valu of Contract
		NGIT,Stafford, VA		0		0			10/06			
	IFFP	INGIT.Station, VA	0.800		1 10/04		10/05	0.735		I Cont	Con	
ITRS Program Support	FFP FFP		0.866 0.325	0	10/04			0.735 0.570	10/06	Cont Cont	Cont	
ITRS Program Support ITRS Contract Adv & Assist	FFP	TITAN VA	0.325			0.014		0.735			Conf	
ITRS Program Support ITRS Contract Adv & Assist CONDOR Program Support,	FFP	TITAN VA	0.325	0	10/04	0.014	10/05	0.570	10/06	Cont	Conf	
TRS Program Support TRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst	FFP FFP	TITAN VA Titan, Stafford, VA	0.325	0.000	10/04	0.014	10/05	0.570	10/06	Cont	Cont	
ITRS Program Support ITRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst	FFP	TITAN VA	0.325	0.000	10/04	0.014	10/05	0.570	10/06	Cont	Conf	
TRS Program Support TRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst	FFP FFP	TITAN VA Titan, Stafford, VA	0.325	0.000	10/04	0.014	10/05	0.570	10/06	Cont	Cont	
JTRS Program Support JTRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst CONDOR Logistics Support	FFP FFP	TITAN VA Titan, Stafford, VA	0.325 0.000 0.000	0.000 0.000	10/04	0.014 0.747 0	10/05 10/05 10/05	0.570 0.633 0.158	10/06 10/06 10/06	Cont Cont Cont	Cont Cont	
ITRS Program Support ITRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst CONDOR Logistics Support  Subtotal Management	FFP FFP	TITAN VA Titan, Stafford, VA	0.325	0.000	10/04	0.014	10/05 10/05 10/05	0.570	10/06 10/06 10/06	Cont	Cont	
ITRS Program Support ITRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst CONDOR Logistics Support  Subtotal Management	FFP FFP	TITAN VA Titan, Stafford, VA	0.325 0.000 0.000	0.000 0.000	10/04	0.014 0.747 0	10/05 10/05 10/05	0.570 0.633 0.158	10/06 10/06 10/06	Cont Cont Cont	Cont Cont	
JTRS Program Support JTRS Contract Adv & Assist CONDOR Program Support, Contract Adv & Asst CONDOR Logistics Support	FFP FFP	TITAN VA Titan, Stafford, VA	0.325 0.000 0.000	0.000 0.000	10/04	0.014 0.747 0	10/05 10/05 10/05	0.570 0.633 0.158	10/06 10/06 10/06	Cont Cont Cont	Cont Cont	

			<u>UNCL</u>	<del>DUULL</del>						
Exhibit 4/4a, S	Schedule Profile/Det	:ail					D/	ATE:	February 20	106
ROPRIATION/BUDGET ACTIVITY	PROGRAM E	LEMENT				F	PROJECT NUME	BER AND NAM	1E 1 CB1 GG1 <b>y 2</b> 0	
RE, N /BA 7 Operational Sys Dev	0206313M N	larine Corps C	ommunication	Systems		(	2275 Joint Tac	tical Radio Sy	/stems	
		JOINT 7	TACTICAL I	RADIO SY	STEM (JT	RS)				
FISCAL YEARS	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	То	
	1								Complete	
BLOCK 1 (Interim)										
MANDAGICLIEND										
MANPACK HFMR			207	531	32				_	
MANPACK MBMMR			207	331	32				_	
W/ ((V) / (O) ( WE) WINT			26	58	104				<del>-</del>	
HANDHELD THHR									_	
			620	1285	597					
HANDHELD IISR										
					4000	2500				
TEAMS										
Milestone			MS 'C'		15	112				
Milestone			, IVIS C							
BLOCK 2 (JTRS Cluster 1 Vehicular)				EMD			LRIP	LRIP	+	ĺ
BESON 2 (STNO Glaster 1 Verneular)				14	0	0	499	788	Cont	ř
Milestones	▲ MS 'B'				_		MS C 🛕			
Contract Award	<b>A</b>									i
Operation Capability 1ST QTR FY10										
										i
BLOCK 3 (JTRS										
					EM D	<u>LRIP</u>	<u>LRIP</u>	FRP		ļ
Manpack/Handheld/SFF)					<u>EM D</u>	LRIP	<u>LRIP</u>	<u>FRP</u>		
Cluster 2 - Handheld				A MS 'C'	<u>EM D</u>	<u>LRIP</u>	LRIP	FRP		
Cluster 2 - Handheld Milestones				▲ MS 'C'		LRIP	LRIP	FRP		
Cluster 2 - Handheld Milestones Contract Award					EM D  USMC Proc.	LRIP	LRIP	FRP		
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF			MS 'B' ▲			LRIP				
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF Milestones			MS 'B' ▲			LRIP	LRIP			
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF			MS 'B' ▲			LRIP			)	
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF Milestones Contract Award (Tentative)		FY 2005						▲ LRIP (tent		tal Cost
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF Milestones Contract Award (Tentative)		_ FY 2005				<u>LRIP</u> <u>FY 2009</u>		▲ LRIP (tent	.) To Compl To	tal Cost
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF Milestones Contract Award (Tentative)  ram Funding Summary PN, BLI #, NOMEN) RDT&E,N		9.812	FY 2006	FY 2007 3.629	USMC Proc.  FY 2008  1.457	FY 2009 1.509		▲ LRIP (tent.  FY 2011  1.547		otal Cost Cont
Cluster 2 - Handheld Milestones Contract Award Cluster 5 - Handheld/Manpack.SFF Milestones			FY 2006 0.014 7.049	FY 2007	USMC Proc.	FY 2009		▲ LRIP (tent.	To Compl To	

	Exhibit 4/4a	4a, Schedule Profile/Detail						DATE:	February 2006
	TION/BUDGET ACTIVITY	PROGRAM ELEMENT						UMBER AND NA	IAME
'&E, N /B	BA 7 Operational Sys Dev	0206313M Marine Corps C			<del></del>		C2275 Joint 7	Tactical Radio	Systems
	JTRS SCHEDULE DET	AIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	]
	Milestone 'B' (Block 2 Gnd V	√eh)			<u> </u>	<u> </u>		<u> </u>	]
	Contract Award (Block 2 Gr	nd Veh)			<u> </u>	<u> </u>		<u> </u>	]
	SRR (Block 2 Gnd Veh)				<u> </u>	<u> </u>		<u> </u>	]
	PDR (Block 2 Gnd Veh)				<u> </u>	<u> </u>		<u> </u>	]
	CDR (Block 2 Gnd Veh)				<u> </u>	<u> </u>		<u> </u>	]
	Early Operational Assessme	ent (Block 2 Gnd Veh)		1Q				<u> </u>	]
	DT/OT (Block 2 Gnd Veh)				1Q			<u> </u>	]
	Milestone 'C' (Block 2 Gnd V	√eh)					2Q	<u> </u>	]
	Block 3 Cluster 2 PDR							<u> </u>	]
	Block 3 Cluster 2 CDR		1Q					<u> </u>	]
	Block 3 Cluster 2 EOA		3Q					<u> </u>	]
	Block 3 Cluster 2 DT/OT			1Q		<u> </u>		<u> </u>	]
	Block 3 Cluster 2 MS 'III'			2Q		<u> </u>		<u> </u>	]
	Block 3 Cluster 5 Events TF	BD (Awaiting Contract Award)						<u> </u>	]
								'	]
					'				]
								<u> </u>	]
								<u> </u>	]
								<u> </u>	1
								7	1

	Exhibit 4/4a, Schedule I	ronie/Detail										DATE:	Februa	ry 2006
PRIATION/BUDGET ACTIVITY		OGRAM ELEME										UMBER AND NA	AME	-
, N /BA 7 Operational Sys Dev	020	06313M Marine									2275 Joint	Tactical Radio	Systems	
		TACTICA	L SAT	ELLIT	E COM	MUNIC	ATION	N TERM	INAL (I	LMST)				
•														
	•	1	l		Ti			l						
Fiscal Year		FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total		
Milestone III (p	rocurement)			•										
Contract ECP A	ward		♦											
Terminal Delive	eries/Fielding													
IOC				•										
FOC						<b>A</b>								
100						٧								
Ka-band develo	pment													
							_							
Integration Fiel	ding Ka-Band Upgrade	es												
IOC							4							
Fog							•							
FOC									•					
		+	-								<u> </u>			
m Funding Summary		_ <u>I</u>	FY 2005	FY	2006	FY 20	<u>007</u>	FY 2008	FY	2009	FY 201	<u>0</u> <u>FY 2011</u>	To Compl	Total Cost
I <u>, BLI #, NOMEN)</u> DT&E,N			0.000		1.300	0.7	700	0.200	)	0.202	0.30	0.302	Cont	Cont
MC BLI# 463300 Radio System	ns (LMST)		16.938		4.106	11.2		4.870		1.310	1.14		Cont	

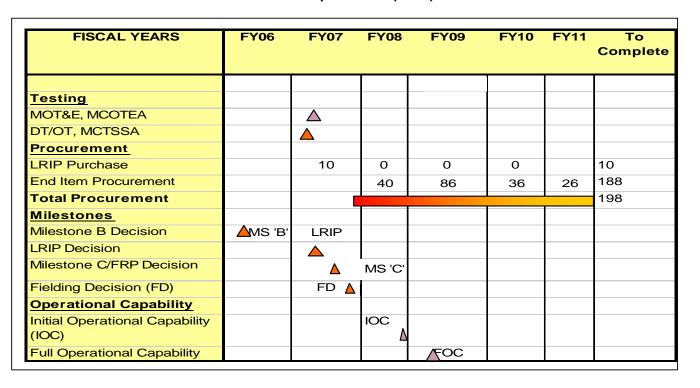
Exhibit 4/4a, Sche	edule Profile/Detail						DATE:	February 2006
N/BUDGET ACTIVITY 7 Operational Sys Dev	PROGRAM ELEMENT  0206313M Marine Corps 0	Communication	n Systems				JMBER AND NA	ME
LMST SCHEDULE DETAIL		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	
Terminal Deliveries								
IOC								
FOC			2ndQtr					
Ka-band Development				1st-4th Qtr				
Ka-band Integration								
IOC				4th Qtr				
FOC						4th Qtr		
			l	l		ı		

**UNCLASSIFIED** Exhibit 4/4a, Schedule Profile/Detail DATE: February 2006 APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NUMBER AND NAME RDT&E, N /BA 7 Operational Sys Dev 0206313M Marine Corps Communication Systems C2275 Joint Tactical Radio Systems Command & Control On-the-move Network, Digital Over-the-horizon Relay (CONDOR) FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 ♦ MS B ♦ MS C Milestones Life-Cycle Cost Estimate **Technical Studies Gateway Optimization** Gateway LTA/LUE PoP-V Prototype Development JC2-V Prototype Development DT (Gateway) DT (PoP-V) DT (JC2-V) LRIP (Gateway) OT (Gateway) OT (PoP-V) OT (JC2-V) Production (Gateway) Fielding (Gateway) IOC (Gateway) FOC (Gateway) FY 2006 FY 2011 To Compl Total Cost Program Funding Summary FY 2005 FY 2007 FY 2008 FY 2009 FY 2010 (APPN, BLI #, NOMEN) (U) RDT&E,N 0.000 6.374 0.910 0.000 2.454 5.527 7.611 1.766 24.642 (U) PMC BLI# 463300 CONDOR 0.000 3.649 8.425 8.489 8.303 5.951 0.000 0.000 34.817

	Exhibit 4/4a, Schedule Profile/Detail							DATE:	Februa	ary 2006				
PROPRIATIO	N/BUDGET ACTIVITY	PROGRAM ELEM	ENT				PROJECT N	JMBER AND NAME						
OT&E, N /BA	7 Operational Sys Dev	0206313M Marin	e Corps Communication	s Communication Systems C2275 Joint						Tactical Radio Systems				
	<b>CONDOR SCHEDULE</b>	DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012			
	Milestones (B) and ©			1st Qtr	1st Qtr									
	Life Cycle Cost Estimate		2-3rd Qtr											
	Technical Studies		1Q	2Q										
	Gateway Optimization		1Q		1stQ									
	Gateway LUE		3rd Qtr	2Q										
	PoP-V Prototype Developm	ent	1Q		1Q									
	JC2-V Prototype Developm	ent	1Q		3Q									
	DT (Gateway)		1Q	4Q										
	DT (PoP-V)			1Q	4Q									
	DT (JC2-V)				1Q	4Q								
	LRIP Gateway				2-4th Qtr									
	OT Gateway				3Q			4Q						
	OT (PoP-V)					3Q		4Q						
	OT (JC2-V)						3Q	4Q						
	Production (Gateway)					1Qtr			4Q					
	Fielding (Gateway)					3Q				2Q				
	IOC Gateway					2Q								
	FOC Gateway									3Q				

Exhibit 4/4a,	Schedule Profile/Detail	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communication Systems	C2275 Joint Tactical Radio Systems

# Wireless Cable Replacement (WCR)



Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)									
(U) RDT&E,N	0.000	0.000	1.110	0.000	0.000	0.000	0.000	Continuing	Continuing
(U) PMC BLI#463300 Wireless Cable Replacement	0.000	0.000	0.004	4.075	3.086	0.000	0.000	Continuing	Continuing

Exhibit 4/4a, Schedu	ıle Profile/Detail	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communication Systems	C2275 Joint Tactical Radio Systems

WCR SCHEDULE DETAIL	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY Total
Milestone 'B' Decision	2Q						
DT/OT 1		1Q					
MOT&E		2Q					
LRIP Decision		2Q					
LRIP Procurement-10 Systems		2Q					
Milestone C/FRP Decision		3Q					
Procurement 40 Systems		4Q	1Q				
Procurement 86 Systems				1Q			
Procurement 36 Systems					1Q		
Procurement 26 Systems						1Q	

EXHIBIT R-2a, RDT&E F		DATE:		Februa	ry 2006				
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev				PROJECT NUMBER AND NAME C2276 Communications Switching & Control Systems					
COST (\$ in Millions)	<u>                                      </u>	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost		3.331	6.127	4.494	4.298	3.499	0.841	0.880	
RDT&E Articles Qty	·								

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

- (U) The Network Planning and Mangement (NPM) is a portfolio of communications planning and Network Management System (NMS) applications for use throughout the Marine Air Ground Task Force (MAGTF). NPM includes JNMS and the Systems Planning Engineering and Evaluation Device (SPEED). JNMS provides the MARFOR component planners with the Joint mandated software needed to conduct high-level planning; detailed planning and engineering; monitoring; control and reconfiguration; spectrum planning and management; and security in support of Combatant Commander (COCOM) and Commander, Joint Task Force (CJTF) operations. SPEED is software used for Radio Frequency (RF) communications analysis by JNMS, other Services and for System Planning and Engineering (SPE) throughout the MAGTF. SPEED provides High Frequency (HF) predictions, Line of Site (LOS) propogation, Radio Coverage Analysis (RCA) and related communications network planning and management.
- (U) The Transition Switch Module (TSM) will provide a flexible Unit Level Switch that bridges legacy Tri-Tac switches with current commercial technology, providing maneuver elements with improved voice/data switching, data transport and bandwidth management capabilities. This program will maintain USMC joint interoperability as all Services transition to COTS switching technologies.
- (U) The Tactical Data Network (TDN) augments the existing Marine Air Ground Task Force (MAGTF) communications infrastructure to provide the commander an integrated data network, forming the communications backbone for Tactical Data Systems (TDS) and the Defense Messaging System (DMS). TDN consists of Gateways (AN/TSQ-222) and Data Distribution Systems (AN/TSQ-228), interconnected with one another and their subscribers via a combination of common user long-haul transmission systems, local area networks (LAN), and switched telephone systems. The TDN PIP provides a smaller and more mobile variant DDS for the Battalion, Secure Wireless LAN capability for enhanced mobility, integrates security interdiction products into the Gateway; and provides critical refresh of non-MCHS network components such as routers, switches, converters, and tactical peripherals.
- (U) The Expeditionary Command and Control Suite (ECCS) is a transit case solution that provides SIPRNET email and web access, secure VTC, C2PC/COP and collaborative planning (DCTS) DISA Standard to initial response teams to communicate with higher HQ until larger C2 systems are established. This is an On-The-Move/Enroute capability.
- (U) The First In Command and Control System (FICCS) is an integrated, processor-controlled communications and management system, housed in a S-788/G Lightweight Multipurpose Shelter (LMS), providing secure and non-secure voice and data communications, switching functions, network routing and management, and global broadcast functions. The S-788/G LMS is mounted on a Heavy-variant High Mobility Multipurpose Wheeled Vehicle (H-HMMWV) and can be connected to a quick-erect general purpose tent.

### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.441	0.000	0.000
RDT&E Articles Qty			
JNMS: Program Management and Support			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.499	0.843	1.820
RDT&E Articles Qty			
NPM: Develop unique USMC models for JNMS and Developmental work for	SPEED Net Centric enhancements.		

, , , , , , , , , , , , , , , , , , ,	&E Project Justification DATE	:		February 2006		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		JMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications S	ys	C2276 Comm	nunications Switching & Control Systems		
COST (\$ in Millions)		FY 2	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		1.9	89	0.000	0.000	
RDT&E Articles Qty						
TSM: Intergration Testing and Training Device	re Engineering					
COST (\$ in Millions)		FY 2	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.0	90	0.000	0.000	
RDT&E Articles Qty						
TSM: Program Support				<u>'</u>		
COST (\$ in Millions)		FY 2	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.0		1.625	0.000	
RDT&E Articles Qty						
	Voice over IP (VoIP) capability for integration into TSM EDM	Is and te	st for interopera	bility/operational suitability.		
COST (\$ in Millions)		FY 2	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.0		1.500	1.500	
·						
RDT&E Articles Qty						
ECCS: Develop and test miniaturized compon	ents that provide DISN services while On-The-Move/Enroute.					
ECCS: Develop and test miniaturized compon  COST (\$ in Millions)	ents that provide DISN services while On-The-Move/Enroute.	FY 2	2005	FY 2006	FY 2007	
	ents that provide DISN services while On-The-Move/Enroute.	FY 2		FY 2006 1.034	FY 2007 <b>1.174</b>	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty		0.0	000	1.034	1.174	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty FICCS: Continue Development of miniaturiza	ents that provide DISN services while On-The-Move/Enroute.  tion of hardware solutions, colaborate with MCTSSA SIE and	0.0	000	1.034	1.174	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty FICCS: Continue Development of miniaturiza Technology into the FICCS Platform.		0.0	Interoperability	1.034  Testing at JITC/Gigabite Etho	1.174 ernet, and Wireless Telephor	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty FICCS: Continue Development of miniaturiza Technology into the FICCS Platform. COST (\$ in Millions)		conduct	Interoperability	Testing at JITC/Gigabite Ethor	1.174 ernet, and Wireless Telephor	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty FICCS: Continue Development of miniaturiza Technology into the FICCS Platform.		0.0	Interoperability	1.034  Testing at JITC/Gigabite Etho	1.174 ernet, and Wireless Telephor	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty FICCS: Continue Development of miniaturiza Technology into the FICCS Platform. COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	tion of hardware solutions, colaborate with MCTSSA SIE and	conduct	Interoperability	Testing at JITC/Gigabite Ethor	1.174 ernet, and Wireless Telepho FY 2007	
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost RDT&E Articles Qty FICCS: Continue Development of miniaturiza Technology into the FICCS Platform. COST (\$ in Millions) Accomplishment/Effort Subtotal Cost	tion of hardware solutions, colaborate with MCTSSA SIE and	conduct	Interoperability	Testing at JITC/Gigabite Ethor	1.174 ernet, and Wireless Telephor	
COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Continue Development of miniaturiza Technology into the FICCS Platform.  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Development of SPEED Mobile Train  COST (\$ in Millions)	tion of hardware solutions, colaborate with MCTSSA SIE and	conduct FY 2 0.3	Interoperability 2005 312	Testing at JITC/Gigabite Ethors FY 2006 0.000  FY 2006	1.174 ernet, and Wireless Telephor FY 2007 0.000 FY 2007	
COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Continue Development of miniaturiza Technology into the FICCS Platform.  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Development of SPEED Mobile Train  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost	tion of hardware solutions, colaborate with MCTSSA SIE and	conduct FY 2	Interoperability 2005 312	Testing at JITC/Gigabite Ethors FY 2006 0.000	1.174 ernet, and Wireless Telephor FY 2007 0.000	
COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Continue Development of miniaturiza Technology into the FICCS Platform.  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Development of SPEED Mobile Train  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty	tion of hardware solutions, colaborate with MCTSSA SIE and	conduct FY 2 0.3	Interoperability 2005 312	Testing at JITC/Gigabite Ethors FY 2006 0.000  FY 2006	1.174 ernet, and Wireless Telephor FY 2007 0.000 FY 2007	
COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Continue Development of miniaturiza Technology into the FICCS Platform.  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost  RDT&E Articles Qty  FICCS: Development of SPEED Mobile Train  COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost	tion of hardware solutions, colaborate with MCTSSA SIE and	conduct FY 2 0.3	Interoperability 2005 312	Testing at JITC/Gigabite Ethors FY 2006 0.000  FY 2006	1.174 ernet, and Wireless Telephor FY 2007 0.000 FY 2007	

EXHIBIT R-2a, RDT&E Pro	ject Justification		D	ATE:		February	2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM EL	EMENT NUM	BER AND NA	ME	PROJECT NUM	MBER AND N	AME			
RDT&E, N /BA-7 Operational Sys Dev	0206313M Ma	rine Corps Co	ommunicatio	ns Sys	C2276 Communications Switching & Control Systems					
(U) PROJECT CHANGE SUMMARY:										
(a) i itaala i amminitti		FY 2005	FY 2006	FY 2007						
(U) FY 2006 President's Budget: (U) Adjustments from the President's Budget:		3.720	6.220	7.642						
(U) Congressional/OSD Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings		-0.207								
(U) SBIR/STTR Transfer		-0.180								
(U) Minor Affordability Adjustment		-0.002	-0.093	-3.148						
(U) FY 2007 President's Budget:		3.331	6.127	4.494	,					
CHANGE SUMMARY EXPLANATION: (U) Funding: See Above. (U) Schedule: Not Applicable. (U) Technical: Not Applicable.										
(U) C. OTHER PROGRAM FUNDING SUMMARY: <u>Line Item No. &amp; Name</u>	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cos	
(U)PMC BLI 463400 Communications Switching and Cont	rol Systems									
NPM (JNMS)	2.989	6.528	0.000	2.232	0.000	0.000	0.000	0.000	11.749	
ECCS	0.000	0.000	0.000	0.000	3.705	3.528	0.645	0.000	7.878	
FICCS	3.438	10.859	0.000	0.768		0.000	0.000	0.000	15.91	
TSM	0.000	27.540	19.813	12.892		8.719	2.106	0.000	89.814	
(U)PMC BLI 468800 Transition Switch Module (TSM)	1.840	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.84	
(U) Related RDT&E: Not Applicable.										

EXHIBIT R-2a, RDT&E Proje	ect Justification	DATE:	February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND N	NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communicat	ions Sys	C2276 Communications Switching & Control Systems

- (U) D. ACQUISITION STRATEGY NPM: NPM uses the Joint Army-led acquisition strategy for JNMS. This is an evolutionary strategy with an initial Build to include all KPP and Threshold requirements. It is followed by pre-planned Builds to incorporate Objective requirements. The JNMS contract method is competitive with a Cost Plus contract for development that is centrally funded by the Army, except for any unique Service requirements. Services are responsible for procurement, fielding and support costs. The production contract is Fixed Price and and the fielding and support is Time and Material (T&M). The JNMS acquisition strategy emphasizes the use of Commercial Off The Shelf (COTS) and Government-off-the-Shelf (GOTS) products. The SPEED acquisition strategy is for spiral development. The SPEED contract method is through a sole source Basic Purchase Agreement (BPA) using Fixed Price Task Orders based on the developers GSA schedule for manhours.
- (U) D. ACQUISITION STRATEGY TSM: The TSM acquisition strategy calls for use of FY04 and FY05 R&D to develop and demonstrate a system of sufficient maturity for production. There will be a single contract award for Low Rate Initial Production (LRIP), testing and full-rate production after successful completion of test. FY06 and FY07 R&D will be used to develop potential cellular telephone and Voice over IP (VoIP) technology for insertion into the TSM Engineering Development Models (EDMs). They will then be tested prior to incorporating them into the TSM production systems.
- (U) D. ACQUISITION STRATEGY ECCS: ECCS will use the evolutionary acquisition strategy and pursue a competitive firm fixed price contract. Major concerns will be interoperability and compatibility with existing systems and components. R&D effort will focus on developing and integrating "miniaturized" version of existing components. Emerging technologies such as VoIP and Secure Wireless will also be addressed in the out year R&D effort.
- (U) D. ACQUISITION STRATEGY FICCS: FICCS will use the evolutionary acquisition strategy with the Block I variant consisting of the initial three JECCS systems. These systems are to be fielded during FY-04, with over \$1M of proposed Office of Naval Research Science and Technology (ONR S&T) and \$80K Extended Littoral Battlespace Advanced Concept Technology Demonstration (ELB ACTD) (Wireless) efforts, FICCS Block II will consist of eleven (11) JECCS production units, which will include upgrades to emerging hardware/software. Exploring the Block II/III R&D effort, FICCS Block III will incorporate emerging technologies such as VoIP, Secure Wireless, and possible ATM. into TDN equipment. RDTE funding in FY06 and FY07 are to be used to test and evaluate Commercial Of The Shelf (COTS) items which will be integrated into TDN Gateways and Data Distribution Systems (DDS) to fulfill ORD requirements.

# (U) E. Major Performers:

FY05 - (NPM) NGIT, Winterpark, FL. SPEED enhancements; CECOM, Momouth, NJ. USMC JNMS adapters, MCOTEA, Quantico, VA, and FMF IOT&E support, JAN 05

FY06 - (NPM) NGIT, Winterpark, FL. SPEED enhancements; CECOM, Momouth, NJ. USMC JNMS adapters, JAN 06

FY04/05 - (TSM) TBD, Prime Contractor, TSM prototype design/build/test, Jun 04

FY 06/07 - (TSM) TBD, Prime Contractor, Integration and test of VoIP and Wireless technology

FY06 - (ECCS) - Contractor TBD. Develop and test miniaturized components that provide DISN services while On-The-Move/Enroute.

FY07(ECCS) - Contractor TBD. Develop and test miniaturized components that provide DISN services while On-The-Move/Enroute.

FY05 - (FICCS) Darlington, Inc., Wando, SC. Hardware miniaturization and colaboration/testing with MCTSSA SIE & JITC, OCT 05

FY06 - (FICCS) EDO/Darlington, Inc., Wando, SC. Integration of VoIP, Secure Wireless, and ATM Technolgoies, OCT 06

FY07 (FICCS) - EDO/Darlington, Inc., Wando, SC. Integration of VoIP, Secure Wireless, and ATM Technologies, OCT 07

FY06 (TDN) - TBD

FY07 (TDN) - TBD

Exhibit R-3 Cost Analysis						DATE:				February 2	2006			
APPROPRIATION/BUDGET	A CTIVITY		PROGRAM E	LEMENT				IDDO IEC	TAILIMDE					
RDT&E, N /BA 7 Operation			0206313M M		na Cam	municatio	no Svo	PROJECT NUMBER AND NAME C2276 Communications Switching & Control Systems						
		Performing	U2U0313W W		•	Inumicatio	FY 05	C2276 C0		Illons Swit	FY 07		Stellis	1
Cost Categories					otal	EV 0E		EV 00	FY 06	EV 07		0	Tatal	Tanast Malus
, ,	Method	Activity &			Y s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location			ost	Cost	Date	Cost	Date	Cost	Date	Compl	Cost	of Contract
NPM (JNMS)	CP		onmouth, NJ		0.265			0.000		0.550		Cont	Cont	
NPM (SPEED)	FP	MCSC, Qua			1.405			0.500		0.850		Cont	Cont	
ECCS	FFP	MCSC, Qua			0.000			0.900		0.600		Cont	Cont	
FICCS	CPFF	EDO/Darlin			0.000			0.614	02/06	0.735	02/07	Cont	Cont	
FICCS	FFP	MCSC, Qua			0.000			0.000		0.000		0.000		
TSM	FFP	MCSC, Qua	antico, Va		4.477	1.989	10/04	1.625	10/05	0.000	10/06	Cont	Cont	
TSM	FFP	MCSC, Qua	antico, Va		0.000	0.090		0.000		0.000		0.000	0.090	
Subtotal Product Dev					6.147	2.984		3.639		2.735		Cont	Cont	
Remarks:	•					•			•		•	1		•
Cost Categories	Contract	Performing			otal		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &		P	Υs	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location		C	ost	Cost	Date	Cost	Date	Cost	Date	Compl	Cost	of Contract
NPM (Program Support)	WR	MCSC/MCT	ΓSSA		0.314	0.000	10/04	0.143	10/05	0.150	10/06	Cont	Cont	
NPM (Support Contractor)	FP	OSEC, Staf			0.684			0.200		0.271	10/06	Cont	Cont	
ECCS	FFP	Support Co	ntractor		0.000	0.000		0.600		0.600	11/06	Cont	Cont	
FICCS	CPFF	Support Co			0.450			0.300		0.418		Cont		
TDN	FFP	NGIT, Aquia	a, VA		0.000	0.000		0.225	11/05	0.000	11/06	Cont	Cont	
Subtotal Support					1.448	0.347		1.468	8	1.439		Cont	Cont	
Remarks:														
Cost Categories	Contract	Performing		Т	otal		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &			Υs	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location			ost	Cost	Date	Cost	Date	Cost	Date	Compl	Cost	of Contract
ECCS	WR	MCOTEA			0.000			0.000		0.300		Cont		
FICCS	WR	MCTSSA			0.257	0.000		0.020	11/05	0.020	11/06	Cont		
FICCS	WR	JITC			0.000			0.100		0.000		0.000		
TDN	FFP	TBD						0.900		0.000		Cont		
Subtotal T&E					0.257	0.000		1.020		0.320		Cont	Cont	
Remarks:	1	I		I					1		1			ı
Cost Categories	Contract	Performing		Т	otal		FY 05		FY 06		FY 07			
	Method	Activity &			Y s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location			ost	Cost	Date	Cost	Date	Cost	Date	Compl	Cost	of Contract
Subtotal Management					0.000			0.000		0.000		0.000		
Remarks:	1	1		I			1	1 2.230	1		1	1 2.230	, 3.030	1
														1
Total Cost					7.852	3.331		6.127	'	4.494		Cont	Cont	

DATE: Exhibit R-4/4a Schedule Profile/Detail February 2006 APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NUMBER AND NAME RDT&E, N /BA 7 Operational Sys Dev 0206313M Marine Corps Communications Sys C2276 Communications Switching & Control Systems TRANSITION SWITCH MODULE Milestone Schedule FY03 FY06 FY08 **FY02 FY04** FY05 **FY07** FY09 FY10 RFP Release MSB 🔷 MS C ♦ FRPD Milestones Contract Award **EDM** PDR CDR Build DT SIT/JITC Certification Decision Review (LRIP) **Build Training Systems** OT&E Increment 1 Production Fielding IOC FOC FY 2011 To Compl Total Cost Program Funding Summary FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 (APPN, BLI #, (U) RDT&E,N 2.079 0.000 0.925 0.320 0.000 6.188 1.625 0.934 0.305 (U) PMC BLI# 468800 Transition Switch Module (TSM) 0.000 0.000 1.840 0.000 0.000 0.000 0.000 0.000 1.840 0.000 8.719 2.106 0.000 87.974 (U) PMC BLI# 463400 Comm Switch & Control Sys 27.540 19.813 12.892 16.904

		DATE:
Exhibit R-4/4a Schedule Profile/Detail		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems

TSM SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Contract Award	3Q							
Engineering Develoment Model Delivery (Qty 6)	4Q	3Q						
Operational Test/Joint Interoperability Certification			2Q					
Milestone C		3Q						
Production Option Award			2Q					
Fielding Begins			3Q					
Initial Operational Capability				1Q				
Fielding Ends/Full Operational Capability						3Q		

		DATE:			
Exhibit R-4/4a Schedule Profile/Detail		February 2006			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME			
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems			

# NPM (JNMS)

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
JNMS PEO/C3T MS C (LRIP)		<b>♦</b> 4/2	28					
JNMS PEO/C3T FRP Decision				$\Diamond$				
JNMS Software Development					$\Diamond$			
JNMS Build 1.1 FQT, Integ Test	-	<b>→</b>						
JNMS NET & IOT&E								
JNMS Build 1.2/1.3 FQT, Re Test								
JNMS Follow-on NET & OT&E			$\langle \Sigma \rangle$					
PEO/C3T MS C (LRIP) UPDATE			$\Diamond$					
JNMS First Units Equipped (FUE)				$\Diamond$				
USMC JNMS Decision/Orders			$\Diamond$	$\Diamond$	$\Diamond$	$\Diamond$		
USMC JNMS FRP Fieldings				$\Diamond$		$\Diamond$		
SPEED Spiral Software Develop		•						
SPEED Next Major Release 10			$\Diamond$					
PDSS/Software Maintenance			<b>&gt;</b>					

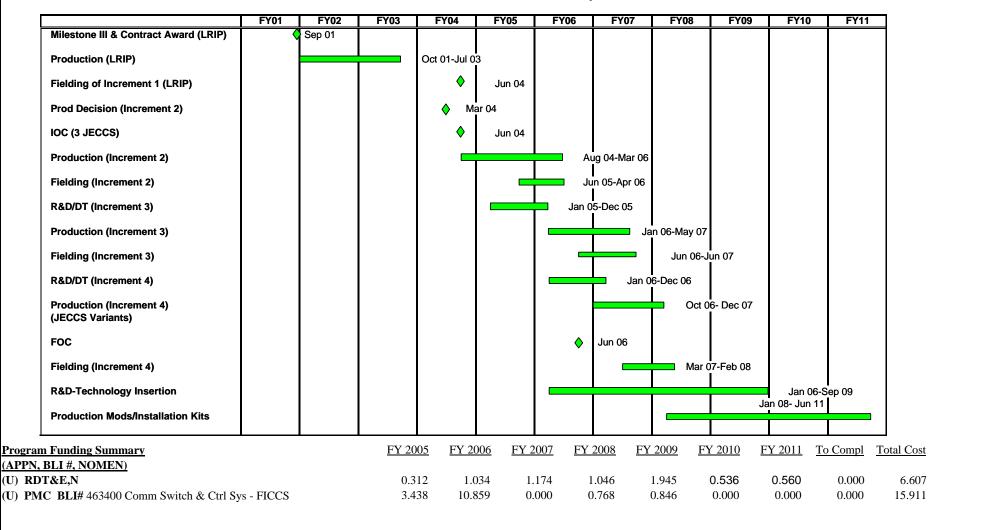
Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)									
(U) RDT&E,N	0.940	0.843	1.820	2.176	0.000	0.000	0.000	Cont	Cont
(U) PMC BLI# 463400 CommSwitch& Ctl Sys -NPM (JNMS)	2.989	6.528	0.000	2.232	0.000	0.000	0.000	0.000	11.749

		DATE:
Exhibit R-4/4a Schedule Profile/Detail		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems

NDM / INIMS) SCHEDIII E DETAIL	EV 2004	EV 2005	EV 2000	EV 2007	EV 2000	EV 2000	EV 2040	EV 2044
NPM (JNMS) SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
MDA Full Rate Production (FRP) Decision			1Q					
JNMS Initial Build 1.2 Post IOT&E Assessment		1Q						
JNMS Enhanced Initial Build 1.3 OT&E		3Q						
MDA Updates MS C (LRIP) Decision		3Q						
JNMS First Units Equipped (FUE)			2Q					
USMC JNMS Orders		3Q	1stQ	1stQ	1stQ			
USMC JNMS FRP Fielding			1stQ		2ndQ			
SPEED Next Major Release 10.0		3Q						
SPEED Spiral Software Development	1Q							
PDSS/Software/Subsequent Releases		3Q				4Q		

		DATE:
Exhibit R-4/4a Schedule Profile/Detail		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems

FICCS
Milestone Schedule / Total Resource Summary

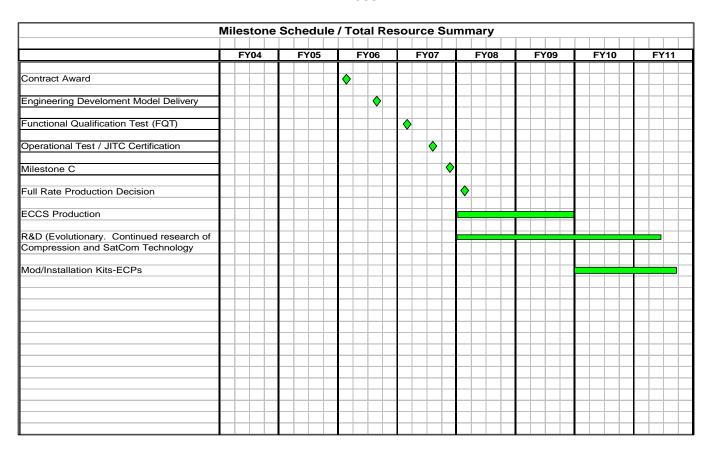


		DATE:				
Exhibit R-4/4a Schedule Profile/Detail		February 2006				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME				
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems				

FICCS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Fielding Decision - Increment 1 (LRIP)	3rdQ							
Production Decision - Increment II	2ndQ							
Full Rate Production of Increment II	4Q-		2Q					
Fielding Decision - Block II		3Q	4Q					
Increment III R&D		2Q 05	- 1Q					
Increment III Production			2Q	3Q				
Increment III Fielding			3Q	3Q				
R&D/DT Increment 4			2Q	1Q				
Production Increment 4 (JECCS Variant)				1Q	1Q			
FOC			3Q					
Fielding Increment 4				2Q	2Q			

		DATE:				
Exhibit R-4/4a Schedule Profile/Detail		February 2006				
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME				
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems				

# **ECCS**



Program Funding Summary (APPN, BLI #, NOMEN)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	<u>FY 2010</u>	FY 2011	To Compl	Total Cost
(U) RDT&E,N	0.000	1.500	1.500	0.000	0.000	0.000	0.000	0.000	3.000

		DATE:
Exhibit R-4/4a Schedule Profile/Detail		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2276 Communications Switching & Control Systems

ECCS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Contract Award			1Q					
Engineering Develoment Model Delivery			3Q					
Functional Qualification Test (FQT)				1Q				
Operational Test / JITC Certification				3Q				
Milestone C				4Q				
Full Rate Production Decision					1Q			
ECCS Production					1Q	4Q		
R&D (Evolutionary. Continued research of								
Compression and SatCom Technology)					1Q			2Q
Mod/Installation Kits-ECPs							1Q	3Q

EXHIBIT R-2a, RDT&E Project Justification									
				February 2006					
APPROPRIATION/BUDGET ACTIVITY  RDT&E, N /BA-7 Operational Sys Dev  PROGRAM ELEMENT NUMBER AND N 0206313M Marine Corps Communication					JMBER AND N ms Engineerin		on		
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Project Cost	8.088	9.537	8.919	9.237	9.417	9.741	9.967		
RDT&E Articles Qty									

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

(U) This project provides funds for engineering, test, and evaluation activity, which ensures that the systems being developed within the Program Element (PE) employ consistent standards for interoperability and, to the maximum extent feasible, use hardware, and software which is uniform across programs.

**Joint Distributed Engineering Plant (JDEP)** is a DoD mandated program to evaluate the interoperability of the Federation of Systems (FedOS) C4ISR configurations that support joint forces, evaluate the interoperability of new acquisition system, and provide an environment for engineering analysis to correct systems deficiencies and develop new capabilities.

Joint Interoperability of Tactical Command and Control Systems (JINTACCS) is a Joint Chiefs-of-Staff (JCS)/DoD-mandated program for joint development, implementation, and testing of data links under the direction of the Defense Information Systems Agency (DIAS).

Coalition Warrior Interoperability Demonstration (CWID) (a.k.a. Joint Warrior InterOperability Demonstration (JWID)) is a Joint Chiefs-of-Staff (JCS) and a Chairman of the Joint anual event. CWID remains the premier event to investigate interagency and coalition interoperability problems. CWID defines solutions that can be applied in the operational community. CWID's mission is to conduct military operations to deter, prevent, and defeat threats and aggressions aimed at the US, its territories and assigned areas of responsibilities as directed by the President or Secretary of Defense.

Marine Air-Ground Task Force Command, Control, Communications, Computers, and Intelligence Systems Engineering and Integration, Coordination. (MAGTF C4I SEI&C) is a non-acquisition effort which provides centralized planning and execution of Marine Corps Enterprise Information Technology and National Security Systems. It develops, certifies and manages the configuration of the Marine Corps Enterprise Systems and Technical Architecture products and uses these to support enterprise-level systems engineering. It is also used to conduct annual Federation-of-Systems (FEDOS) testing to determine the performance of critical Marine Corps systems-of-systems, directly supporting the Marine Corps Operating Forces.

### (U) B. ACCOMPLISHMENTS/ PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	1.385	1.417	1.465
RDT&E Articles Qty			

**JDEP:** DoD mandated program to evaluate the interoperability of the Federation of Systems (FoS) C4ISR configurations that support joint forces, evaluate the interoperability of new acquisition systems, and provide an environment for engineering.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	1.636	1.461	1.542
RDT&E Articles Qty			

JINTACCS: Joint development, implementation, and testing of data links under the direction of the Joint Interoperability Engineering Organization (JIEO).

EXHIBIT R-2a, RDT8	E Project Justification	DATE:					
	•		February 20	06			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND		PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev 0206313M Marine Corps Communications System C2277 Systems Engineering & Integration							
COST (\$ in Millions)		FY 2	005 FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost			97 1.178	1.251			
RDT&E Articles Qty							
CWID: to deter, prevent, and defeat threats a	and aggressions aimed at the US.	•	•	•			
COST (\$ in Millions)		FY 2	005 FY 2006	FY 2007			
Accomplishment/Effort Subtotal Cost		3.97	70 5.481	4.661			
RDT&E Articles Qty							
MACTE SEL&C. Engineering and technical	support for configuration management of MACTE	CAI eyetame and	its migration to the DILCOE Assi	et Program Group			

MAGTF SEI&C: Engineering and technical support for configuration management of MAGTF C4I systems and its migration to the DII COE. Assist Program Group Managers in meeting C4I Support Plans (KPPs). Maintain MSTAR system as technical roadmap to MAGTF C4

(U) Total \$ <u>8.088</u> <u>9.537</u> <u>8.919</u>

(U) PROJECT CHANGE SUMMARY:	FY2005	FY2006	FY2007
(U) FY 2006 President's Budget:	7.787	9.697	8.877
(U) Adjustments from the President's Budget:			
(U) Congressional Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	0.393		
(U) SBIR/STTR Transfer	-0.088		
(U) Minor Affordability Adjustment	-0.004	-0.160	0.042
(U) FY 2007 President's Budget:	8.088	9.537	8.919

CHANGE SUMMARY EXPLANATION:

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

### (U) C. OTHER PROGRAM FUNDING SUMMARY: N/A

# (U) Related RDT&E:

(U) PE 0206623M, Marine Corps Ground Combat/Supporting Arms Systems

### (U) D. ACQUISITION STRATEGY:

JDEP, JINTACCS, CWID, & MAGTF SE&IC: N/A as these are non-acquisition programs.

(U) E. Major Performers: FY02-FY05 Northrup Grumman, Stafford VA - Level of effort contract for logistics support, engineering, analytical, acquisition and program management for C4I programs in the areas of systems architectures, configuration management, interoprability and integration.

Requirements   Stype   Location   Cost   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   C									DATE:					
ROTAE, N /BA 7 Operational Sys   Dev				006	ebruary 2	F								Exhibit R-3 Cost Analysis
Cost Categories				AME	MBER AND NA	PROJECT NUI				NT	PROGRAM ELEMEI			APPROPRIATION/BUDGET ACTIVITY
Crailor to WBS, or Sys/Item   Method   Activity &   PY o   FY 05   Award   Cost   Total Requirements   Activity &   PY o   Even   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Cos			egration	eering & Into	tems Engin	C2277 Syst		on Systems	ommunicatio	ine Corps Co	0206313M Mar		s Dev	RDT&E, N /BA 7 Operational Sy
Requirements   Stype   Location   Cost   Cost   Date   Cost   C				FY 07		FY 06		FY 05		Total		Performing	Contract	Cost Categories
CWID	Target Valu	Total	Cost to	Award	FY 07	Award	FY 06	Award	FY 05	PY s		Activity &	Method	(Tailor to WBS, or Sys/Item
CWID   WR   MCSC Quantico, VA   0.116   0.020   10/04   0.013   12/06   0.032   12/06   Cont   Cont	of Contract	Cost	Complete	Date	Cost	Date	Cost	Date	Cost	Cost		Location	& Type	Requirements)
Contract   Contract		t Cont	Cont	12/06	0.752	12/06	0.755	12/04	0.740	2.483	gren	NSWC Dahlg	MIPR	CWID
Subtotal Product Dev   Cont		t Cont	Cont	12/06	0.032	12/06	0.013	10/04	0.020	0.116	ico, VA	MCSC Quantio	WR	CWID
Remarks:		t Cont	Cont	12/06	0.045	12/06	0.033	10/04	0.040	0.116	N HEAD	JTIC -INDIAN	MIPR	CWID
1.385   5.481   4.661		t Cont	Cont		0.829		0.801		0.800	2.715				Subtotal Product Dev
Cost Categories   Contract   Performing   Contract   Performing   Activity & PY's   FY 05   Award   FY 06   Award   FY 07   Award   Cost to   Total   Requirements   Strype   Location   Cost					A 661		5 /181		1 385					Remarks:
Method   Activity &   PY s   FY 05   Award   FY 06   Award   FY 07   Award   Cost   Total   Requirements   No.   Cost   Cost   Cost   Date				FY 07	7.001		0.701		1.000			Performing	Contract	Cost Categories
Requirements   Requirements   Requirements   Requirements   Republic   Requirements   Requirements   Republic   Requirements   Republic   Requirements   R	Target Value	Total	Cost to		FY 07		FY 06		FY 05					
CWID   C/FFP   NGIT, Stafford VA   1.724   0.297   10/04   0.377   12/05   0.422   12/06   Cont   Cont   Cont   MAGTF SEI&C   C/FFP   NGIT, Stafford VA   4.416   2.431   10/04   2.673   10/05   1.695   10/06   Cont   Cont   MAGTF SEI&C   WR   MCSC, Quantico, VA   0.768   0.078   10/04   0.994   10/05   0.145   10/06   Cont   Cont   MAGTF SEI&C   WR   MCTSSA, Cp Pndlin, CA   0.561   0.862   10/04   1.042   10/05   1.083   10/06   Cont   Cont   Cont   MAGTF SEI&C   WR   MCTSSA, Cp Pndlin, CA   0.593   0.069   0.505   0.052   0.506   0.072   0.507   Cont   Cont   JDEP   MPR   NSWC - Crane   0.324   0.140   0.205   0.307   0.206   0.329   0.507   Cont   Cont   JUNTACCS   C/FFP   NGIT, Stafford VA   0.593   0.672   10/04   0.861   10/05   0.991   10/06   Cont   Cont   JUNTACCS   WR   MCTSSA, Cp Pndlin, CA   0.561   0.964   10/04   0.600   10/05   0.641   10/06   Cont   Cont   Cont   JUNTACCS   WR   MCTSSA, Cp Pndlin, CA   0.561   0.964   10/04   0.600   10/05   0.641   10/06   Cont	of Contract				_							,		, ,
MAGTF SEI&C											ord VA			
MAGTF SEI&C   WR   MCSC, Quantico, VA   0.768   0.078   10/04   0.094   10/05   0.145   10/06   Cont   Cont   MAGTF SEI&C   WR   MCTSSA, CP Pndlm, CA   0.561   0.862   10/04   1.042   10/05   0.145   10/06   Cont   Co														
MAGTF SEI&C				l I										
JDEP														
JDEP														
JINTACCS										_				
JINTACCS														
Remarks:   Cost Categories   Contract (Tailor to WBS, or Sys/Item   Method Activity & Pys   Fy 05   Award Cost   Date   Cost   Cost   Date   Cost   Cost   Date   Cost   Cost   Date   Cost   Cost   Cost   Date   Cost   Cost   Cost   Cost   Date   Cost														
Cost Categories   Contract   Performing   Total   Pys   Fy 05   Award   Fy 06   Award   Fy 07   Award   Cost   Total   Cost   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Cost   Date   Cost   Date   Cost   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Date   Cost   Cost   Date   Cost		t Cont	Cont		5.288		6.006		5.513	9.540				Subtotal Support
Cailor to WBS, or Sys/Item   Method & Activity & PY s   FY 05   Cost   Cost   Date   Cost   Date   Cost   Cost   Date   Cost   Cost   Date   Cost   Cost   Cost   Date   Cost   Cost   Cost   Date   Cost   Cost   Cost   Date   Cost   Cost   Cost   Cost   Cost   Date   Cost   Cost   Cost   Cost   Cost   Cost   Cost   Date   Cost														Remarks:
Requirements   State		T		FY 07		FY 06		FY 05		Total		Performing	Contract	Cost Categories
JDEP	Target Value			Award	FY 07	Award	FY 06	Award	FY 05	PY s		Activity &	Method	(Tailor to WBS, or Sys/Item
MAGTF SEI&C         MIPR         MITRE         3.119         0.270         10/04         1.339         10/05         1.381         10/06         Cont         Cont           Subtotal T&E         3.775         1.446         2.397         2.445         Cont         Cont           Remarks:           Cost Categories         Contract         Performing         Total         FY 05         FY 06         FY 07         Award         FY 07         Award         FY 06         Award         FY 07         Award         FY 07         Award         FY 06         Award         Award	of Contract	Cost	Complete	Date	Cost	Date	Cost	Date	Cost	Cost		Location	& Type	Requirements)
Subtotal T&E         3.775         1.446         2.397         2.445         Cont         Cont           Remarks:           Cost Categories           (Tailor to WBS, or Sys/Item         Method         Activity &         PY s         FY 05         Award         FY 06         Award         FY 07         Award         Cost to Total           Requirements)         & Type         Location         Cost         Cost         Date         Cost         Date <td< td=""><td></td><td>t Cont</td><td>Cont</td><td>10/06</td><td>1.064</td><td>10/05</td><td>1.058</td><td>10/04</td><td></td><td>0.656</td><td>Pndltn, CA</td><td>MCTSSA, Cp</td><td>WR</td><td></td></td<>		t Cont	Cont	10/06	1.064	10/05	1.058	10/04		0.656	Pndltn, CA	MCTSSA, Cp	WR	
Remarks:  Cost Categories Contract Performing Total Py s FY 05 FY 06 FY 07 Total Requirements) Requirements) MAGTF SEI&C C/FFP NGIT, Stafford VA NGIT, Staff		t Cont	Cont	10/06	1.381	10/05	1.339	10/04	0.270	3.119		MITRE	MIPR	MAGTF SEI&C
Cost Categories   Contract   Performing   Total   FY 05   FY 06   FY 07   (Tailor to WBS, or Sys/Item   Method   Activity & PY s   FY 05   Award   FY 06   Award   FY 07   Award   Cost to   Total   Requirements)   & Type   Location   Cost   Cost   Date   Cost   Date   Cost   Date   Complete   Cost   MAGTF SEI&C   C/FFP   NGIT, Stafford VA   0.404   0.329   10/04   0.333   10/05   0.357   10/06   Cont   Cont   Subtotal Management   0.404   0.329   0.333   0.357   Cont   Cont   Remarks:		t Cont	Cont		2.445		2.397		1.446	3.775				Subtotal T&E
(Tailor to WBS, or Sys/Item Method Activity & PY's FY 05 Award FY 06 Award FY 07 Award Cost to Requirements)  Requirements)  Method Activity & PY's FY 05 Award FY 06 Award FY 07 Award Cost to Date Cost Date Date Cost Date Cost Date Date Cost Date Date Cost Date Date Cost Date Date Cost Date Date Cost Date Date Cost Date Date Date Date Date Date Date Dat														Remarks:
Requirements)         & Type         Location         Cost         Cost         Date         Cost         Date </td <td></td> <td>Τ</td> <td></td> <td>FY 07</td> <td></td> <td>FY 06</td> <td></td> <td>FY 05</td> <td></td> <td>Total</td> <td></td> <td>Performing</td> <td>Contract</td> <td>Cost Categories</td>		Τ		FY 07		FY 06		FY 05		Total		Performing	Contract	Cost Categories
Requirements)         & Type         Location         Cost         Cost         Date         Cost         Date         Cost         Date         Complete         Cost           MAGTF SEI&C         C/FFP         NGIT, Stafford VA         0.404         0.329         10/04         0.333         10/05         0.357         10/06         Cont         Cont           Subtotal Management           Remarks:	Target Value	Total	Cost to	Award	FY 07	Award	FY 06	Award	FY 05	PY s		Activity &	Method	(Tailor to WBS, or Sys/Item
MAGTF SEI&C         C/FFP         NGIT, Stafford VA         0.404         0.329         10/04         0.333         10/05         0.357         10/06         Cont         Cont           Subtotal Management         0.404         0.329         0.333         0.357         Cont         Cont           Remarks:	of Contract	Cost	Complete	Date	Cost	Date	Cost	Date	Cost	Cost		Location	& Type	Requirements)
Remarks:		t Cont	Cont	10/06	0.357	10/05	0.333	10/04	0.329	0.404	ord VA	NGIT, Staffor	C/FFP	MAGTF SEI&C
	]	t Cont	Cont		0.357		0.333		0.329	0.404				
Total Cost 0.000 0.527 9.010 Cont Cont														Remarks:
10tal COSt     0.010   5.337   6.315   COIII   COIII		t Cont	Cont		8.919		9.537		8.088	16.434				Total Cost
		_												

UNCLASSIFIED									
EXHIBIT R-2a, RDT&E				DATE:					
						February 200	)6		
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME				PROJECT NU	NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Cor	0206313M Marine Corps Communications System			C2278 Air De	2278 Air Defense Weapons Systems			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Project Cost		20.247	16.001*	6.423	10.940	6.374	5.490	5.071	
RDT&E Articles Qty									

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

- (U) This project encompasses two sub-element programs which are part of the Integrated Air Defense System for the Marine Corps.
- 1. The Complementary Low Altitude Weapons System (CLAWS) is a mobile ground based air defense missile system designed to defeat threat cruise missiles, unmanned aerial vehicles, rotary wing and fixed wing aircraft. CLAWS shall provide a rapidly deployable, mobile, high firepower, all-weather, standoff air defense system to defend Marine Expeditionary Forces and Naval Forces from attack by cruise missiles, aircraft and UAVs. It will complement existing Short Range Air Defense (SHORAD) capabilities and will interface with current and proposed Marine Command and Control Systems, sensors, and data paths. CLAWS Increment-0 will provide the initial capability. CLAWS Increment-1 will align with and become the launcher for Army Surface Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM) Increment-1 program. The Marine Corps relies on the Army SLAMRAAM Increment-1 program to develop the final threshold capability with the CLAWS Increment-1 launcher.
- 2. Ground Based Air Defense Transformation (GBAD-T): Based upon the deployment of the Low Altitude Air Defense (LAAD) Battalion and their employment of the Stinger Missile, GBAD-T transforms Air Defense equipment through technology insertion and equipment repackaging to address capability gaps as the result of equipment obsolesence and the emergent and evolving threats to the Marine Air Ground Task Force (MAGTF). GBAD-T consist of four efforts: 1) sustainment of currently fielded LAAD equipment/assets; 2) fielding and support of the Advanced Man-Portable Air Defense System (A-MANPADS) that replaces the Avenger Weapon System and existing MANPADS vehicles; 3) replaces the Remote Terminal Unit, an effort that replaces an 18 pound laptop computer that provides Situational Awareness and Command and Control to the Stinger and A-MANPAD teams. Replacement will interface with and be capable of receiving a Common Aviation Command and Control Systems (CAC2S) broadcasted link; and 4) Replaces the unsupportable and obsolete Stinger Missile Night Sight with the PAS-13 Thermal Sight. R&D is required to incorporate the Stinger Missile reticule and hardware interface and execute developmental testing. The PAS-13 provides twice the
- 3. Mounted Cooperative Target ID System (MCTIS) (formerly known as Combat Identification (CID)) will be a cooperative battlefield target identification device that employs encrypted, Ka band, millimeter wave, question and answer technology. It will consist of interrogator and transponder antennae, transceiver, and communications/electrical interface unit. It will be fielded as two variants: interrogaror/transponder system for Expeditionary Fighting Vehicle (EFVs), Light Amphibious Vehicles (LAVs), and M1A1s; and transponder-only system for combat support and combat service support vehicles. When fielded, mounted weapon systems will have the capability to identify targets as friendly or unknown, at ranges to 6 km, before engaging them. They and all other designated vehicles will also possess the capability to rapidly identify themselves as friendly to weapon systems equipped with comparable systems prior to being engaged. As a result, incidents of fratricide and collateral damage will decline, while the range at which targets may be engaged without fear of misidentification will increase dramatically. The system will be interoperable with Joint, Allied, and Coalition forces' cooperative target identification systems.
- 4. The Joint Combat Identification Evaluation Team (JCIET) is a superb opportunity to conduct quality assurance testing of services' systems operating in a joint environment. It conducts assessments in a number of verues including: Military Operations in Urban Terrain (MOUT) exercises, Advanced Comcept Technology Demos (ACTD), Joint Training exercises, Combined Armed Training Exercises (CAXs), and Weapons Tactics Instruction (WTI) events. Its mission is to improve Tactics, Techniques and Procedures (TTP) across all Combat Identification mission areas. (It is not an acquisition program, therefore it does not have specific milestone dates.)

\*\$3.7M of FY 2006 funds will be used to forward finance FY 2007

	UNCLASSIFIED				
EXHIBIT R-2a, RDT&E I	Project Justification		DATE: February 2006		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAM	ΛΕ ,	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Syste	m	C2278 Air Defense Weapons	Systems	
U) B. ACCOMPLISHMENTS/ PLANNED PROGRAI	M:				
COST (\$ in Millions)	FY	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		903	0.000	0.000	
RDT&E Articles Qty					
CLAWS: Development, design, test and integration i	issues related to the six Production Representative Systems.				
COST (\$ in Millions)	FY	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		.457	0.791	1.073	
RDT&E Articles Qty			0.101		
	ing (DT), Operational Testing (OT), and develop a capability with the C	CLAWS Inc	rement I launcher.		
COST (\$ in Millions)		2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		000	0.720	0.000	
RDT&E Articles Qty					
CLAWS: Interim Contract Support for Pre-Fielding l	Increment I assets.		<u> </u>		
COST (\$ in Millions)	FY	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	3.	932	1.514	1.369	
RDT&E Articles Qty					
CLAWS: Program Management Support.					
COST (\$ in Millions)	FY	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.	000	0.000	0.076	
RDT&E Articles Qty					
9 11	ng prior to FY07 is found in Project C2273 within this PE.				
COST (\$ in Millions)		2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.	000	0.000	0.760	
RDT&E Articles Qty					
JCIET: Data and analysis for exercise. Funding prior					
COST (\$ in Millions)		2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	0.	000	0.000	0.025	
RDT&E Articles Qty					
JCIET: Program management support Funding prior	•	0005	F1/ 2222	<b>5</b> // 2225	
COST (\$ in Millions)		2005	FY 2006	FY 2007 <b>0.000</b>	
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty	0.	121	1.799	0.000	
GBAD TRANSFORMATION: Program Manageme	ont Sarvices				
COST (\$ in Millions)	-	2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		2005 <b>772</b>	3.700	0.000	
RDT&E Articles Qty	0.		3.700	J.000	
GBAD TRANSFORMATION: Product Development	nt (CLAWS/CAC2S Integration)				
COST (\$ in Millions)		2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		<u>2003</u> <b>000</b>	2.000	0.000	
toooniphoninchi Liiott Oubtotal Oost	U.	<del></del>	2.000	0.000	

tion			DATE:	
				February 2006
GRAM ELEMENT NU			PROJECT NUMBER AND NA	
313M Marine Corps	Communicati	•	C2278 Air Defense Weapons	
				FY 2007
		0.065	1.100	0.620
Integration)				
		FY 2005	FY 2006	FY 2007
		0.985	0.440	0.000
ine support)				
		FY 2005	FY 2006	FY 2007
		0.812	1.000	1.000
		FY 2005	FY 2006	FY 2007
				0.500
3.	<u>,                                    </u>		1	
		FY 2005	FY 2006	FY 2007
		0.300	1.137	0.700
		FY 2005	FY 2006	FY 2007
		0.150	0.300	0.100
		FY 2005	FY 2006	FY 2007
		0.250	0.500	0.200
		<u>20.247</u>	<u>16.001</u>	<u>6.423</u>
FY2005	FY2006	<b>FY2007</b>		
22.535	16.253	15.742		
-1.968		1.351		
20.247	16.001	6.423		
	FY2005 22.535  -1.968 -0.303 -0.017	FY2005 FY2006 22.535 16.253	FY 2005 0.985  ane support)  FY 2005 0.812  FY 2005 0.500  S.  FY 2005 0.300  FY 2005 0.300  FY 2005 0.150  FY 2005 0.150  FY 2005 0.150  FY 2005 1.351 1.968 1.351 -0.303 -0.017 -0.252 -10.670	FY 2005 FY 2006  0.065  1.100  Integration)  FY 2005 FY 2006  0.985  0.440  Integration)  FY 2005 FY 2006  0.812  1.000  FY 2005 FY 2006  0.812  1.000  FY 2005 FY 2006  0.500  1.000  S.  FY 2005 FY 2006  0.500  1.137  FY 2005 FY 2006  0.300  1.137  FY 2005 FY 2006  0.300  FY 2005 FY 2006  0.300  Integration)  FY 2005 FY 2006  0.300  FY 2005 FY 2006  0.150  0.300  FY 2005 FY 2006  0.250  0.500  Integration)  FY 2005 FY 2006  0.250  Integration)  FY 2005 FY 2006  0.250  Integration)  FY 2005 FY 2006  0.250  Integration)  FY 2005 FY 2006  Integration)  FY 2005 FY 2006  Integration)  FY 2005 FY 2006  Integration)  Integration)  FY 2005 FY 2006  Integration)  Integration)  FY 2005 FY 2006  Integration)  Integration)  Integration)  FY 2005 FY 2006  Integration Integration  Integration)  Integration Integration  Inte

		UI	NCLASSI	FIED					
EXHIBIT R-2a, RDT&E Project	t Justification					DATE:			
								February 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT NU	JMBER AND N	IAME		PROJECT NUME	BER AND NAM	1E	
RDT&E, N /BA-7 Operational Sys Dev 0206313M Marine Corps Comm			Communicat	ions System		C2278 Air Defen	se Weapons S	Systems	
(U) C. OTHER PROGRAM FUNDING SUMMARY:									
Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	<b>Total Cost</b>
(U) PMC LINE BLI 489000 CLAWS	6.144	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.144
(U) PMC LINE BLI 305100 CLAWS	0.000	0.418	3.155	2.353	33.689	31.056	17.305	Cont	Cont
(U) PMC LINE BLI 300600 GBAD-T	9.758	1.891	3.894	1.975	12.421	11.533	14.353	Cont	Cont

#### (U) Related RDT&E:

PE 0603216C (Ballistic Missile Defense Organization, Theater Missile Defense)

#### (U) D. ACQUISITION STRATEGY:

(U) CLAWS: CLAWS integrates government furnished equipment (GFE), non-developmental items (NDI) and new technology to develop a surfaced launched Anti-Air launcher. CLAWS will utilize the AMRAAM (current inventory DoD missile), existing High Mobility Multi-purpose Wheeled Vehicle (HMMWV) and contractor developed missile launch platform. CLAWS completed Developmental Test (DT) in FY05 and completed Operational Test (OT) during 1st Qtr FY06. IOC will occur no later than 4th Qtr FY06. CLAWS provides a Joint Emergency Operational Capability from FY06-FY09 and provides concept validation and risk mitigation for the SLAMRAAM program. CLAWS Increment I will align with and become the launcher for SLAMRAAM Increment I. The Marine Corps relies on SLAMRAAM Increment to develop the final threshold capability with the CLAWS Increment I launcher.

U) GBAD- TRANSFORMATION: 1) GBAD sustainment provides the LAAD Battalions with the equipment required to maintain an Air Defense capability in support of the MAGTF mission. The sustainment program provides lifecycle management functions to support continuous and improved training, obsolescence mitigation through technology and use of commercial or government off-the-shelf equipment, and reduced ownership costs. 2) The Advanced MANPADS is a low risk, low-cost effort that has been designated an Abbreviated Acquisition Program and will enter the acquisition phase at Milestone C, with a fielding decision currently planned for Jan 06. 3) The RTU replacement requires a two year committment to design, fabricate and test. Following a successful test, out year PMC will support procurement. 4) The PAS-13 Thermal Sight will replace the obsolete and unsupportable Stinger Night (PAS-18). The PAS-13 has been put on contract to support the LAAD units M240B Machine Guns. Using existing DOD contracts with the manufacturer, the Stinger Missile reticule and hardware interfaces are being developed that will double the range and reduce the weight by 50%. This capability will provide a common Thermal Sight for all medium machine guns and the Stinger Missile system.

(U) MCTIS: Economy of scales dictate a strategy that highly leverages Joint/coalition evolutionary development efforts. The FY03- FY05 Coalition Combat ID Advanced Concept Technology Demonstration (CCID ACTD) process will evaluate several millimeter wave (mmW) Target Identification systems with the objective of identifying the best system to satisfy the Marine Corps requirement. FY04/05 efforts will focus on unique system integration efforts required on Marine Corps vehicles not already accomplished through similar Joint efforts. It is anticipated system procurement acquisition will be accomplished on a Joint/coalition basis to take advantage of parallel support efforts.

#### (U) E. MAJOR PERFORMERS:

#### CLAWS:

FY05 Raytheon, Tewsbury, MA. System Development & Demonstration; Operational Testing.

FY06 Raytheon, Tewksbury, MA. Fielding/sustainment for CLAWS Increment 0 Launchers. SLAMRAAM Increment I System Development; CLAWS Increment I Launcher DT.

FY07 Raytheon, Tewksbury, MA. System Development and Demonstration; Developmental Test.

#### GBAD Transformation:

FY05 AT&T, Vienna, VA. Modeling and Simulation.

FY06 DRS Palm Bay, FL PAS-13 HW/SW Integration

FY06 Raytheon, Tewksbury, MA RTU Replacement, S/W Integration

FY06 Raytheon, Tewksbury, MA. GBAD/CLAWS Integration.

FY07 NSWC, Crane, IN. Technical Engineering Services.

### MCTIS:

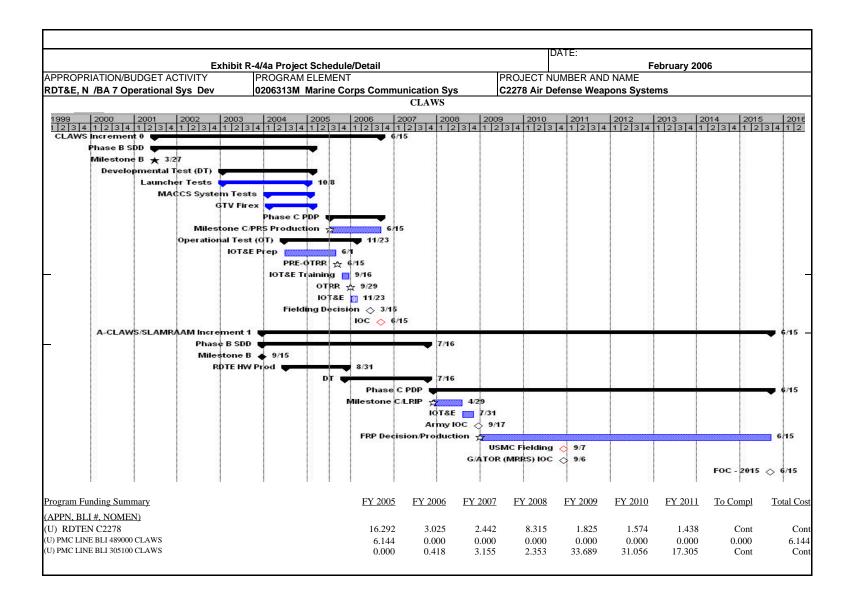
FY05-FY07 NSWC, Crane, IN Engineering Services.

FY05-FY07 MarCorSysCom (PA&E) LCCE Effort. Contractor Techolote

FY05-FY07 MarCorSysCom CEOSS support contract recompeted in Sep 04. Contractor Anteon

					DATE:							
		ibit R-3 Cost Analysis							ary 2006			
APPROPRIATION/BUDGET	ACTIVITY	PROGRAM ELEM				NUMBER						
RDT&E, N /BA 7 Operationa	al Sys Dev	0206313M Marin	e Corps Co	mmunica	C2278 Air	Defense W	leapons S	Systems				
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
CLAWS	RCP	Raytheon, Andover, MA	16.840	0.903	03/05	0.157	01/06	0.113	01/07	Cont	Cont	
GBAD TRANSFORMATION	WR	NSWC, Crane, IN(PAS-13 HW)	0.000	0.772	02/05	0.500	06/06			Cont	Cont	
GBAD TRANSFORMATION	RCP	EG&G, Stafford, VA	0.000	0.188	10/04	0.310	12/06			Cont	Cont	
GBAD TRANSFORMATION	RCP	DRS Tech, Palm Bay FL (PAS-13 SW)				0.500	05/06					
GBAD TRANSFORMATION	RCP	Raytheon, Tewksbury, MA (RTU)				1.000	06/06			Cont	Cont	
GBAD TRANSFORMATION	RCP	Raytheon, SanDiego,CA (CAC2S)	0.000			3.700	02/06			0.000	1.500	1.00
GBAD TRANSFORMATION	RCP	MCSC, QUANTICO, VA	0.000			1.314	01/06			<u> </u>		
MCTIS (CID)	WR	NSWC, Crane, IN	0.994	0.974	10/04	2.837	02/06	1.900	01/07	Cont	Cont	
JCIET	WR	MCSC, Quantico, VA						0.390	01/07	Cont	Cont	
JCIET	WR	NSWC, Crane, IN						0.335	01/07	Cont	Cont	
JCIET	RCP	Anteon, Stafford, VA						0.111	01/07	Cont	Cont	
JCIET	MIPR	CECOM, Ft Monmouth						0.025	01/07	Cont	Cont	
Subtotal Product Dev			17.834	2.837		10.318		2.874		Cont	Cont	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
CLAWS	WR	MCSC, Quantico, Va	0.401	0.025	01/05			0.025	01/07	Cont	Cont	
CLAWS	WR	MCCDC, Quantico, VA	0.200	0.090	01/05			0.094	01/07	Cont	Cont	
GBAD TRANSFORMATION	WR	MCTSSA Cp Pendleton CA				0.120	11/05					
GBAD TRANSFORMATION	WR	NSWC, Crane, IN(ADCP GBDL-E)	0.130			0.395	01/06					
GBAD TRANSFORMATION	RCP	MCCDC, Quantico, VA	0.000	0.798	10/04	0.050	10/05			0.000	1.298	1.298
GBAD TRANSFORMATION	RCP	MCCDC, Quantico, VA	0.000			0.050	04/06			0.000	1.298	1.298
Subtotal Support			0.731	0.913		0.615		0.119		Cont	Cont	
Remarks:		•								•		
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07	1		
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
CLAWS	RCP	Raytheon, Andover, MA	3.999	2.074	06/05	0.171	01/06	0031	Date	Cont	Cont	
CLAWS	RCP	MCSC Quantico, VA	0.646	1.080	01/05	0.171	01/00			Cont	Cont	
CLAWS	MIPR	White Sands, NM	2.551	1.769	03/05	1				Cont		
CLAWS	WR	MCOTEA, Quantico, VA	0.725	1.037	01/05	0.620	01/06	0.025	01/07	Cont	Cont	
CLAWS	MIPR	JSPO, Eglin, AFB, FL	3.154	1.728	06/05	0.020	0 1,700	0.020	0.70.	Cont	Cont	
CLAWS	MIPR	Pt. Mugu, CA	2.045	0.447	03/05					Cont	Cont	1
CLAWS	MIPR	PEO ASMD	2.040	-	06/05					Cont	Cont	1
	+			1.906								1
CLAWS	MIPR	SHORAD		1.274	01/05					Cont	Cont	
CLAWS	MIPR	Aberdeen, Maryland		0.142	03/05							-
GBAD TRANSFORMATION	MIPR	WSMR, NM (PAS-13/ RTU Testing)	0.000	0.138	07/05			0.611	03/07	0.000	0.138	
GBAD TRANSFORMATION	MIPR	Aberdeen, MD	0.000	0.047	06/05					0.000	0.047	
Subtotal T&E			13.120	11.642		0.791		0.636		Cont	Cont	
Remarks:									-	-		

					DATE:							
	Exh	ibit R-3 Cost Analysis						Febru	ary 2006			
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM ELEM	ENT		PROJECT	NUMBER	AND NAM	Е				
RDT&E, N /BA 7 Operationa	l Sys Dev	0206313M Marino	e Corps Co	mmunica	C2278 Air	Defense V	eapons S	systems				
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Target Value
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Comp	Cost	of Contract
CLAWS	RCP	NGIT, Stafford, VA	4.204	2.085	02/05	1.600	01/06	1.700	01/07	Cont	Cont	
CLAWS	WR	MCTSSA Cp Pendleton CA	0.024	0.240	01/05			0.060	01/07	Cont	Cont	
CLAWS	WR	NSWC Crane, IN	0.618	0.446	04/05			0.285	01/07	Cont	Cont	
CLAWS	MIPR	AMRDEC Redstone Arsenal, AL	0.598	0.655	01/05	0.477	02/06	0.140	01/07	Cont	Cont	
CLAWS	WR	MCSC, Quantico	0.531	0.391	01/05					Cont	Cont	
GBAD TRAANSFORMATION	WR	MCSC,QUANTICO, VA	0.000			1.100	12/05	0.009	12/06	Cont	Cont	
MCTIS (CID)	RCP	Anteon, Stafford, VA	1.291	0.900	10/04	1.000	01/06	0.500	01/07	Cont	Cont	
MCTIS (CID)	WR	MCSC, Quantico, VA	0.056	0.031	01/05	0.020	10/05	0.030	01/07	Cont	Cont	
MCTIS (CID)	RCP	Tecolote, Goleta, CA	0.000	0.074	01/05	0.080	03/06	0.070	03/07	0.000	0.075	
MCTIS (CID)	RCP	CACI, Chantilly, VA	0.000	0.033	10/04							
Subtotal Management			7.322	4.855		4.277		2.794		Cont	Cont	
Remarks:												
Total Costs			39.007	20.247		16.001		6.423		Cont	Cont	



Evhibit D 4/	a Drainat Sahadula/Datail				DATE:		Fabruary 20	00		
	a Project Schedule/Detail			PRO IECT	<u>I</u> Number ai		February 20	06		
	06313M Marine Corps Comm	unication S	Svs		-	efense Weapons Systems				
			-,-							
		1				1				
CLAWS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011		
Increment 0										
Development Testing		2nd Qtr								
LRIP Decision		3rd Qtr								
Operational Testing			1st Qtr							
Fielding Decision			2nd Qtr							
Initial Operational Capability			3rd Qtr							
, , , , , , , , , , , , , , , , , , , ,										
Increment I										
Development Testing				3rd Qtr						
LRIP Production					2nd Qtr					
Operational Testing					4th Qtr					
Fielding Decision					4th Qtr					
Initial Operational Capability					4th Qtr					

Exhibit R-4/4a Project Schedule/Detail

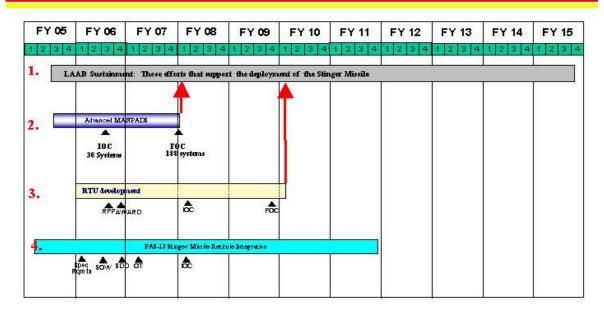
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NUMBER AND NAME

RDT&E, N /BA 7 Operational Sys Dev 0206313M Marine Corps Communication Sys C2278 Air Defense Weapons Systems



# Acquisition Timeline

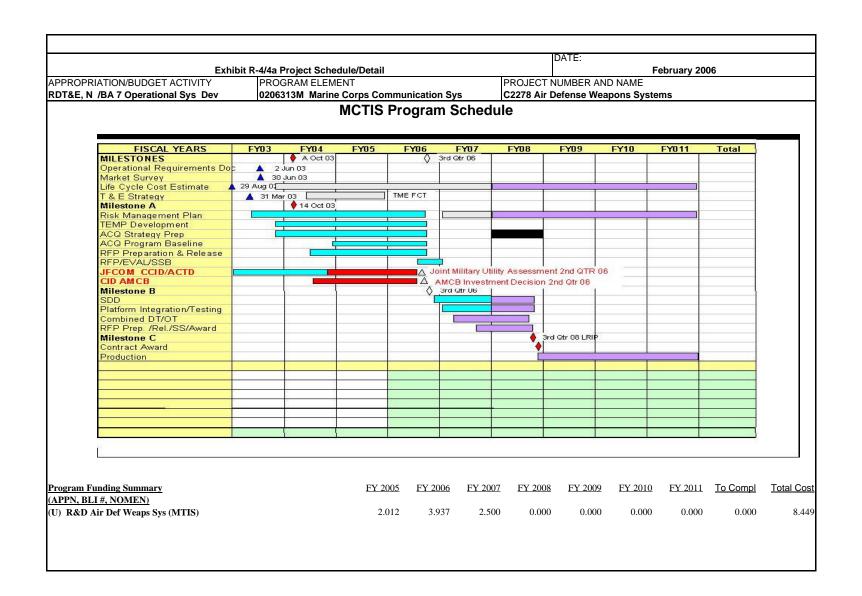
# USMC Ground Based Air Defense (GBAD) (T) Transformation



1 1/17/2006

Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)									
(U) RDTEN C2278	1.943	9.039	0.620	4.174	4.392	3.788	4.231	Cont	Cont
(U) PMC LINE BLI 300600 GBAD-T	9.758	1.891	3.894	1.975	12.421	11.533	14.353	Cont	Cont

							DATE:			
		it R-4/4a Project Schedu				IDD O JEGE			February 20	006
	N/BUDGET ACTIVITY	PROGRAM ELEMEN					NUMBER A			
., N /BA	7 Operational Sys Dev	0206313M Marine (			<u> </u>		Defense We			E) ( 00 ( )
	GBAD TRANSFORMATION		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	Advanced MANPADS (AAP	()								
	Milestone C/ Full Rate Produ	ıction			1st Qtr					
	Fielding Decision				2nd Qtr					
	IOC				3rd Qtr					
	FOC					3rd Qtr				
	Remote Terminal Unit (RTI	J Replacement)								
	Design and Interface Requir	ements (internal)			3rd Qtr					
	Command and Control Proto	ocol (CAC2S)			3rd Qtr					
	CAC2S Interface (External)					2nd Qtr				
	RTU Replacement Testing					2nd Qtr				
	RTU Replacement Fielding						2nd Qtr			
	PAS-13 Thermal Sight (Stir	nger Reticule)								
	Requirements / Specification	ns			2nd Qtr					
	Request for Proposal				2nd Qtr					
	System Development and D	emonstration			4th Qtr					
	Operational Testing/FUE					1st Qtr				
	Fielding	<del></del>					1st Qtr			



RIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NUMBER AND NAME	PROGRAM ELEMENT   PROJECT NUMBER AND NAME	Evhihir	R-4/4a Project Schedule/Detail				DATE:		February 20	206
MCTIS SCHEDULE DETAIL         FY 2004         FY 2005         FY 2006         FY 2007         FY 2009         FY 2010         FY 2011           Milestone A         1st Qtr         3rd Qtr <th>MCTIS SCHEDULE DETAIL         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008         FY 2009         FY 2010         FY 2011           Milestone A         1st Qtr         3rd Qtr<th></th><th></th><th></th><th></th><th>PROJECT I</th><th>L NUMBER AI</th><th></th><th>rebiualy 20</th><th><i>,</i>000</th></th>	MCTIS SCHEDULE DETAIL         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008         FY 2009         FY 2010         FY 2011           Milestone A         1st Qtr         3rd Qtr <th></th> <th></th> <th></th> <th></th> <th>PROJECT I</th> <th>L NUMBER AI</th> <th></th> <th>rebiualy 20</th> <th><i>,</i>000</th>					PROJECT I	L NUMBER AI		rebiualy 20	<i>,</i> 000
MCTIS SCHEDULE DETAIL         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008         FY 2009         FY 2010         FY 2011           Milestone A         1st Qtr         3rd Qtr <th>MCTIS SCHEDULE DETAIL         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008         FY 2009         FY 2010         FY 2011           Milestone A         1st Qtr         3rd Qtr<th>N /BA 7 Operational Sys Dev</th><th></th><th>unication S</th><th>Sys</th><th></th><th></th><th></th><th>ems</th><th></th></th>	MCTIS SCHEDULE DETAIL         FY 2004         FY 2005         FY 2006         FY 2007         FY 2008         FY 2009         FY 2010         FY 2011           Milestone A         1st Qtr         3rd Qtr <th>N /BA 7 Operational Sys Dev</th> <th></th> <th>unication S</th> <th>Sys</th> <th></th> <th></th> <th></th> <th>ems</th> <th></th>	N /BA 7 Operational Sys Dev		unication S	Sys				ems	
Milestone A         1st Qtr           Milestone B         3rd Qtr	Milestone A         1st Qtr           Milestone B         3rd Qtr									
Milestone B 3rd Qtr	Milestone B 3rd Qtr	MCTIS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
		Milestone A	1st Qtr							
Integration Testing 1st Qtr	Integration Testing 1st Qtr	Milestone B			3rd Qtr					
		Integration Testing				1st Qtr				

EXHIBIT R-2a, RDT&E Project Justification					DATE:			
•					I	February 2006	3	
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Development	0206313M Marine Corp	0206313M Marine Corps Communication Systems			C2315 Traini	ng Devices/Si	mulators	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		4.173	8.806	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								
U) A. MISSION DESCRIPTION AND BUDGET ITEM	JUSTIFICATION:		•			•	•	

(U) Training simulators supported by this program element include Joint Simulation System (JSIMS), Closed Loop Artillery Simulation System (CLASS), Multiple Integrated Laser Engagement System (MILES 2000), Special Effect Small Arms Marking System (SESAMS), Combined Arms Command & Control Training Upgrade System (CACCTUS), MAGTF Tactical Warfare Simulation (MTWS) Enhancements, Combat Team Decision, and Joint National Training Center (JNTC) Investment. These training systems provide tactical weapons and decision-making skill training from entry level through Marine Air-Ground Task Force (MAGTF) staff level. CLASS integrates Marine Corps training requirements with the Advanced Field Artillery Tactical Data System (AFATDS). Systems will be interoperable and will allow for mission planning, mission rehearsal and concept evaluation in a valid synthetic environment with objective, timely feedback. Through live, virtual and constructive simulation, the Marine Corps will have the means to train jointly, educate, develop doctrine and tactics, formulate and assess operational plans, assess warfighting situations and define operational requirements.

### NOTE: Funding for this project in FY07 and beyond is found in PE 0206623M.

#### B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	2.876	5.666	0.000
RDT&E Articles Qty			

CACCTUS: Initial Proto-type installed at 29 Palms, CA for verification and validation testing by Tactical Training Exercise Control Group (TTECG). Transitioning continues from test bed to target simulation engine. Integration of operation C4I systems with sim. Development and integration of sim interfaces and visualization tools.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.369	1.582	0.000
RDT&E Articles Qty			

MILES: Develop Dry Fire Trigger capability, develop extended service capability for the Automatic Small Arms Alignment Fixtures (ASAAF), develop Wireless RF Detectors belt, and integrate MK19 40 mm machine gun capability into existing MILES 2000 inventory.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.540	1.558	0.000
RDT&E Articles Qty			

MTWS Enhancements: The MTWS support initiative includes software and system developement support, training network infrastructure support, and hardware support to include: Develop an HLA interface between MTWS and other simulation models, such as Joint Conflict and Tactical Simulation (JCATS) and other selected models. Develop MTWS-C4I interoperability with Command and Control PC (C2PC), Army Field Artillery Tactical Data System (AFATDS), Theater Battle Management Corps System (TBMCS), and Common Aviation Command and control System (CAC2S). Enhanced man machine interface for efficient exercise generation and execution processes, and reduce the number of exercise operators and controllers. Refresh computer hardware training suites, and supporting training communication network infrastructure. Develop Course of Actions and Analyses (COAA) capability. Rules of Engagement for multi-sided warfare and organizations. Airborne Electronic Warfare and Advanced synthetic natural environment upgrade.

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.388	0.000	0.000
RDT&F Articles Otv			

Manpower Training Analysis (MTA): Provides MTA support to prioritized collection of Marine Corps System Command (MCSC) sponsored acquisition programs. Provides for development of training plans, conduction of front-end-analysis to assess Total Force Structure impacts and interfacing with TECOM to institutionalize life cycle processes.

(U) Total \$ 4.173 8.806 0.000

EXHIBIT R-2a, RDT&E Project Justification						DATE:			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					February 2006 PROJECT NUMBER AND NAME			
RDT&E, N /BA-7 Operational Sys Development	0206313M Marine Corps Communication Systems					C2315 Training Devices/Simulators			
(U) PROJECT CHANGE SUMMARY:	FY2005 FY2006 FY2007					zoro maning	, Devices/em	ididioi 5	
				·					
(U) FY 2006 President's Budget:		4.804	8.941	7.333					
(U) Adjustments from the President's Budget:									
(U) Congressional/OSD Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases		-0.511							
(U) Reprogrammings (U) SBIR/STTR Transfer		-0.311 -0.117							
(U) Minor Affordability Adjustment		-0.117	-0.135	-7.333					
(O) Willion Allordability Adjustifierit		-0.003	-0.135	-7.333					
(U) FY 2007 President's Budget:		4.173	8.806	0.000					
(U) Funding: See above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
(U) C. OTHER PROGRAM FUNDING SUMMARY:									
Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC, BLI# 653200 Trng Dev/Sims	96.546	57.581	13.797	30.651	55.935	17.889	18.609	Cont	Cont
(U) FMC, BLI# 033200 Trilg Dev/Sillis	90.340	37.381	15.797	30.031	33.933	17.009	18.009	Cont	Cont
(II) Deleted DDTS F. Net Applicable									
(U) Related RDT&E: Not Applicable									
(U) D. ACQUISITION STRATEGY: (U) CACCTUS - Competitive Cost plus Fixed Fee contract (CPFF). (U) MILES - Competitively award Cost Plus Incentive Fee (CPIF) development contract. (U) MTWS Enhancements - Competitively award Cost Plus Incentive Fee (CPIF) development contract. (U) Manpower Training Analysis - Competitively award service contract. (U) E. MAJOR PERFORMERS:  Not Applicable for any programs with Training Devices/Simulators, C2315.									

Eu		at Amahada			DATE:			Fala				
		ost Analysis	NACNIT				DDO IEO		uary 2006			
APPROPRIATION/BUDGET AC		PROGRAM ELE							R AND NA			
RDT&E, N /BA 7 Operational S				Communi		stems		aining De	vices/Sim	ulators		_
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Product Dev - MILES	SS/FP	PAE, Deland FL	0.000	0.058	12/04					0.000	0.058	
Product Dev - MILES	SS/FP	Saab, Orlando, FL (Wireless)		0.000		0.327	02/06			0.000	Cont	
Product Dev - MILES	SS/FP	Unitech, Orlando, FL (DT)	0.000	0.000		0.050	02/06			0.000	0.050	
Product Dev - MILES	SS/FP	Unitech, Orlando, FL (ASAAF	=)			0.160	02/06			0.000	0.160	
Product Dev - MILES	SS/FP	Unitech, Orlando, FL (MK19)				0.240	02/06			0.000	0.240	
Subtotal Product Dev			0.000	0.058		0.777		0.000		Cont	Cont	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
SW Dev - Miles	SS/FP	Saab, Orlando, FL (Wireless)	)			0.327	02/06		1	0.000	0.327	1
SW Dev - Miles	SS/FP	Unitech, Orlando, FL (ASAAF	=)			0.040	02/06			0.000	0.040	$\top$
SW Dev - Miles	SS/FP	Unitech, Orlando, FL (MK19)	/	1	1	0.060	02/06	1	1			1
Software Dev-CACCTUS	CPFF*	PM TRASYS, Orlando, FL	0.000	2.189	04/05	2.801	01/06		1	0.000	4.990	+
Software Dev-CACCTUS	CPFF*	PM TRASYS, Orlando, FL	0.000	0.625	0 1/00	2.473	03/06			0.000	3.098	
SW Dev, CACCTUS	C/IDIQ	NAWC, Orlando, FL	1.400	0.062	04/05	0.392	01/06			0.000	1.854	+
SW Dev, CACCTUS	MIPR	PEO STRI. Orlando FL	1.954	0.002	04/03	0.392	01/00			0.000	1.954	+
		, , , , , , , , , , , , , , , , , , , ,		0.540	04/05	4.044	40/05					+
Dev Support - MTWS	SS/T&M	PM TRASYS, Orlando, FL	0.000	0.540	01/05	1.341	10/05			0.000	1.881	+
Subtotal SW Dev Support			3.354	3.416		7.434		0.000		Cont	Cont	1
Remarks:	•			1	•	•			•	-		
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
T & E - MILES	WR	Brooks, AFB, TX	0.000	0.050	01/05						0.050	1
T & E - MILES	WR	Crane, IN (Omega 36)	0.000	0.051	01/05						0.051	
T & E - MILES	WR	Dahlgren, VA	0.000	0.010	02/05						0.010	1
T & E - MILES	WR	MCSC, Quantico, VA	0.000	0.005	02/05						0.005	1
T & E - MILES	WR	Crane, IN	0.000	0.050	10/04						0.050	
Subtotal Dev T&E			0.000	0.166		0.000		0.000		Cont	Cont	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or System/Item	Method	Activity &	PY s	FY 05	Award		Award	FY 07	Award	Cost to	Total	Value of
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract
Program Support - MTWS	SS/T&M	MCSC, Quantico, VA	0.000			0.214	10/05				0.214	
Program Support - MTA	C/IDIQ	MCSC, Quantico, VA	0.000	0.388	04/05		1		1		0.388	1
Program Spt - MILES	WR	NAWC, Orlando, FL	0.191	0.145	10/04					1	0.336	+
Program Spt - MILES	VVIX	NAVVC, Orlando, FL	0.191	0.145	10/04						0.330	
								•				
Subtotal Management Spt Remarks:	1		0.191	0.533	1	0.214	1	0.000	ı	Cont	Cont	
Total Cost			3.545	4.173		8.425		0.000		Cont	Cont	

EXHIBI	T R-2a, RDT&E Project Justification				DATE:				
						Februa	ry 2006		
APPROPRIATION/BUDGET ACTIVITY	AND NAME			PROJECT N	February 2006  OJECT NUMBER AND NAME  510 MAGTF CSSE & SE  Y 2008 FY 2009 FY2010 FY2011				
RDT&E, N /BA-7 Operational Systems Dev 0206313M Marine Corps Communications Systems			stems		C2510 MAG	TF CSSE & S	SE		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011	
Project Cost		17.278	17.453	35.311	20.874	26.271	17.047	25.696	
RDT&E Articles Qty	,								

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

(U) The MAGTF Combat Service Support Element & Supporting Establishment (CSSE & SE) consists of mutually supporting Logistics Information Technology (IT) programs that support force deployment, planning, and execution; sustainment and distribution; and contribute to the Combatant Commander's Common Operating Picture (COP) to support rapid accurate decision making.

Automated Information Technology (AIT) is the proper mix of a suite of technologies that enables the user to efficiently and effectively capture, aggregate, transfer data and, integrate with Logistics Automated Information Systems (LOG AIS) using the optimum technology. Individual user's data and information will be integrated with DoD-wide systems technologies, software, and encoding formats as well as international commercial applications. AIT will facilitate data collection and flow to other AISs to better achieve Total Asset Visibility (TAV), enhancing and streamlining business processes and warfighting capability. AIT will remain interoperable with current DoD applications and capable of assimilating process and technological advancements.

Transportation Systems Portfolio (formerly known as TC-AIMS II) funding supports the fielding, maintenance and sustainment of two Joint deployment programs—Integrated Computerized Deployment System (ICODES) and Aircraft Air Load Planning System (AALPS)—as well as the software maintenance and sustainment of our existing legacy systems—MAGTF LOGAIS (MDSS II/TC AIMS), Cargo Movement Operations System (CMOS), and Automated Manifest System – Tactical (AMS-TAC).

- MDSS II (MAGTF Deployment Support System II) allows planners at the unit level to rapidly create lists of deploying equipment and personnel in response to taskings received from higher headquarters. Unit planners can compare on-hand assets to requirements and assign equipment and personnel to specific carriers for both sea deployments and air embarkations. It also provides the Marine Air Ground Task Force (MAGTF) Commander with the automated ability to plan, coordinate, manage and execute the MAGTF operations relevant to various phases of transportation.
- Automated Air Load Planning System (AALPS). Allows military air load planners to quickly and efficiently estimate airlift requirements, plan force packages, and modify aircraft loads.
- Integrated Computerized Deployment System (ICODES). Ship load planning software application.

Cargo Movement Operations System (CMOS) A combat support system that automates and streamlines installation level cargo movement processes for both peacetime and deployment/contingency cargo. Workstations in ITO/TMO functional areas support one-time data capture for the preparation of documentation for all modes of shipment.

- Automated Manifest System Tactical (AMS-TAC). AMS is a transportation tool that utilizes AIT technologies to facilitate In-transit Visibility/ Total Asset Visibility (ITV/TAV) for DLA, the US Army, USN and USMC.
- -TC-AIMS II provides the hub for the OSD mandated Joint transportation suite of systems that will provide mobility and sustainment capability to all services and bring the Marine Corps into compliance with Department of Defense Reform Initiative 54. TC-AIMS II is a Joint transportation and deployment Automated Information System (AIS) supporting the DOD mission areas of mobility and sustainment.

Marine Common Hardware Suite (MCHS) centralizes and standardizes management and acquisition of all Tactical common computer hardware and infrastructure by adopting the Joint Defense Information Infrastructure (DII) Common Operating Environment (COE) with consolidated Integrated Logistics Support. Ensures the environment remains in synchronization with computer hardware technology hardware improvements. The mission supports the Commandant's Planning Guidance and the Marine Corps Master Plan.

EXHIBIT R-2	a, RDT&E Project Justification	DATE:							
		February 2006							
APPROPRIATION/BUDGET ACTIVITY	PROJECT NUMBER AND NAME								
RDT&E, N /BA-7 Operational Systems Dev	0206313M Marine Corps Communications Systems	C2510 MAGTF CSSE & SE							
Global Combat Support System-Marine Corps (GCSS-MC)	is the physical implementation of the enterprise information technology architecture	e designed to support both improved and enhanced							
MAGTF Combat Service Support functions and MAGTF Com	nander and Combatant Commander/Joint Task Force (JTF) combat support information	tion requirements. As such, GCSS-MC is not a single							
system but a portfolio of information technology capabilities tie	system but a portfolio of information technology capabilities tied to discrete performance measures that support required combat service support mission objectives.								
The ILC Analysis provided the foundation for logistics transform	mation within the Marine Corps and established a compliance response to Defense	Reform Initiative Directive (DRID) 54, directing that							

The ILC Analysis provided the foundation for logistics transformation within the Marine Corps and established a compliance response to Defense Reform Initiative Directive (DRID) 54, directing that logistics transformation be accomplished throughout the service components. Immediately following the guidance of DRID 54, the GCSS-Capstone Requirements Document (CRD) was approved by the JROC. The GCSS CRD requires an IOC in FY04 and FOC in FY06. Specific ILC objectives are desired by 2004. GCSS-MC is the IT solution to accomplish the transformation and GCSS objectives. GCSS-MC is an integrated set of capabilities. The capabilities will be implemented within a bottoms-up (programs of record) approach within a portfolio of systems. The portfolio of systems contributes to the primary capabilities of GCSS-MC. External portfolios will also contribute secondary to GCSS-MC capabilities through integration strategies. Primary capabilities are supply chain and combat service support oriented.

Secondary capabilities and aspects of some of the above are achieved through integration with the Manpower, Acquisition and other portfolios as well as integration with Joint and other Service systems. This integration will migrate the current Shared Data Environment (SDE), Total Force Structure Management System (TFSMS), and Automated Information Technology (AIT) to an integrated Detailed Planning and Current Operations System over the long-term. The capabilities are to be matched against systems remaining after the system realignment and categorization process and then assessed for compliance, alignment and cost effectiveness versus readily available COTS and GOTS products. The GCSS-MC portfolio seeks to most effectively achieve the mandated requirements through provisioning of the capabilities not extending specific systems.

GCSS-MC is the IT solution for logistics transformation being developed by the ILC. The ILC Analysis was completed during an 18-week engagement beginning in late October 1998 to early February 1999. This analysis concluded with a high-level Business Case Analysis (BCA). The BCA concluded conservatively that accomplishing the ILC actions (including re-engineered IT among others) would reduce Marine Corps inventories and reduce support requirements allowing the shifting of (2000) Marines from logistics to the battlefield by 2004 (given the current timelines). ILC action will also result in: lighter, more flexible and easier to move MAGTF; Higher CSS responsiveness: reduced stocks and CSS footprint inside the MAGTF; Less equipment for Warfighter to manage; Rapidly scaleable and deployable CSS units that have worldwide inventory visibility. Access to more reliable, accurate and actionable information that clarifies the logistics situational awareness; near real time visibility of requests for products and services allowing higher confidence and trust in logistics; and the ability to operate with greater certainty. The resulting capability is referred to as a shared data environment.

Joint Forces Requirment Generation II (JFRG II) The mission of JFRG II is to enhance and increase the ability of Joint Force planners and operators to efficiently task, organize, deploy, and sustain forces during combat operations or operations other than war. The system will decrease the planning and mobilization time and effort necessary to support a Combatant Commander's mission priorities and objectives. JFRG II is a force multiplier, improving service responsiveness for unit assignment to notional operational plans.

***C2150 \$2.3572M of FY06 Funds will be used to Forward Finance FY07 for GCSS	
OZ 100 \$2.007 ZW 011 100 1 and Will be doed to 1 of Ward 1 marice 1 107 for Cocc	

APPROPRIATION/BUDGET ACTIVITY	EXHIBIT R-2a, RDT&E Project Justification				
AFFROFRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND N	ME	PROJECT NUMBER AND	ry 2006	
RDT&E, N /BA-7 Operational Systems Dev	0206313M Marine Corps Communication		C2510 MAGTF CSSE & S		
		no dystems	02010 MACTI 000E & C	<i>,</i>	
U) B. ACCOMPLISHMENTS/PLANNED PROGRA COST (\$ in Millions)	AM:	FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost	<del> </del>	0.990	0.970	0.950	
RDT&E Articles Qty		0.990	0.970	0.930	
MCHS: Environmental testing of CISC/RISC wor	rkstations.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.405	0.396	0.517	
RDT&E Articles Qty		0.400	0.000	0.017	
MCHS: Environmental testing of CISC/RISC serv	/ers.				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.000	0.100	0.250	
RDT&E Articles Qty					
AIT: Development of software with AIT capabilit	ties in conjunction with the DOD AIT implementation p	lan.			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		13.728	10.365	27.351	
RDT&E Articles Qty					
GCSS-MC Logistics Chain Management: Progr	ram/Engineering support, analysis, integration, develop	ment, testing, and enhancements	for blocks one (1) through three (	(3).	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		1.439	3.341	4.095	
RDT&E Articles Qty					
GCSS-MC Logistics Command and Control: Pr	rogram/Engineering support, analysis, integration, deve	lopment, testing, and enhanceme	nts for blocks one (1) through thr	ree (3).	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.716	0.680	0.488	
RDT&E Articles Qty					
distribution systems.	ational test and evaluation of TC-AIMS II per JPMO sc				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	
Accomplishment/Effort Subtotal Cost		0.000	1.601	1.660	
	TO T 1 C C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: CCCC 4 V 11	ame from all carvices to pass deal	. 1	
RDT&E Articles Qty  Joint Forces Requirment Generation II (JFRG I	II): Funds are for software development and integration	i into GCCs 4.X and legacy syst	ems from an services to pass depi	loyment data to GCCS.	

EXHIBIT R	-2a, RDT&E Project Justif	cation				DATE:			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Systems Dev	PROGRAM ELEMENT 0206313M Marine Corp			ems		PROJECT NU		NAME	
(U) PROJECT CHANGE SUMMARY:	FY 2005	FY 2006	FY 2007		•				
(U) FY 2006 President's Budget:	17.829	17.724	21.273						
(U) Adjustments from the President's Budget:									
(U) Congressional Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	-0.122								
(U) SBIR/STTR Transfer	-0.418								
(U) Minor Affordability Adjustments	-0.011	-0.271	14.038						
(U) FY 2007 President's Budget:	17.278	17.453	35.311						
CHANGE SUMMARY EXPLANATION:									
<ul><li>(U) Funding: See Above.</li><li>(U) Schedule: GCSS-MC Schedule Slip.</li><li>(U) Technical: Not Applicable.</li></ul>									
(U) C. OTHER PROGRAM FUNDING SUMMARY:									
Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
PMC BLI 464100 MAGTF CSSE & SE: TSP	1.340	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.340
PMC BLI 463000 CCR: MCHS Svrs/Wkstns	57.927	39.542	57.380	67.386	87.131	72.175	60.787	Cont	Cont
PMC BLI 461400 GCSS: GCSS	1.488	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.488
PMC BLI 461700 COMBAT SPT SYS: GCSS	0.000	12.161	0.000	8.336	3.286	4.001	7.624	Cont	Cont
PMC BLI 461400 GCSS: AIT	3.584	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.584
PMC BLI 461700 COMBAT SPT SYS: AIT	0.000	7.539	9.736	12.865	13.280	9.171	10.226	Cont	Cont
(U) Related RDT&E: Not Applicable.									

EXHIBIT R-2	a, RDT&E Project Justification	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Systems Dev	0206313M Marine Corps Communications Systems	C2510 MAGTF CSSE & SE

#### (U) D. ACQUISITION STRATEGY:

Transportation Systems Portfolio: Support the development and sustainment of Joint/Multi-Service transportation and distribution systems.

Marine Corps Hardware Suites (MCHS): To insure computer hardware in the operating forces keeps pace with industry computer hardware technical improvements.

GCSS-MC is a portfolio of systems. The approach is to enable Marine Corps Logistics Modernization through two main programs, Logistics Chain Management (LCM) and Logistics Command and Control (Log C2). Each program will pursue an evolutionary acquisition (EA) strategy in order to field operationally suitable and supportable capabilities in the shortest time possible. EA offers the fastest method to field this highest of Advocate priorities and allows for requirements to be time-phased as the users become more familiar with the fielded systems' strengths and weaknesses. In addition to quicker fielding, an EA approach is particularly well suited to software intensive programs and offers these benefits: rapidly delivers an initial capability with the explicit intent of delivering continuously improved capability in the future and reduces "cycle time" from identification of emergent user requirements, priorities and fielding. The GCSS-MC acquisition strategy for each program will be to deliver capabilities in Blocks. Each Block is divided into two main phases: Planning/Blueprinting and Realization/Transition. More substantial software improvement/system upgrades will be fielded with each Block, as required and prioritized by the user community. Blocks will include eme Each Block will repeat the complete acquisition program cycle starting with MS A for the first Block for LCM and Milestone B thereafter going through a Milestone C/FRPDR for each Block. LCM is an ACAT 1AM program and Log C2 is an ACAT III or IV. LCM has passed MS A. The tentative date are for LCM MS B is during the 3rd quarter FY05 and MS C during the 4th quarter FY06, with fielding to begin in the latter part of FY06 with continued block upgrades thereafter. FOC is validated when all Marine Corps ground components are using capabilities provided by GCSS-MC LCM to include formal schools, and selected Marine Reserve Components and the following systems are no longer used operationally: SASSY, ATLASS II. ATLASS II. MIMMS, and PC MIMMS.

Joint Forces Requirment Generation II (JFRG II): JFRG II develops to requirements provided by all services as it becomes necessary. Software is tested for functionality with service users then passed on to DISA for security & interoperability testing and release as a GCCS mission application. This is conducted based on a 6-month release schedule of GCCS, with a 6-month lead time for each JFRG II version release.

### (U) E. MAJOR PERFORMERS:

#### Transportation Systems Portfolio

FY06 - NWSC, Crane, IN, Conduct IOT&E - supporting MCOTEA. Stanley Associates (MDSS II), Army (AALPS), SDDC (ICODES), ANTEON (AMS-TAC and CMOS) Dec 05 FY07 - NWSC, Crane, IN, Conduct IOT&E - supporting MCOTEA. Stanley Associates (MDSS II), Army (AALPS), SDDC (ICODES), ANTEON (AMS-TAC and CMOS), Dec 06

#### **MCHS**

FY05 - NWSC, Crane, IN, Environment testing of servers and workstations, Jan 2005.

FY06 - Spawar, Charleston, SC Environmental testing of servers and workstations Jan 2006.

FY07 - SpaWar, Charleston, SC Environmental testing of servers and workstations Jan 2007

### GCSS

FY05 - Contracting information will be determined at a later date.

#### Joint Forces Requirment Generation II (JFRG II):

FY06 CSC/BBN Tech (Software Developers), Oct 05

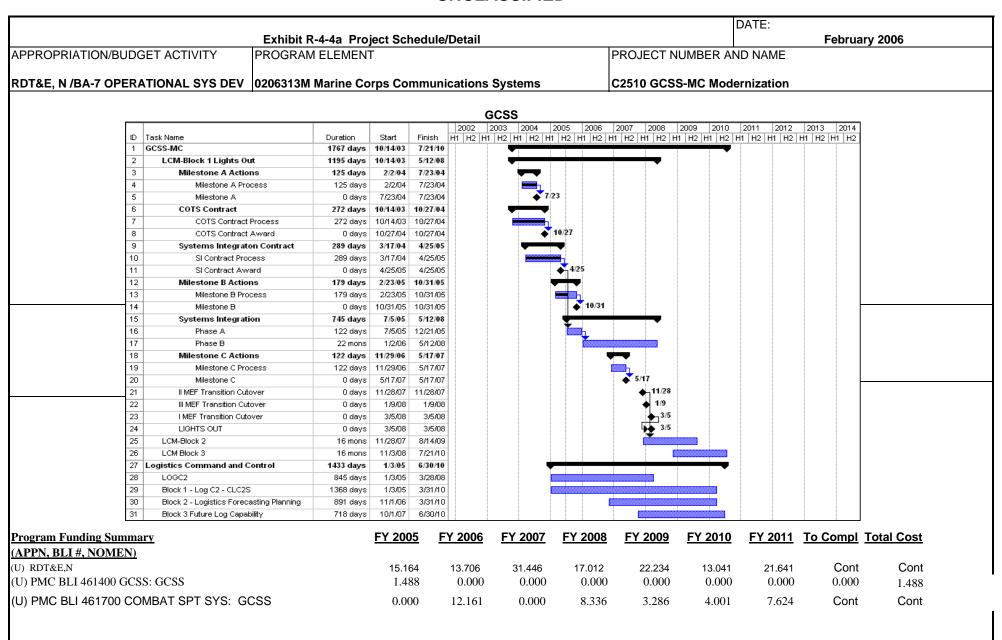
FY07 CSC/BBN Tech (Software Developers). Oct 06

#### Automated Information Technology (AIT)

FY06 - Contracting information will be determined at a later date.

FY07 - Contracting information will be determined at a later date.

				DATE:				_				
Exhibit R-3 Cost Analysis					I				ebruary 2	:006		
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMEN				T NUMBER		ME				
RDT&E, N /BA-7 Operational Sys Dev			orps Communications	Systems		AGTF CSS						
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
	Method	Activity &	PY s		Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
	& Type	Location	Cost		Date	Cost	Date	Cost	Date	Compl	Cost	Contract
Transportation System Portfolio	C/FFP	MCSC, Quantico, VA	0.000			0.185		0.340		Cont	Cont	
GCSS Logistics Chain Man	FFP/C	MCSC, Quantico, VA	10.465	8.128		6.365	03/06	21.786		Cont	Cont	
GCSS Log C2 Systems	TBD	TBD	1.200	0.862		2.004	03/06	2.457	01/07	Cont	Cont	
JFRG II	RCP	MCSC, Quantico, VA	0.000	0.000		1.601	10/05	1.660	10/06	Cont	Cont	
Subtotal Product Dev			11.665	9.506		10.155		26.243		Cont	Cont	
Remarks:	I	1	1						1			ı
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
Cost Categories	Method	Activity &	PY s		Award		Award	FY 07	Award	Cost to	Total	Value of
	& Type	Location	Cost		Date		Date	Cost	Date	Compl	Cost	Contract
GCSS Logistics Chain Man	TBD	Various	0.000	0.000		0031	Date	0031	Date	0.000		
GCSS Log C2 Systems	TBD	TBD	0.000	0.000						0.000		
AIT	TBD	TBD	0.000	0.000		0.100	01/06	0.250	01/07	Cont		
Subtotal Support	1		0.000			0.100		0.250		Cont		
Remarks:		1	1 0.000	0.000		0.100		0.200	1	Cont	COIR	
04-0-4	0	Destauration	T-4-1	ı	EV 05	1	EV 00	1	FY 07	1	1	T
Cost Categories	Contract	Performing	Total PY s		FY 05		FY 06	EV 07		0	T-4-1	Target
	Method	Activity &	Cost		Award Date		Award Date	FY 07 Cost	Award	Cost to Compl	Total Cost	Value of Contract
MCHS	& Type WR	NSWC, Crane Indiana	1.586	Cost 1.395		1.366		1.467	Date 01/07	Compi	Cost	
Transportation System Portfolio	WR	MCPD	0.200	0.100		0.205	12/05	1.407	01/01	0.000		
Transportation System Portfolio	WR	MCPD	0.200	0.100		0.203	12/05			0.000		
Transportation System Portfolio	RCP	ANTEON	0.100	0.100	01/03	0.130	12/05	0.148	12/06	0.000		
GCSS Logistics Chain Man	KCF	ANTEON	0.000	4.200	01/05	3.000	02/06	4.200		0.000	11.400	
												<b>†</b>
GCSS Log C2 Systems			0.000	0.433		1.003	03/06	1.228			2.664	
Subtotal T&E Remarks:			2.017	6.228		5.864		7.043		Cont	Cont	
Remarks:												
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
_	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of
	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Compl	Cost	Contract
GCSS Logistics Chain Man	1		0.000	1.400	01/05	1.000	01/06	1.365	01/07		3.765	
GCSS Log C2 Systems			0.000	0.144	01/05	0.334	01/06	0.410			0.888	
										_	_	
Subtotal Management		1	0.000	1.544		1.334		1.775		Cont	Cont	l
Remarks:												
Total Cost			13.682	17.278		17.453		35.311		Cont	Cont	



							DATE:		
	-4a Project Schedule/D	Detail			1			Februa	ary 2006
PRIATION/BUDGET ACTIVITY PROGRAM E	ELEMENT				PROJECT	NUMBER A	ND NAME		
N /BA-7 OPERATIONAL SYS DEV 0206313M M	arine Corps Communic	ations	Systems		C2510 GC	SS-MC Mod	ernization		
GCSS-MC (Logistics Chain Mgmt, Log C2)	FY 2	2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
LCM Block 1 - "Lights Out"						2nd Qtr			
MS A Plan	3rd Q	tr							
Implementation	1st Qt	tr ++++	++++++	+++++++	+++++++	++			
DT&E				4th Qtr+++	++++				
Milestone C - Block 1					3rd Qtr				
II MEF LCM Block 1 Transition/Cutover						1st Qtr			
III MEF "Lights Out"						2nd Qtr			
III MEF "Lights Out"						2nd Qtr			
LCM Block 1 - "Lights Out"/Transition Compl	ete					2nd Qtr			
LCM Block 2 - Enhancements, New Capabili	ties						4th Qtr		
LCM Block 3								4th Qtr	
Log C2		2	2nd Qtr ++	++++++	+++++++	++++			
Block 1 - Log C2 - CLC2S		2	2nd Qtr ++	++++++	-++++++	++++++	++++++	++	
Block 2 - Logistics Forecasting/Planning				1st Qtr +++	++++++	++++++	+++++++	++	
Block 3 - Future Log C2 Capability					4th Qtr +++	+++++++	++++++	+++++	

EXHIBIT R-2a,	RDT&E Project Justifica	tion			DATE:			
					February 2006			
APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT NUMBER AND NAME			PROJECT NU	PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 OPERATIONAL SYS DEV	T&E, N /BA-7 OPERATIONAL SYS DEV 0206313M Marine Corps Communication Systems			C3099 RADAR SYSTEMS				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost		29.761	26.818	55.746	56.418	169.604	66.900	64.338
RDT&E Articles Qty						_		_

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

- 1. **The Aviation Radar** (AN/TPS-59(V)3) is a national asset. It is the only fielded ground-based sensor which can detect and track long range Air Breathing Targets (ABT) within 300 nautical miles, as well as Tactical Ballistic Missiles (TBM) at ranges of 400 nautical miles for 360 degrees and up to one million feet in elevation. Highly Expeditionary Long Range Air Surveillance Radar (HELRASR) is the modernization initiative to replace the AN-TPS 59 Radar.
- 2. Ground Weapons Locating Radar (GWLR): The GWLR is an up-grade to the current AN/TPQ-46A radar. The system will acquire threat indirect fire weapons including mortars, artillery, rocket and missile systems at greater ranges than the current radar. The principle functions of the system will be to detect, track, classify and accurately determine the origin of enemy weapon platforms and forward the location data to the counterfire element. The upgrades will focus on achievement of greater detection ranges as well as increased communication, security, and system availability.
- 3. **The Multi-Role Radar System (MRRS) is also known programmatically as Ground/Air Task Oriented Radar (G/ATOR).** G/ATOR is a single material solution to fill the MRRS's and Ground Weapon Locating Radar's (GWLR) (End State) requirements. It is an Evolutionary Acquisition/Incremental Development Program designed to reduce the Total Ownership Costs associated with the MRRS and GWLR systems. Increment I will fill the MRRS's Short Range Air Defense (SHORAD) mission and medium range Air Surveillance mission. Increment II will fill the GWLR's Counter Fire/Counter Battery missions. Increment III will develop tactical enhancements to Increment I's design. Lastly, Increment IV will fill the Air Traffic Control mission. Programmatically, MRRS and GWLR will merge into a single requirement (G/ATOR) as the requirement documents transition from the Op Requirement Document (ORD) format to the Capability Development Document (CDD) format.
- 4. The Short/Medium Range Air Defense Radar AN/TPS-63B is a two-dimensional, medium-range, medium altitude, transportable radar system which is doctrinally employed as a tactical gap-filler or as an early warning system for early deployment into the operational area. It has a 360-degree air surveillance capability at a range of 160 miles and complements the co-employed AN/TPS-59(V)3 three-dimensional, long-range, air surveillance radar system. The Short/Medium Range Air Defense Radar will develop engineering change proposals related to improved system performance with the specific purpose of meeting increased fleet operational requirements. AN/TPS-63 modifications and system improvements will be researched and analyzed to determine which complement existing components to preclude an expensive USMC investment in solid-state radar technology.

#### (U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	4.405	1.709	7.832
RDT&E Articles Qty			
AN/TPS-59 (Sustainment): Develop Engineering Change Proposals for software in	nprovements and Diminishing Manufacturing Sources	s issues.	
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.850	0.750	0.750
RDT&E Articles Qty			
AN/TPS-59 (Sustainment): Contractor service support.			
COST (\$ in Millions)	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	0.180	0.000	0.224
RDT&E Articles Qty			
HELRASR (Modernization): Perform Risk Mitigation analysis.			

EXHIBIT I	R-2a, RDT&E Project Justification		DATE:			
A DDD ODDIA TION (DLID OFT, A OTI) (IT)	DDOOD AND SUSANDANIAN THE MADER AND MANA	_	February 2006 PROJECT NUMBER AND NAME			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAM					
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication		C3099 RADAR SYSTEMS			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		1.010	0.150	0.400		
RDT&E Articles Qty						
<b>HELRASR (Modernization):</b> Develop Life Cycle	Cost Estimate, System Test Plan					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.501	0.100	2.800		
RDT&E Articles Qty						
HELRASR (Modernization): Acquisition Support						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost	+	0.843	3.250	0.100		
RDT&E Articles Qty		U.U43	3.230	0.100		
HELRASR (Modernization): System development	and demonstration for Risk Mitigation					
COST (\$ in Millions)	and demonstration for Risk Witigation.	FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		1.328	2.153	0.774		
RDT&E Articles Qty		1.020	2.100	0.774		
GWLR: Radar Processor Redesign.						
		E)/ 000E	EV 0000	EV 0007		
COST (\$ in Millions) Accomplishment/Effort Subtotal Cost		FY 2005 <b>0.548</b>	FY 2006 <b>0.389</b>	FY 2007 <b>1.207</b>		
· · · · · · · · · · · · · · · · · · ·		0.548	0.389	1.207		
RDT&E Articles Qty						
<b>GWLR:</b> AN/TPQ-46A Re-cap/Up-grade.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.060	0.050	0.050		
RDT&E Articles Qty						
GWLR: Program office management/travel.						
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.107	0.200	0.100		
RDT&E Articles Qty						
G/ATOR: Contractor Technical, Programmatic, Eng	gineering and Logistics Support			<u> </u>		
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		4.048	4.000	4.200		
RDT&E Articles Qty						
G/ATOR: Logistics and increment II Studies & A	nalysis					
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007		
Accomplishment/Effort Subtotal Cost		0.200	0.200	0.900		
RDT&E Articles Qty						
G/ATOR: Modeling and Simulation (V & V)						

EXHIBIT	R-2a, RDT&E Project Justification		DATE:	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	y 2006
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication Sys		C3099 RADAR SYSTEMS	<b>5</b> 1/ 2225
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.180	0.000	1.000
RDT&E Articles Qty				
G/ATOR: Capabilities Development		=>/	57,0000	<b>5</b> 1/ 2225
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.130	0.400	0.400
RDT&E Articles Qty				
G/ATOR: Risk Management				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.220	0.000	0.000
RDT&E Articles Qty				
G/ATOR: In-house Program Management (Govt S	alaries)			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.225	1.250	1.250
RDT&E Articles Qty				
G/ATOR: Program Office Mananagement & Trave	el Costs			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.141	0.150	0.150
RDT&E Articles Qty				
G/ATOR: RFP Development/Tech. Support				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.350	0.350	0.350
RDT&E Articles Qty				
G/ATOR: Radar Engineer SME ISO				
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.520	0.200	0.200
RDT&E Articles Qty				
G/ATOR: Government Furnished Equipment (GFF	Ξ)			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	0.800	0.000
RDT&E Articles Qty				
G/ATOR: Development Engineering/EDM Hardw	are Production			
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		13.212	7.264	17.700
RDT&E Articles Qty				
G/ATOR: Software Requirement Engineering and	Development		<u> </u>	
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		0.000	3.100	15.105
RDT&E Articles Qty				
G/ATOR Testing Evaluation				,

	2-2a, RDT&E Project Justification	n		DATE:	
	•			Febru	uary 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NU	JMBER AND NA	AME	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps	Communication	on Systems	C3099 RADAR SYSTEMS	
COST (\$ in Millions)			FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.120	0.125	0.134
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RAD	AR: Program Management Support				
COST (\$ in Millions)			FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.083	0.028	0.120
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RAD	AR: Engineering and technical suppo	or <b>t.</b>			
COST (\$ in Millions)			FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.250	0.000	0.000
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RAD	<b>AR:</b> Feasibility study for the Multi-I	Level Power Supp	oly.		
COST (\$ in Millions)			FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost			0.250	0.200	0.000
Accomplishment/Effort Subtotal Cost					
RDT&E Articles Qty					
	AR: Feasibility study for the Frequen	ncy Generator.			
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD	<b>AR:</b> Feasibility study for the Frequen	ncy Generator.			
RDT&E Articles Qty	AR: Feasibility study for the Freque	ncy Generator.	29.761	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD	AR: Feasibility study for the Frequence  FY 2005	ncy Generator.	29.761 FY 2007	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY:				26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget:	<u>FY 2005</u>	FY 2006		26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget:			FY 2007	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions	<u>FY 2005</u>	FY 2006	FY 2007	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions	<u>FY 2005</u>	FY 2006	FY 2007	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases	<u>FY 2005</u> 51.055	FY 2006	FY 2007 42.380	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings	FY 2005 51.055	FY 2006	FY 2007	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer	FY 2005 51.055 -20.057 -1.198	FY 2006 23.741	FY 2007 42.380 9.600	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment	FY 2005  51.055  -20.057 -1.198 -0.039	FY 2006 23.741	FY 2007 42.380 9.600 3.766	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment  (U) FY 2007 President's Budget:	FY 2005 51.055 -20.057 -1.198	FY 2006 23.741	FY 2007 42.380 9.600	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment  (U) FY 2007 President's Budget: CHANGE SUMMARY EXPLANATION:	FY 2005  51.055  -20.057 -1.198 -0.039	FY 2006 23.741	FY 2007 42.380 9.600 3.766	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment  (U) FY 2007 President's Budget: CHANGE SUMMARY EXPLANATION: (U) Funding: See Above.	FY 2005  51.055  -20.057 -1.198 -0.039	FY 2006 23.741	FY 2007 42.380 9.600 3.766	26.818	55.746
RDT&E Articles Qty SHORT/MEDIUM RANGE AIR DEFENSE RAD  (U) Total \$ (C3099 Radar Systems)  (U) PROJECT CHANGE SUMMARY: (U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional/OSD Program Reductions (U) Congressional Rescissions (U) Congressional Increases (U) Reprogrammings (U) SBIR/STTR Transfer (U) Minor Affordability Adjustment  (U) FY 2007 President's Budget: CHANGE SUMMARY EXPLANATION:	FY 2005  51.055  -20.057 -1.198 -0.039	FY 2006 23.741	FY 2007 42.380 9.600 3.766	26.818	55.746

EXHIBIT R-2a	a, RDT&E Proje	ct Justification	n			DATE:			
	•						Februa	ary 2006	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM	ELEMENT NU	JMBER AND NA	AME		PROJECT NUMBE	R AND NAME		
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M	<b>Marine Corps</b>	Communication	on Systems		C3099 RADAR SY	STEMS		
(U) C. OTHER PROGRAM FUNDING SUMMARY:	<u> </u>	-							
Line Item No. & Name	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC, BLI#465100, AN/TPS-59 Sustainment	27.277	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27.277
(U) PMC, BLI#465000, AN/TPS-59 Sustainment	0.000	5.306	4.576	6.261	6.458	4.887	2.823	Cont	Cont
(U) PMC, BLI#464200, Grnd Weapon Locator Radar	0.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.832
(U) PMC, BLI#465000, Grnd Weapons Locating Radar	0.000	5.689	9.784	9.247	2.134	2.548	2.853	Cont	Cont
(U) PMC, BLI#464200, Short/Med Range Radar	1.427	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.427
(U) PMC, BLI#464200, AN/TPQ-46A	6.850	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.850
(U) PMC, BLI#464200, AN/TPQ-63B	1.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.200
(U) PMC, BLI#465000, Short/Medium Range Radar	0.000	0.526	0.436	0.448	0.453	0.407	0.340	Cont	Cont
(U) PMC, BLI#465000, Title IX Radar Set, Firefinder	0.000	18.000	0.000	0.000	0.000	0.000	0.000	0.000	18.000
(U) PMC, BLI#465000, Grnd/Air Task Oriented Radar	0.000	0.000	0.000	0.000	44.706	104.453	113.826	Cont	Cont
(U) PMC, BLI#465100, HELRASR (Modernization)	7.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.500
(U) PMC, BLI#465100, Long Range Radars	16.185	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.185
(U) Related RDT&E:									

o) Related RD I de.

### (U) D. ACQUISITION STRATEGY:

- (U) Highly Expeditionary Long Range Air Surveillance Radar (HELRASR): The modernization initiative will encompass all 11 AN/TPS-59 radar systems within the Marine Corps inventory. Due to technological advances, evolving threats, mobility issues, changes in employment concepts (Operational Maneuver from the Sea (OMFTS) and Expeditionary Maneuver Warfare (EMW)), interface requirements imposed by developing systems (CAC2S, CEC/CTN and CLAWS) and requirements outlined in the Capstone Requirements Documents (CID, TAMD, GIG, and IDM), the AN/TPS-59(V)3 must undergo modernization. The Acquisition Strategy is based on the recommendations from the Business Case Analysis and two independent modernization studies. The program office started R&D efforts that will incorporate the 3-D Expeditionary Long Range Radar ORD requirements into the current 11 fielded AN/TPS-59(V)3 radars. It is anticipated that this effort will require 9 years of R&D with a separate Development Test (DT)/Operational Test (OT). Forecasted IOC is FY13 with FOC for 11 systems occurring in FY18.
- (U) AN/TPS-59 Radar Sustainment: The Program Office intends to address Diminishing Manufacturing Sources (DMS) issues by continuing with the Post Production Support Program (PPSP) started in POM 02 initiative, and they will also begin R&D efforts that will modernize the radar with advanced technology and performance capabilities. A Business Case Analysis (BCA) was completed which incorporated two independent obsolescence/DMS studies that identified critical components which will severely impact the system performance and readiness by FY07. Based upon the BCA, the program office intends to sustain systems. The refurbishing and sustaining of systems will enable 3 active units and 2 reserve units to have a system with current technology, extend system life cycle and lower the radars' overall operating cost and maintain the supporting establishment.
- (U) **Ground Weapons Locating Radar (GWLR):** The GWLR is an upgrade to the current AN/TPQ-46A radar. The upgrade will be accomplished through a series of engineering change proposals (antenna transceiver group re-cap, Radar Processor re-host, and the lightweight computer unit replacement). ECPs will be conducted by the equipment PICA (Army PM Firefinder) with USMC participation. Joint procurement of hardware will realize economy of scale savings and insure common configuration. Army and Marine Corps Depot facilities will be utilitized to perform hardware installation. Purporse of the upgrade is to enhance performance and availability.

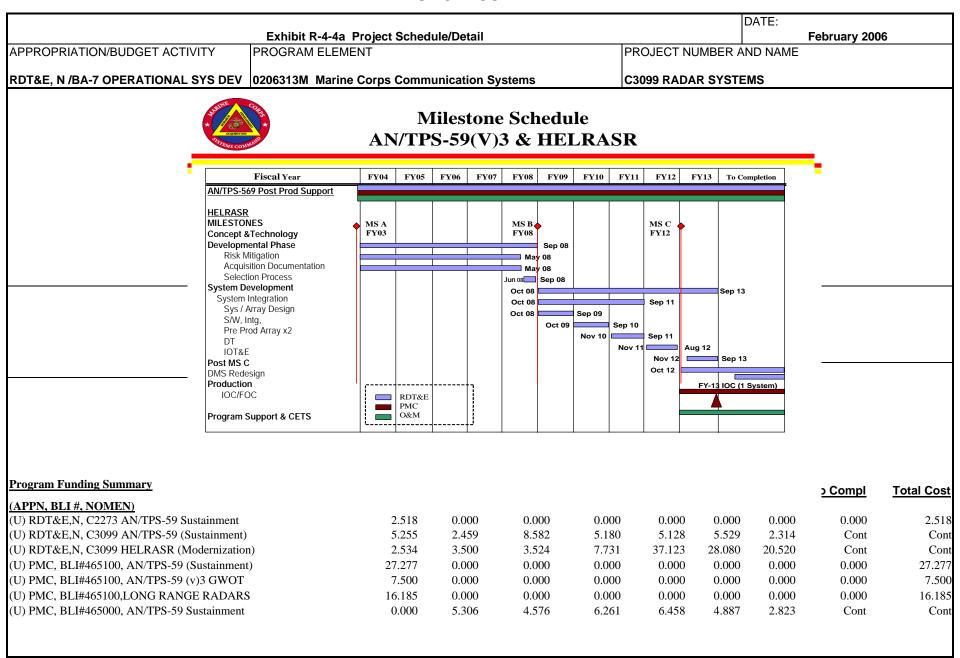
<sup>(</sup>U) PE 0206313M (Marine Corps Communication Systems), Project C2278, Project C2273, and Project C9276.

<sup>(</sup>U) PMC, BLI#464200, Short/Med Range Radar

EXHIBIT F	R-2a, RDT&E Project Justification	DATE:
		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication Systems	C3099 RADAR SYSTEMS
GWLR's requirements. Four legacy systems (TPS-63, I logistics assets. MRRS' Authorized Acquisition Objective cue); GWLR's AAO is 22 systems, a one for one replacer obsolescence & technology growth issues. Early Increme	MPQ-62, TPS-73/79 & TPQ-46A) will be replaced by a single material designe (AAO) is 41 systems replacing the TPS-63, MPQ-62 and TPS-73/79 systemment of the TPQ-46A. The Increments' System Development & Demonstrati	s they become available, Increment III Tactical Enhancements will parallel field to
providing sustainment for the fielded system. Efforts are	underway to award a sole source Engineering Services and procurement co	edium Range Air Defense Radar System's electronics and hardware viable and safe, ontract with the AN/TPS-63's Original Equipment Manufacturer, Northrop Grumman. ining obsolete components, as well as those assemblies experiencing reliability,
(U) E. MAJOR PERFORMERS:		
(U) Lockheed Martin Corp, Syracuse, NY. Contract awa year to develop ECPs for software improvements.	orded in April 04 for AN/TPS-59 to develop ECPs for software improvements	and DMS issues. FY05, FY06, and FY07 project contract with LMC in Jan of each
(U) Contract with Sensis Corp Projected to be put on con	tract July 05 to support the HELRASR (AN/TPS-59 system development risk	k mitigation).

		•	JNCLA									
		11. D.O. (A. I.)				DATE:		_				
		nibit R-3 Cost Analysis							ebruary 2	2006		
APPROPRIATION/BUDGET A	CHVITY	PROGRAM ELE				PROJECT	NUMBE	ER AND N	AME			
RDT&E, N /BA-7 OPERATION	AL SYS D	EV 0206313M Mari	ne Corps	Communi	cation	C3099 RA		STEMS				
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value o
Requirements)	& Type	Location	Cost	Cost	Date	Cost	Date	Cost	Date	Compl	Cost	Contra
AN/TPS-59 Sustainment	C/CPFF	Lockheed, Syracuse NY	4.666	4.405	01/05	1.709	01/06	7.832	01/07	Cont	Cont	
HELRASR (Modernization)	RCP	Sensis Corp	0.000	1.010	07/05	3.250	N/A	0.124	N/A	Cont	Cont	
SHORT/MEDIUM RANGE	RCP	Northrop Grumman	0.584	0.500	01/05	0.200	01/06	0.000	N/A	Cont	Cont	
G/ATOR	CPIF	Contractor TBD		13.388	09/05	10.264	04/06	32.700		Cont		
G/ATOR (GFE)	MIPR	TBD	0.000	0.000	N/A	0.800		0.000		Cont		
Subtotal Product Dev			5.250	19.303	,, .	16.223	0 1,00	40.656		Cont		
Remarks:			3.230	19.303		10.223		40.030		Cont	Cont	1
Remarks.												
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item	Method	Activity &			Award		Award	EV 07	Award	Cost to	Total	Value
Requirements)	& Type	Location	Cost			Cost	Date	Cost	Date	Complete		Contra
GWLR	WR	NSWC, Dahlgren, VA	0.550	1.328	11/04	1.121	11/05	0.305		Cont	Cont	Contra
GWLR	MIPR	US Army CECOM	0.330	0.195		0.782	11/05	0.303		Cont		
GWLR	WR	MCLB Barstow	0.160	0.138	02/05	0.782	11/05	0.902		Cont		
GWLR	WR	NSCW, Crane, IN	0.000	0.136		0.369		0.000		Cont		
HELRASR (Modernization)	RCP	MCR Federal, MCSC	0.000	0.000		0.050	04/06	0.000		0.000	0.050	
HELRASR (Modernization)	WR	MCOTEA, Quantico, VA	0.000	0.000	N/A	0.100		0.000	-	0.000	0.100	
SHORT/MEDIUM RANGE	WR	NSWC, Crane, IN	0.206	0.083	01/05	0.028	01/06	0.120		Cont	Cont	
G/ATOR (PBL)	C/FFP	EG&G Tech Svc, Dumfries, VA	0.200	0.200		0.200		0.900		Cont		
G/ATOR (RADAR ENGINEER)		NRL, Washington, DC	0.000	0.424	10/04	0.200	10/05	0.200		Cont		
G/ATOR	MIPR	MITRE, Boston, MA	0.000	0.350		0.350		0.350		Cont		
G/ATOR (RADAR ENGINEER)		NAVAIR-John Lee	0.000	0.105		0.200		0.200		Cont		
G/ATOR	RCP	MCR Federal, MCSC	0.000	0.007		0.200		0.100		Cont		
G/ATOR	WR	NSWC-CRANE	0.000	0.520	01/05	0.200	10/05	0.200		Cont	Cont	
G/ATOR	C/FFP	TBD (Models & Sym)	3.550	0.000	0 17 00	0.000	10/00	1.000		Cont		
G/ATOR	C/FFP	TBD (RFP DEV)	4.006	0.000		0.000		0.200		Cont		
Subtotal Support	<b>3</b> ,1 1 1		9.389	3.565		4.070		5.251	. 0, 00	Cont	Cont	
Remarks:		1	1.500	2.200				1 0.201	1	1 23.11		1
Nomano.												
Cost Categories	Contract	Performing	Total		FY 05		FY 06		FY 07			Target
(Tailor to WBS, or Sys/Item	Method	Activity &	PY s	FY 05	Award		Award	FY 07	Award	Cost to	Total	Value (
Requirements)	& Type	Location	Cost	Cost		Cost	Date	Cost	Date	Complete	Cost	Contra
G/ATOR	MIPR	MCOTEA, Quantico, VA	0.000	0.000		0.325		0.330		Cont	Cont	
Subtotal T&E			0.000	0.000		0.325		0.330		Cont	Cont	
Remarks:		ı							·			1

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Exhibit R-3 Cost Analysis									February 2006						
TIVITY		PROGRAM ELEI	MENT			PROJECT NUMBER AND NAME									
DT&E, N /BA-7 OPERATIONAL SYS DEV 0206313M M					cation	C3099 RAI	DAR SY	STEMS							
		-	Total						FY 07			Target			
1ethod	Activity &		PY s	FY 05	Award	FY 06	Award	FY 07	Award	Cost to	Total	Value of			
Туре	Location		Cost	Cost	Date	Cost	Date	Cost	Date	Complete	Cost	Contract			
CPFF	Anteon, Stafford	l, VA	3.091	0.850	01/05	0.750	01/06	0.750	01/07	Cont	Cont				
CPFF	Anteon, Stafford	l, VA	0.353	0.501	01/05	0.000	N/A	0.600	N/A	Cont	Cont				
۷R	MCSC, Quantico	o, VA	1.072	1.023	01/05	0.100	09/06	2.800	N/A	Cont	Cont				
CPFF	Anteon, Stafford	l, VA	0.097	0.105	10/04	0.105	10/05	0.110	10/06	Cont	Cont				
۷R	MCSC, Quantico	o, VA	0.015	0.015	12/04	0.020	12/05	0.024	12/06	Cont	Cont				
۷R	MCSC, Quantico	o, VA	0.126	0.060	10/04	0.050	10/05	0.050	10/06	Cont	Cont				
CP	Anteon, Stafford	l, VA	0.000	3.848	10/04	4.000	10/05	4.000	10/06	Cont	Cont				
CP	MCCDC, Quanti	co, VA	0.000	0.130	11/04	0.200	02/06	0.200	10/06	Cont	Cont				
1IPR	MCSC, Quantico	o, VA	0.000	0.220	10/04	0.625	01/06	0.625	01/07	Cont	Cont				
CP	MCSC, Quantico	o, VA	0.000	0.141	10/04	0.150	10/05	0.150	10/06	Cont	Cont				
CPFF	TBD (Risk Mana	agement)	0.000	0.000	N/A	0.200	03/06	0.200	10/06	Cont					
			4.754	6.893		6.200		9.509		Cont	Cont				
			•					-	-		-	•			
			19.393	29.761		26.818		55.746		Cont	Cont				
	SYS DE contract ethod Type //CPFF //R //CPFF //R //R //CP CP IPR CP	cethod Activity & Location  /CPFF Anteon, Stafford /CPFF Anteon, Stafford /CPFF Anteon, Stafford /CPFF Anteon, Stafford /CPFF Anteon, Stafford /CPFF Anteon, Stafford /CPF Anteon, Stafford /CPF Anteon, Stafford /CP MCSC, Quantical /CP Anteon, Stafford /CP Anteon, Stafford /CP MCCDC, Quantical /CP MCSC, Quantical /CP MCSC, Quantical	ontract Performing ethod Activity & Type Location /CPFF Anteon, Stafford, VA /CPFF Anteon, Stafford, VA /CPFF Anteon, Stafford, VA /CPFF Anteon, Stafford, VA /CPFF Anteon, Stafford, VA /CPF Anteon, Stafford, VA /CPF Anteon, Stafford, VA /CP MCSC, Quantico, VA /CP Anteon, Stafford, VA /CP Anteon, Stafford, VA /CP MCCDC, Quantico, VA /CP MCCDC, Quantico, VA /CP MCSC, Quantico, VA	Ochrract Performing Activity & PY's Cost Cost Cost Cost Cost Cost Cost Cos	Description   Description	Description	Campulation	SYS DEV	Description   Description	Description   Performing   Performing   Py s   Fy 05   Award   Py 06   Award   Py 07   Award   Py 08   Py s   Py 05   Date   Cost   Date   C	Contract	Carrell			



			DATE:
	Exhibit R-4-4a Project Schedule/Detail		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER A	ND NAME
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication Systems	C3099 RADAR SYSTE	MS

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
AN/TPS-59 Sustainment Schedule	FY 02							
HELRASR (AN/TPS-59 Modernization) Schedule								
Milestone A	FY 03							
Concept & Technology Developmental Phase	FY 03	4th Q	1st Q-4th Q	1st Q-4th Q	1st Q-4th Q			
Acquisition Documentation			1st Q	1st Q-4th Q	1st Q-3rd Q	!		
Selection Process			2ND Q	1st Q-4th Q	3rd Q4th (	Ω 		
Milestone B						1st Q		
System Development						1st Q		
System Integration						1st Q		4th Q
DT								FY 12
IOT&E								FY 13
Milestone C								FY 12
Production								FY 13
IOC								FY 13
FOC								FY 18
Program Support	3rd Q		<u> </u>	<u> </u>				

Exhibit R-4-4a Project Schedule/Detail

APPROPRIATION/BUDGET ACTIVITY

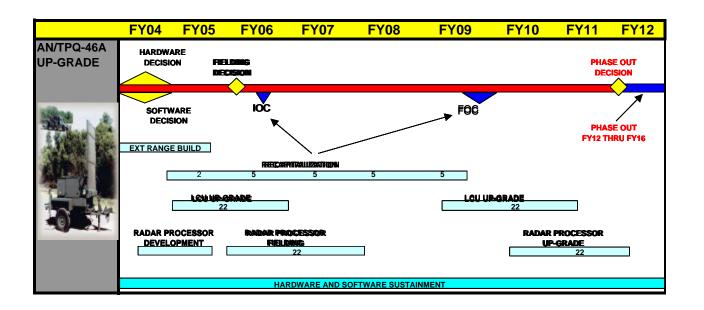
PROGRAM ELEMENT

PROJECT NUMBER AND NAME

RDT&E, N /BA-7 OPERATIONAL SYS DEV 0206313M Marine Corps Communication Systems

C3099 RADAR SYSTEMS

**GROUND WEAPONS LOCATING RADAR SCHEDULE PROFILE** 

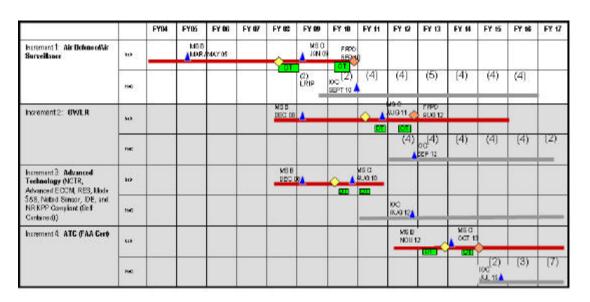


Program Funding Summary (APPN, BLI #, NOMEN)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N, C3099, GWLR	1.936	2.592	2.031	1.791	1.789	1.832	1.877	Cont	Cont
(U) PMC, BLI#465000, GWLR	0.000	5.689	9.784	9.247	2.134	2.548	2.853	Cont	Cont
(U) PMC, BLI#465000,AN/TPS 63B	1.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
(U) PMC, BLI#464200, GWLR	0.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.832

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ROPRIATION/BUDGET ACTIVITY	PROGRAM			edule/Deta	<u> </u>		PROJECT	NUMBER /	<u> </u> And name	February 2006
					•					
&E, N /BA-7 OPERATIONAL SYS DEV	0206313M	Marine	Corps Con	nmunicatio	n Systems		C3099 RAI	DAR SYST	EMS	
					1					
GWLR SCHEDULE DETAIL	F	Y 2003		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Extended Range Software Build			2nd Q							
Re-Cap							3 T			
LCU Replacement				3rd Q	3rd Q					2nd Q
MILTOPE 750M Refresh								1st Q		
Radar Processor ECP			2nd Q	 T		-1st Q				
Radar Processor Refresh								2nd Q		
Software PDSS				4th Q						
IOC Upgrade ECPs					3rd Q					
FOC Upgrade ECPs								3rd Q		

			DATE:
	Exhibit R-4-4a Project Schedule/Detail		February 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER A	ND NAME
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication Systems	C3099 RADAR SYSTE	EMS

# G/ATOR Overall Program Schedule





Program Funding Summary	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	<b>Total Cost</b>
(APPN, BLI #, NOMEN)									
(U) RDT&E,N, C3099, G/ATOR	0.000	19.333	17.914	41.355	41.465	125.331	31.240	39.437	316.075
(U) PMC, BLI#465000, G/ATOR	0.000	0.000	0.000	0.000	44.706	104.453	113.826	Cont	Cont

	Establish B 4.4-	D	l l - /D - ( - :					DATE:	F-1
PRIATION/BUDGET ACTIVITY	Exhibit R-4-4a PROGRAM ELEM		iedule/Detai	<u> </u>		PROJECT	NILIMPED		February 200
RIATION/BUDGET ACTIVITY	PROGRAM ELEM	EIN I				PROJECT	NUIVIDER /	AND MAINE	=
N /BA-7 OPERATIONAL SYS DEV	0206313M Marine	e Corps Con	nmunicatio	n Systems		C3099 RAI	DAR SYST	EMS	
G/ATOR SCHEDULE DETAIL		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Increment I									
Concept & Technology Developmen	ntal Phase		3rd Q						
Selection Process		3rd Q	-3rd Q						
Milestone B			3rd Q						
System Development and Demonst	ration Phase		3rd Q			3rc	Q		
System Integration (EDM)					2nd Q	2nd Q			
System Demonstration (DT)				3rd Q					
Long Lead Items (EDM, LRIP & I	Production)				3rd Q				Cont
Milestone C	,						2nd Q		
Production Phase									Cont
LRIP							2nd Q		00.11
IOT&E							2nd3rd (		
IOC								4th Q	
Program Support									Cont
r regram Cappent								101 Q	00111
Increment II									
Concept & Technology Developmen	ntal Phase					1st Q	·1st Q		
Milestone B						100 5	1st Q		
System Development and Demonst	ration Phase						1st Q		4th Q
System Demonstration (DT)									3rd Q-4th Q
Long Lead Items								4th Q	
Milestone C									4th Q
In any many till									
Increment III	- 1 - 1 Db					4-1-0	1-1-0		
Concept & Technology Development Milestone B	ntai Phase					1st Q			
System Development and Demonst	ration Phase						1st Q 1st Q		
System Development and Demonstration (DT)	ialiuli Fliase							2ndQ-3rd	0
Milestone C				1				4th Q	<u> </u>
Production Phase								1.11 04	1st QCont
IOT&E			1						1st-2ndQ

	UNCLASS	SIFIED						
EXHIBIT	R-2a, RDT&E Project Justification				DATE:			
						F	ebruary 2006	i
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND	D NAME		PROJEC <sup>*</sup>	T NUMBER	R AND NAM	IE	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communic	cation Sys	tem	C9999 FY06 Congressional Adds				
i								
COST (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost		0.000	27.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Qty								
(U) A. MISSION DESCRIPTION AND BUDGET I								
(U) B. ACCOMPLISHMENTS/PLANNED PROG	RAM:			2005		100	1	E) (0.7
COST (\$ in Millions)				2005 <b>)00</b>		′06		FY07 <b>0.000</b>
Accomplishment/Effort Subtotal Cost RDT&E Articles Qty			0.0	JUU	2.1	700		0.000
establishment of Information Sharing and Analys relevant information from vastly disparate stored easily reproduced and adapted by local, state and The focus of CIPC is to substantially reduce the relimited resources available to do so and ensure ap COST (\$ in Millions)  Accomplishment/Effort Subtotal Cost RDT&E Articles Qty  Ground//AirTask Oriented Radar G/ATOR C system is a 3-Dimensional, HMMWV-mounted, so one rapidly deployed system that replaces four ex commonality of maintenance concepts and parts.	ical infrastructure and emergency response. The viticis Centers (ISAC's). The C4ISR challenges to Defein a myriad of systems across a global information of federal organizations involved in information sharing real risks associated with terrorism by most effective propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defense and civil capable of the GATOR program will develop and propriate interface between defen	ense, as well environmen ng and analyely applying polities.  rocure 41 ai ets such as centification, anal radar co	l as other F. t. The CIP ysis, civil in the  FY: 0.0 r componer ruise missi reduced log verage for	ederal, State C is establish frastructure 2005 000 nt radar syst les, Air Bre gistical foot those areas	e and Local shing archite protection,  FY 1.8  Tems and 22  Targerint, increa out of view	authorities are curres, proceed emergency in 2006 and competent of the fielded embeddings of the fielded embediates of the fielded embeddings of the fielded embeddings of the	ponent radar sy mortars and art and reduces O	ppropriate and el systems that can be nd homeland security.  FY07 0.000  stems. The radar illery. It is an all-in-&M costs through //3 Radar system due
COST (\$ in Millions)			FV '	2005	ΕV	′06		FY07
Accomplishment/Effort Subtotal Cost				000		100		0.000
RDT&E Articles Qty			<u> </u>					
Impv Ground Based Transportable Radar C30 Air Breathing Targets (ABT) within 300 nautical	099C - The Aviation Radar (AN/TPS-59(V)3) is a miles, as well as Tactical Ballistic Missiles (TBM) Engineering Change Proposal to incorporate Nation	at ranges of	400 nautic Cueing to i	al miles for	360 degrees M detection	and up to or		
Accomplishment/Effort Subtotal Cost				000		600		0.000
RDT&E Articles Qty								
• 0	<b>861N</b> - The MC Composite Tracking Network Eng/I am management, logistics, test management, test sunal (radio).			•	•	•		

EXHIBIT R-2a,	RDT&E Project Justification			DATE:	
				F	ebruary 2006
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		<b>PROJEC</b>	T NUMBER AND NAM	1E
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communication Sys	tem	C9999 F	Y06 Congressional A	dds
COST (\$ in Millions)		FY 2	2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost		0.0	000	1.000	0.000
RDT&E Articles Qty					

MC DCGS & Net Centric Center 9862N - DCGS-Distributed Common Ground/Surface System – Marine Corps (DCGS), formerly known as Distributed Common Ground/Surface-Integration (DCGS-1), is a collection of Service Systems that will contribute to joint and combined war fighter needs for Intelligence, Surveillances and Reconnaissance (ISR) support, with the global Information Grid (GIG) providing unconstrained communications circa 2010 to support the Department of Defense (DOD), ISR Enterprise end-state. The DCGS Integrated Backbone (DIB) is the architecture that will tie the Service DCGS systems together into one Family of Systems (FOS). The DIB will provide the tools, standards, architecture, and documentation for the DCGS community to achieve Multi-Intelligence (Multi-INT) (e.g. Imagery Intelligence (IMINT), Signal Intelligence (SIGINT), Measurement/Measuring and Signature Intelligence (MASINT), Counterintelligence/Human Intelligence (CI/HUMINT)), network centric environment with the interoperability to afford individual nodes' access to the information needed to execute their respective missions.

COST (\$ in Millions)	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	0.000	1.500	0.000
RDT&E Articles Qty			

USMC Battlefield Fusion - Develop an Electronic Warfare Scenario Simulator (EWSS) to modify and edit Electronic Warfare mission scenarios. The EWSS will be used by CESAS operators to continuously calculate electromagnetic wave emission and propagation, antenna beam shape, scan patterns, and emitter audio. It will provide necessary training in the Techniques, Tactics, and Procedures required to attack, in a realistic training environment, targets of interest.

COST (\$ in Millions)	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	0.000	1.500	0.000
RDT&E Articles Qty			

MetaData C9276C - Metadata technology incorporates the first data language. It serves as the "brain" and is the enabling component of the Metadata products.. The technology array solves the above-identified problems by:

- § Commonly defining and modeling data meanings, functions, and relations;
- § Creating an intelligent database with pre-loaded data conditions and automatically merging new real-time data;
- § Enabling all data structures to be stored using a finite set of data relations;
- § Preparing data for a variety of mission specific tool sets;
- § Delivering a database that can search itself; enabling users to access data in a common way; and
- § Providing A single database design for all applications.

COST (\$ in Millions)	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	0.000	1.000	0.000
RDT&E Articles Qtv			

Radio Bn Info Ops Training C9863N - Funds will be used to establish training efforts associated with electronic warfare simulators. Funds will be used at Electronic Warfare Associates (EWA) MTC Services Corp. and Chesapeake Technologies Inc. (CTI).

COST (\$ in Millions)	FY 2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	0.000	6.800	0.000
RDT&E Articles Qty			

Recon, Target & Surveillance Veh RST-V C2273 - 9864N - The RST-V is a 4x4 hybrid electric drvie vehicle with reconnaissance, surveillance, targeting and C3I (command, control, communications and intelligence) capability coupled with integrated stealth and survivability features. The communications systems include an ITT SINCGARS ASIIIP VHF transponder and satellite communications.

	OIN	LASS							
EXHIBIT	T R-2a, RDT&E Project Justification					DATE:			
								bruary 2006	
PPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUM				PROJEC1	NUMBER	AND NAME	E	
DT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps C	communica	ation Sys				ssional Ad		
COST (\$ in Millions)				FY 2	2005	FY2	006	F	Y2007
.ccomplishment/Effort Subtotal Cost				0.0	00	1.7	00	(	0.000
DT&E Articles Qty									
as a FUE and funding is to support the procurem comprise a complete suite of VSAT systems and delivery concept that will be comprised of a 2.5r deployments.	subcomponents that will be used to provi	ide secure, h	igh bandwi	idth to the l	Radio Batta ele Based, (	lions. The in .9m system)	systems for	to provide a 'ho use during ME	ub and spoke' U and OIF
COST (\$ in Millions)				FY 2		FY2			Y2007
ccomplishment/Effort Subtotal Cost				0.0	00	3.0	00	(	0.000
DT&E Articles Qty TPS-59 HELRASR Sup Ballistic Miss Def C3									
,		FY 2005	FY 2006	FY 2007					
Ú) FY 2006 President's Budget:		FY 2005 0.000	FY 2006 0.000	FY 2007 0.000					
No in the President's Budget:  U) Adjustments from the President's Budget:									
U) FY 2006 President's Budget: U) Adjustments from the President's Budget: (U) Congressional Program Reductions									
No in the President's Budget:  U) Adjustments from the President's Budget:									
U) FY 2006 President's Budget: U) Adjustments from the President's Budget: (U) Congressional Program Reductions (U) Congressional Rescissions (U) Congressional Increases									
(U) FY 2006 President's Budget: (U) Adjustments from the President's Budget: (U) Congressional Program Reductions (U) Congressional Rescissions			0.000						
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V) FY 2006 President's Budget:     U) Adjustments from the President's Budget:         (U) Congressional Program Reductions         (U) Congressional Rescissions         (U) Congressional Increases         (U) POM 06 Core Adjustment         (U) Reprogrammings         (U) SBIR/STTR Transfer         (U) Minor Affordability Adjustment         U) FY 2007 President's Budget:		0.000	<b>0.000</b> 27.000	0.000					
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