EXHIBIT R-2, RDT&E Budget Item Justification					DATE: **February 2005**			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**		PROGRAM ELEMENT (PE) NAME AND NO. **0206313M Marine Corps Communications Sys**						
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	**238.114**	**273.870**	**237.081**	**210.955**	**264.419**	**256.074**	**194.692**	**186.937**
C2270 Command Post Systems	**16.575**	**10.586**	**18.407**	**18.523**	**17.087**	**19.875**	**18.343**	**18.005**
C2272 Intelligence C2 Systems	**19.677**	**22.299**	**27.025**	**22.440**	**21.024**	**18.197**	**21.432**	**22.673**
C2273 Air Operations C2 Systems	**94.592**	**93.339**	**87.444**	**48.374**	**35.601**	**21.611**	**23.485**	**25.901**
C2274 Warfare Systems	**9.493**	**11.358**	**5.989**	**3.829**	**3.595**	**4.167**	**4.702**	**3.722**
C2275 Radio Systems	**8.904**	**8.536**	**15.640**	**14.542**	**13.790**	**12.088**	**8.820**	**8.039**
C2276 Communications Switching & Control Systems	**6.944**	**3.720**	**6.220**	**7.642**	**7.094**	**4.891**	**1.938**	**1.817**
C2277 System Engineering & Integration	**9.225**	**7.787**	**9.697**	**8.877**	**9.183**	**9.363**	**9.686**	**9.909**
C2278 Air Defense Weapons Systems	**20.876**	**22.535**	**16.253**	**15.742**	**12.489**	**6.217**	**5.362**	**5.669**
C2315 Training Devices/Simulators	**8.440**	**4.804**	**8.941**	**7.333**	**15.023**	**13.960**	**10.765**	**10.884**
C2510 MAGTF CSSE & SE	**13.682**	**17.829**	**17.724**	**21.273**	**26.212**	**27.788**	**23.633**	**16.343**
C3099 Radar Systems	**19.393**	**51.055**	**23.741**	**42.380**	**103.321**	**117.917**	**66.526**	**63.975**
C9273 Defense Emergency Response Fund (DERF)	**0.138**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9276 Radar and Marine Corps Ship Maneuver	**10.175**	**1.452**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9632 Advanced Ferrite Antenna (AFA)	**0.000**	**2.080**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9633 Miniaturized Combat ID System	**0.000**	**0.990**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9634 Marine Corps Wideband Communications	**0.000**	**4.211**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9635 USMC Hitch Hiker	**0.000**	**1.683**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9636 Display Technology Porgram	**0.000**	**1.684**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9637 Marine Airborne Re-Trans Sys (MARTS)	**0.000**	**3.368**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9638 Covert Sight for Urban Warfare	**0.000**	**1.484**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9639 Improved Ground Based Transportable Radar	**0.000**	**2.080**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
C9640 USMC Electronic Battlefield Fusion	**0.000**	**0.990**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

EXHIBIT R-2, RDT&E Budget Item Justification	DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT (PE) NAME AND NO. **0206313M Marine Corps Communications Sys**

(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.

B. PROGRAM CHANGE SUMMARY

	FY 2004	FY 2005	FY 2006	FY 2007
(U) FY 2005 President's Budget:	247.179	268.638	219.349	221.868
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions		-9.700		
(U) Congressional Rescissions				
(U) Congressional Increases		27.750		
(U) Reprogrammings	-6.360		21.889	-6.788
(U) SBIR/STTR Transfer	-2.635			
(U) Minor Affordability Adjustment	-0.070	-12.818	-4.157	-4.125
(U) FY 2006 President's Budget:	238.114	273.870	237.081	210.955

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

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**				PROJECT NUMBER AND NAME **C2270 Command Post Systems**			
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**16.575**	**10.586**	**18.407**	**18.523**	**17.087**	**19.875**	**18.343**	**18.005**
RDT&E Articles Qty								

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

(U) 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 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 Command and Control (C2) automation to Marine Air Ground Task Force (MAGTF) Fire Support Coordination Centers, Fire Direction Centers, and Supporting Arms Coordination Centers (afloat).

2. **MAGTF Software Baseline (MSBL)**. 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. 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 abiilty 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.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2270 Command Post Systems**	

(U) B. ACCOMPLISHMENTS/ PLANNED PROGRAM:

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.254**	**0.213**	**0.170**
RDT&E Articles Qty				

TCO: Program management and engineering support.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.244**	**0.204**	**0.164**
RDT&E Articles Qty				

TCO: System testing and integration to develop additional functional capabilities.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.215**	**0.185**	**0.149**
RDT&E Articles Qty				

TCO: Integrate software changes into new system and perform testing.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.323**	**0.283**	**0.228**
RDT&E Articles Qty				

TCO: Testing and validations of advanced concepts and technologies.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.200**	**1.200**	**1.220**	**1.240**
RDT&E Articles Qty reprogrammed				

MAGTF C4I BASELINE/C2PC: Build, test, field and support COE compliant versions of GCCS-J in support of the six Warfighting functions. This effort focuses primarily on the integration, inclusion and incorporation of Fire Support, Maneuver and Intel capabilities.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.307**	**0.245**	**0.250**	**0.255**
RDT&E Articles Qty				

MAGTF C4I BASELINE/C2PC: Engineering Support

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.266**	**0.535**	**0.546**	**0.557**
RDT&E Articles Qty				

MAGTF C4I BASELINE/C2PC: Program Management Support

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.115**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

MAGTF C4I BASELINE/C2PC: Conduct Life Cycle Cost Estimate

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2270 Command Post Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**8.644**	**2.980**	**5.027**	**6.221**
RDT&E Articles Qty				
MAGTF C4I BASELINE/C2PC: Development of MSBL Client in MS Windows environment (C2PC) and foot mobile Marines in Windows CE environment, Command and Control Compact Edition (C2CE).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.200**	**0.000**	**0.000**
RDT&E Articles Qty				
MAGTF C4I BASELINE/C2PC: Conduct C2PC Code Quality Analysis.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.100**	**0.000**	**0.000**
RDT&E Articles Qty				
MAGTF C4I BASELINE/C2PC: Conduct C2PC Study Analysis.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.020**	**0.000**	**0.000**
RDT&E Articles Qty				
MAGTF C4I BASELINE/C2PC: NMCI Cost				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.040**	**0.100**	**0.000**	**0.000**
RDT&E Articles Qty				
MAGTF C4I BASELINE/C2PC: MCSC Program Office Travel				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.070**	**0.085**	**1.537**	**0.818**
RDT&E Articles Qty				
AFATDS: Development of BUCS and LWTDS SW				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.505**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
AFATDS: Developed AFATDS V6.4 software. Simplified human factors interface to allow easier initial and sustainment training. Increased functionality with Marine Corps fire support systems (including Towed Artillery Digitization and HIMARS.)				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.300**	**0.500**	**0.000**	**0.000**
RDT&E Articles Qty				
AFATDS: Field Integration Team (FIT) testing, software development, and FMF interoperability support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.100**	**0.000**	**0.506**	**0.244**
RDT&E Articles Qty				
AFATDS Program management, engineering support and hardware development.				

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2270 Command Post Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.030**	**0.032**	**0.000**	**0.036**
RDT&E Articles Qty				
AFATDS: MCTSAA tested new SW and SOST.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.536**	**2.217**	**1.848**
RDT&E Articles Qty				
AFATDS: Development of improved interoperability with USMC and Joint systems. Enhancement to EMT and C2PC interface.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**1.478**	**1.010**	**1.965**
RDT&E Articles Qty				
AFATDS: Development of SWBII and future software. Increased functionality, interoperability, and ease of use. Better interface with USMC and USN systems.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.020**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
DACT: DACT Security Accredidation, Develop software recovery solution.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.580**	**1.200**
RDT&E Articles Qty				
DACT: DACT FMF test support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.050**	**0.050**
RDT&E Articles Qty				
DACT: DACT Exercise Support				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.339**	**1.102**	**1.008**
RDT&E Articles Qty				
DACT: DACT Development				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**1.180**	**0.650**	**0.000**
RDT&E Articles Qty				
DACT: Protocol Implementation				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.226**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
DACT: Internal 188-220 modem development				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.372**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
DACT: Development, integration, testing and fielding of the Tank and DACT Vehicle Mount.				

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2270 Command Post Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.299**	**0.000**	**0.607**	**0.600**
RDT&E Articles Qty				
DACT: DACT Training Development				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.020**	**0.020**	**0.020**
RDT&E Articles Qty				
DACT: DACT Technical Support Plan				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.019**	**0.000**	**0.450**	**0.000**
RDT&E Articles Qty				
DACT: Dismounted DACT Development				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**4.062**	**0.000**	**1.750**	**1.750**
RDT&E Articles Qty				

TLDHS: Test Development and integration support.

(U) Total $	**16.575**	**10.586**	**18.407**	**18.523**

(U) PROJECT CHANGE SUMMARY:	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
(U) FY 2005 President's Budget:	**9.064**	**10.727**	**12.308**	**9.932**
(U) Adjustments from the President's Budget:				
(U) Congressional Program Reductions				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	7.632	0.000	5.941	8.371
(U) SBIR/STTR Transfer	-0.121			
(U) Minor Affordability Adjustment		-0.141	0.158	0.220
(U) FY 2006 President's Budget:	**16.575**	**10.586**	**18.407**	**18.523**

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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
PMC BLI# 463100 TCO	1.152	3.246	0.194	0.412	0.406	0.208	0.218	0.228	Cont	Cont
PMC BLI# 463100 AFATDS	0.750	0.173	4.191	8.113	9.015	3.271	3.385	3.451	Cont	Cont
PMC BLI# 463100 DACT	10.851	0.935	7.132	7.826	2.020	7.021	5.126	3.194	Cont	Cont
PMC BLI#463100 TLDHS	0.000	0.000	1.509	1.515	0.911	1.013	1.013	2.026	Cont	Cont
PMC BLI# 463100 GCCS	3.879	3.759	4.229	4.391	4.607	4.517	4.864	4.983	Cont	Cont

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2270 Command Post 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) Defense.
(U) Navy Tactical Flag Communication and Control System.

(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.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2270 Command Post Systems**

E. Major Performers:

TACTICAL COMBAT OPERATIONS (TCO)

FY 04 MCTSSA, Camp Pendleton, CA. System of systems testing. Oct 04.

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. Nov 04.

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. Nov 06.

MAGTF SOFTWARE BASELINE (MSBL)

FY 04 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), San Diego, CA. Software development C2PC and C2CE (C2PC Light). Contract awarded date: Mar 04
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Contract awarded date: Nov 03
NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), Stafford, VA. Engineering support. Contract awarded date: Oct 03
TITAN CORPORATION, Stafford, VA. Program Management Support. Contract awarded date: Oct 03
MCR Federal, Reston, VA. Life Cycle Cost Estimate. Contract awarded date: Apr 04

FY 05 NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), San Diego, CA. Software development C2PC and C2CE (C2PC Light). Estimated contract award date: Feb 05
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Estimated contract award date: Nov
NORTHROP GRUMMAN MISSION SYSTEMS (NGMS), Stafford, VA. Engineering support. Estimated contract award date: Oct 04.
TITAN CORPORATION, Stafford, VA. Program Management Support. Estimated contract award date: Oct 04
MCTSSA, software testing Award Nov 04.
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
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
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

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2270 Command Post Systems**

ADVANCED FIELD ARTILLERY TACTICAL DATA SYSTEM (AFATDS)

FY 04 RAYTHEON, Fort Wayne IN. Develop and test software. Oct 03.
MCOTEA, Quantico VA. Test software. Award Dec 03.
MCTSSA, Software testing. Award Oct 03.
FY 05 RAYTHEON, Fort Wayne IN. Develop and test software. Nov 04.
MCOTEA, Quantico VA. Test software. Award Nov 04.
MCTSSA, Software testing. Award Nov 05
FY 06 RAYTHEON, Fort Wayne IN. Develop and test software. Oct 06.
MCOTEA, Quantico VA. Test software. Award Dec 06.
MCTSSA, Software testing. Award Oct 06.
FY 07 RAYTHEON, Fort Wayne IN. Develop and test software. Nov 07.
MCOTEA, Quantico VA. Test V6.3.2 software. Award Nov 07.
MCTSSA, Software testing. Award Nov 07.

DATA AUTOMATED COMMERCIAL TERMINAL (DACT)

FY 04 NORTHROP GRUMMAN, San Diego, CA. Sotfware Development, Jan 03.
NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA. Program Support. Oct 03.
GENERAL DYNAMICS (via Army CECOM), Wireless communication, Feb 04.
COMTECH, Germantown, MD. Over the horizon communication, Mar 04.
FY 05 NORTHROP GRUMMAN, San Diego, CA. Software Development
Ocean Systems Engineering Corporation (OSEC), Stafford, VA Training Development
Raytheon, Modem Development
Titan Corporation, Staffort, VA Program Support
NORTHROP GRUMMAN Mission Systems (NGMS), Stafford, VA. Program Support.
FY 06 NORTHROP GRUMMAN, San Diego, CA. Software Development
Ocean Systems Engineering Corporation (OSEC), Stafford, VA Training Development
Raytheon, Modem Development
Titan Corporation, Staffort, VA Program Support
NORTHROP GRUMMAN Mission Systems (NGMS), Stafford, VA. Program Support.
FY 07 NORTHROP GRUMMAN, San Diego, CA. Software Development
Ocean Systems Engineering Corporation (OSEC), Stafford, VA Training Development
Titan Corporation, Staffort, VA Program Support
NORTHROP GRUMMAN Mission Systems (NGMS), Stafford, VA. Program Support.

TARGET LOCATION DESIGNATION AND HAND-OFF SYSTEM (TLDHS)

FY 04 NSWC, Crane, IN. Block I Fielding Integration. Dec 03.
NSWC Dahlgren, King George, VA. Government Test Agent. Oct 03
Stauder Technologies, Stt. Peters, MO. Software Developer. May 04
FY05 N/A
FY06 TBD
FY07 TBD

Exhibit R-3 Cost Analysis							DATE:								February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**					PROJECT NUMBER AND NAME **C2270 Command Post Systems**								
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 04 Cost**	**FY 04 Award Date**	**FY 05 Cost**	**FY 05 Award Date**	**FY 06 Cost**	**FY 06 Award Date**	**FY 07 Cost**	**FY 07 Award Date**	**Cost to Complete**	**Total Cost**	**Target Value of Contract**	
TCO	WR/RCP	SPAWAR. Charleston, SC	1.328	0.000		0.498	11/04	0.417	11/05	0.334	11/06	Cont	Cont		
MAGTF C4I BASELINE	RCP	SPAWAR, Charleston, SC	4.860	1.200	11/03	1.200	11/04	1.220	11/05	1.240	11/06	Cont	Cont		
MAGTF C4I BASELINE	RCP	Northrop Grumman, San Diego, CA	17.681	8.520	03/04	2.980	02/05	5.027	12/05	6.221	12/06	Cont	Cont		
MAGTF C4I BASELINE	RCP	Northrop Grumman, Stafford, VA	1.057	0.307	10/03	0.245	10/04	0.250	10/05	0.255	10/06	Cont	Cont		
MAGTF C4I BASELINE	RCP	Titan Corporation, Stafford, VA	1.904	0.266	10/03	0.535	10/04	0.546	10/05	0.557	10/06	Cont	Cont		
MAGTF C4I BASELINE	RCP	MCR Federal, McClean, VA	0.115	0.115	04/04							Cont	Cont		
MAGTF C4I BASELINE	WR	MCSC, Quantico, VA	0.140	0.040	10/03	0.100	10/04					Cont	Cont		
MAGTF C4I BASELINE	RCP	Carnegie Melon University	0.324	0.124		0.200	10/04					0.000	0.648		
MAGTF C4I BASELINE	RCP	Naval Post Graduate School	0.100			0.100	02/05					0.000	0.200		
MAGTF C4I BASELINE	WR	NMCI	0.020			0.020	10/04					0.000	0.040		
AFATDS	WR	MCSC (MCTSSA), Quantico, VA	0.240	0.040	10/03	0.032	10/04	0.034	11/05	0.036	11/06	Cont	Cont		
AFATDS	CPFF/MIPR	CECOM, Ft. Monmouth,NJ	1.950	0.965	10/03	2.599	11/04	5.236	11/05	4.875	11/06	Cont	Cont		
DACT	TM	Raytheon, Fort Wayne, IN	2.483	0.716		1.180	11/04	0.650	11/05			Cont	Cont		
DACT	FFP	Northrop Grumman, San Diego CA	1.570	0.000	11/03	0.339	11/04	0.450	11/05			Cont	Cont		
DACT	RCP	COMTECH, Germantown, MD		0.100	11/03							Cont	Cont		
DACT	WR	FMF, MCB Camp Pendleton/MCTSSA	0.300	0.020	10/03	0.020	12/04	0.650	11/05	1.270	11/06	Cont	Cont		
DACT	WR	MCSC, Quantico, VA	1.500		02/04							Cont	Cont		
DACT	FFP	OSEC, Stafford, VA						0.607	11/05	0.600	11/06				
DACT	UNK	TBD						1.102	12/05	1.008	11/06				
TLDHS	SS/IDIQ	Stauder Technologies	0.000	0.142	05/03							Cont	Cont		
TLDHS	SS/IDIQ	TBD						1.000	01/06	1.000	01/07				
Subtotal Product Dev				**12.555**		**10.048**		**17.189**		**17.396**		**Cont**	**Cont**		

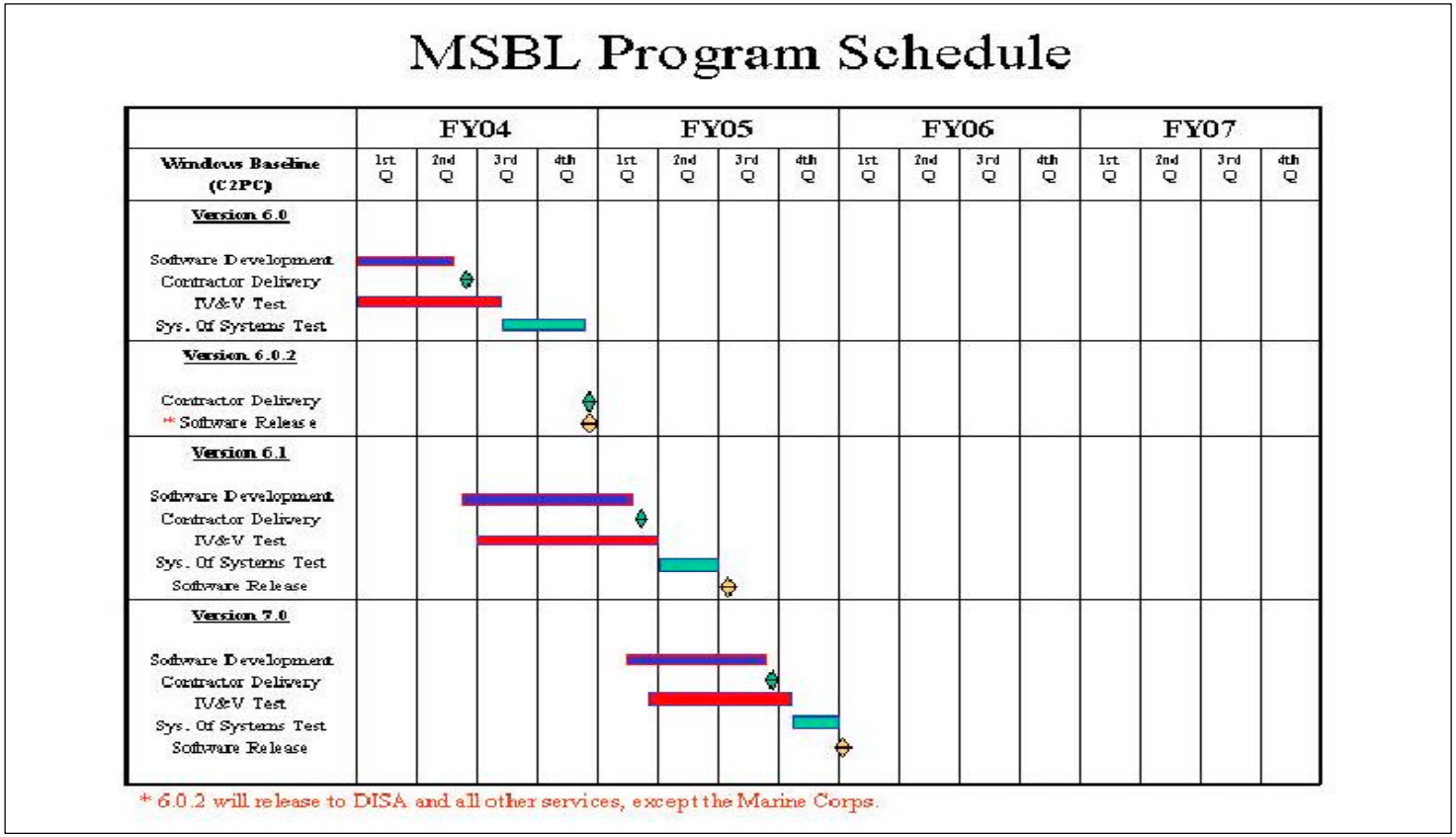
Remarks:

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**					PROJECT NUMBER AND NAME **C2270 Command Post Systems**							
Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 04 Cost**	**FY 04 Award Date**	**FY 05 Cost**	**FY 05 Award Date**	**FY 06 Cost**	**FY 06 Award Date**	**FY 07 Cost**	**FY 07 Award Date**	**Cost to Complete**	**Total Cost**	**Target Value of Contract**
DACT	FFP	NORTHROP GRUMMAN, Stafford, VA	0.724	0.100	10/03							Cont	Cont	
TLDHS	RCP	NSWC Crane	1.149	3.920	12/03	0.000		0.070	12/05	0.150	12/06	0.000	5.289	
Subtotal Support				**4.020**		**0.000**		**0.070**		**0.150**		**Cont**	**Cont**	
Remarks:														

Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 04 Cost**	**FY 04 Award Date**	**FY 05 Cost**	**FY 05 Award Date**	**FY 06 Cost**	**FY 06 Award Date**	**FY 07 Cost**	**FY 07 Award Date**	**Cost to Complete**	**Total Cost**	**Target Value of Contract**
TCO	WR	MCTSSA, Camp Pndltn, CA	0.261	0.000	10/03	0.156	12/04	0.180	12/05	0.180	12/06	Cont	Cont	
TCO	WR/RCP	SPAWAR. Charleston, SC				0.382	11/04	0.288	11/05	0.197	11/06	Cont	Cont	
TLDHS	WRR	NAWC, China Lake, CA	0.144	0.000	12/03	0.000		0.150	12/05	0.070	12/06	0.000	0.364	
TLDHS	MIPR	JITC, Ft. Huachuca	0.000	0.000	10/03	0.000		0.030	10/05	0.030	10/06	0.000	0.060	
TLDHS	WRR	NSWC Dahlgren	0.638	0.000	10/03	0.000		0.500	12/05	0.500	12/06	0.000	1.638	
TLDHS	RCP	NGIT, San Diego, CA	2.635									0.000	2.635	
Subtotal T&E				**0.000**		**0.538**		**1.148**		**0.977**		**Cont**	**Cont**	
Remarks:														

Cost Categories	**Contract Method & Type**	**Performing Activity & Location**	**Total PY s Cost**	**FY 04 Cost**	**FY 04 Award Date**	**FY 05 Cost**	**FY 05 Award Date**	**FY 06 Cost**	**FY 06 Award Date**	**FY 07 Cost**	**FY 07 Award Date**	**Cost to Complete**	**Total Cost**	**Target Value of Contract**
Subtotal Management				**0.000**		**0.000**		**0.000**		**0.000**		**0.000**	**0.000**	
Remarks:														
Total Cost				**16.575**		**10.586**		**18.407**		**18.523**		**Cont**	**Cont**	

EXHIBIT R-4/4a, Schedule Profile/Detail		DATE: February 2005
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	C2270 Command Post Systems



Program Funding Summary

(APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N MSBL	10.572	5.380	5.834	6.012	6.165	6.363	6.521	6.617	Cont	Cont
(U) RDT&E,N C2PC	0.000	0.000	1.209	2.261	2.179	2.262	2.190	2.285	Cont	Cont
LINE TOTAL	10.572	5.380	7.043	8.273	8.344	8.625	8.711	8.902	Cont	Cont

EXHIBIT R-4/4a, Schedule Profile/Detail			DATE: February 2005
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**	**C2270 Command Post Systems**	

MSBL SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
C2PC SOFTWARE RELEASES	4Q	3Q	1Q			

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005				
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**				PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**			
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**19.677**	**22.299**	**27.025**	**22.440**	**21.024**	**18.197**	**21.432**	**22.673**
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.

1. 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.

2. The 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 GEOINT support at the MEF and the MEW levels. The TPC configurations consist of 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 COP for the 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 proivdes the frame work for the Common Tactical Picture (CTP) of the battlefield; terrain analysis in support of the Intelligence Preparation of the Battlefield (IPB) process; all source terrain data collection, analysis and integration; and decision-aid development support.

3. The 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 .

4. The 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.

5. The 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 Corps (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.

6. The Counterintelligence (CI) and Human Intelligence (HUMINT) Equipment Program (CIHEP) is an intelligence collection, and reporting suite of equipment, employing Commercial-Off-The-Shelf (COTS) and non-developmental items (NDI) of equipment and software. It will produce digital soft copy as well as hard copy CI, Interrogator-Translator (IT) and HUMINT information reports and images for the Marine Air Ground Task Force (MAGTF) or Joint Force (JTF) Commander. CIHEP will allow the electronic storage and dissemination of HUMINT information throughout the command, as well as for low volume traditional hard copy dissemination.

7. 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.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**

8. 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.

9. MAGTF Secondary Imagery Dissemination System (MSIDS) This is a program formerly known as Manpackable Secondary Imagery Dissemination System (MP SIDS). MSIDS is a digital imagery collection/transmission system employed by Reconnaissance (Recon) and Light Armored Reconnaissance (LAR) Marines. MSIDS consist of one base station and three outstations. The base station consists of a ruggedized laptop computer with data controller hardware/software and a printer for hard copy printout of collected images. The outstation consists of a basic digital still-photo camera, advanced digital still-photo camera, night vision intensifier tube, and ruggedized ultra-portable laptop computer with data controller hardware/software. All equipment comprising MSIDS is Commerical-Off-The-Shelf (COTS) or Government Off The Shelf (GOTS). MSIDS works in conjunction with organic USMC/USN radios to transmit collected images from forward observation positions to intelligence/operations centers within the MAGTF.

10. The 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. A Marine Expeditionary Force (MEF) IAS variant will also process signal intelligence.

11. 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).

12. 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.

13. 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.

14. 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 lessential 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.

15. Trojan Spirit II - Two programs TROJAN SPIRIT II and TROJAN SPIRIT LITE are merging into a single program called TROJAN SPIRIT. TROJAN SPIRIT is a SHF multi-band satellite communications terminal, available in either HMMWV-mounted or transit case configuraion, that provides dedicated tactical communications capacity at the TS/SCI and Secret Collateral levels to USMC intelligence units. TROJAN SPIRIT terminals provide connectivity into JWICS, NSANET and SIPRNET via the TROJAN Network Control Center.

16. DCGSI - Distributed Common Ground/Surface System-Marine Corps, formerly known as Distributed Common Ground/Surface-Integration (DCGS-I), is a collection of Service Systems that will contribute to joint and combined warfighter needs for ISR support, with the Global Information Grid (GIG) providing unconstrained communications circa 2010 to support the Department of Defense (DoD) Intelligence, Surevillance and Reconnassiance (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 a 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. The Marine Corps will conduct DIB integration reseach and development to meet a congressionally mandated implementation deadline.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.024**	**0.034**	**0.028**	**0.035**
RDT&E Articles Qty				
CIHEP: Engineering, Integration and Technical support for technical refresh and update of program hardware/software upgrades.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.074**	**0.081**	**0.091**	**0.091**
RDT&E Articles Qty				
CIHEP: Program Management Support for the technical refresh and update of program hardware/software upgrades.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.620**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
COBRA: NAVSEA Technical and Contractual Support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.299**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
COBRA: Engineering and Technical Development, Platform Integration Services				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.120**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
COBRA: MCSC Program Support				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**1.630**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
COBRA: SD&D Contract, Northgrup Grumman, System Development, Spiral A.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**1.439**	**1.513**	**1.567**	**1.588**
RDT&E Articles Qty				
GCCS-I3: Operational system development. Funding for this effort in FY02 and FY03 is provided under Project C2270 of this Program Element (PE).				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.326**	**0.504**	**0.574**	**0.593**
RDT&E Articles Qty				
IAS MOD KIT: Critical improvements to GCCS-I3 Intelligence Support software for USMC requirements. Funding for this effort in FY02 and FY03 is provided under Project C2270 of this PE.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.144**	**0.057**	**0.000**	**0.000**
RDT&E Articles Qty				
IAS MOD KIT: Joint interoperabilty assessment and documentation. Funding for this effort in FY02 is provided under Project C2270 of this PE.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.358**	**0.431**	**0.460**	**0.445**
RDT&E Articles Qty				
IAS MOD KIT: Software modifications to support USMC joint interoperability. Funding for this effort in FY03 is provided under Project C2270 of this PE.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
Accomplishment/Effort Subtotal Cost	**0.200**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
IAS MOD KIT. Perform trade study for the IOS server, MEF IAS client and IOW laptop.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.811**	**0.929**	**1.040**	**1.000**
RDT&E Articles Qty				
IBR: Engineering and technical service support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.049**	**0.068**	**0.097**	**0.087**
RDT&E Articles Qty				
IBR: Contract and Program Support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.140**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
IBR: Logistic and Training Support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.340**	**0.299**	**0.275**
RDT&E Articles Qty				
ISR: Program Management and Technical Support for the ISR Program.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.406**	**0.422**	**0.366**
RDT&E Articles Qty				
ISR: Engineering Support for delivery of new technology initiatives to the Operating Forces.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.308**	**0.295**	**0.295**
RDT&E Articles Qty				
ISR: System Engineering support for the ISR Testing and Training Center.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.304**	**0.261**	**0.186**	**0.259**
RDT&E Articles Qty				
JSTARS: Engineering and technical support for development and integration of client software that will reside on existing MAGTF system and utilize JSTARS data.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.433**	**0.000**	**0.186**	**0.521**
RDT&E Articles Qty				
JSTARS: Future MTI capability into JSTARS ground elements.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.108**	**0.279**
RDT&E Articles Qty				
JSTARS: Common Data Link Capability.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
Accomplishment/Effort Subtotal Cost	**0.000**	**0.389**	**0.000**	**0.221**
RDT&E Articles Qty				
JSTARS: Future MTI Sensor capability.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.084**	**0.073**	**0.083**
RDT&E Articles Qty				
JSTARS: IPv6 integration research.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.441**	**0.803**	**0.580**	**0.710**
RDT&E Articles Qty				
JSIPS-TEG: Development and integration of enhanced TEG/TEG-RWS functionality to include SCI capability.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.100**	**0.225**	**0.300**	**0.371**
RDT&E Articles Qty				
JSIPS-TEG: Development and integration of required upgrades/interfaces to accommodate emerging airborne imagery sensor.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.177**	**0.157**	**0.090**	**0.080**
RDT&E Articles Qty				
JSIPS-TEG: Develop, maintain and improve Precision Targeting software.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.086**	**0.130**
RDT&E Articles Qty				
JSIPS-TEG: Development of MTI/MTIX interfaces to include potential merger of current JSTARS/CGS capabilities				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.412**	**0.198**	**0.104**	**0.171**
RDT&E Articles Qty				
JSIPS-TEG: Development and integration of video capture and exploitation capability.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.062**	**0.081**	**0.138**	**0.183**
RDT&E Articles Qty				
JSIPS-TEG: Development and integration of mandated DCGS/DIB interfaces and comunication architectures.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.100**	**0.094**
RDT&E Articles Qty				
JSIPS-TEG: Development of man-portable and reduced form-factor Comon Data Link (CDL) capability.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.829**	**0.738**	**0.492**	**0.563**
RDT&E Articles Qty				
JSIPS-TEG: Engineering/technical management and Infrastructure/Team IMINT shared costs.				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.084**	**0.100**
RDT&E Articles Qty				
JSIPS-TEG: Development and integration of mandated Joint interoperability and architectures to include IPv6, GIG and others.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.245**	**0.084**	**0.147**	**0.151**
RDT&E Articles Qty				
MSIDS: Engineering and technical support for product development of program hardware and software refresh.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.092**	**0.059**	**0.059**
RDT&E Articles Qty				
MSIDS: Program Management and technical support for product development of program hardware and software refresh.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.061**	**0.041**	**0.041**
RDT&E Articles Qty				
MSIDS: Program Management and technical support for Technical and Evaluation of program refresh.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.819**	**0.892**	**0.912**	**1.511**
RDT&E Articles Qty				
TCAC: Software development keeping TCAC with COE 4.X and future releases.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**2.234**	**3.253**	**3.429**	**3.225**
RDT&E Articles Qty				
TENCAP: Program support and management; evaluate national intelligence data systems for MAGTF applicability.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.089**	**0.232**	**0.506**	**0.395**
RDT&E Articles Qty				
TENCAP: Technical assessments of emerging national data dissemination capabilities.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.015**	**0.015**	**0.015**
RDT&E Articles Qty				
TENCAP: Training and education efforts by providing the Fleet Marine Force with TENCAP simulation, visualization, and data receipt and dissemination capabilities.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.280**	**0.300**	**0.000**	**0.335**
RDT&E Articles Qty				
TENCAP: Evaluate the utility of emerging exploitation, automated and manual target recognition and detection tools.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.277**	**0.343**	**0.354**	**0.357**
RDT&E Articles Qty				
TPC: Contractor Support for Integration and Re-engineering Support				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.474**	**0.000**	**0.707**	**1.000**
RDT&E Articles Qty				
TPCS-MPC: EDM Design.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.700**	**0.500**
RDT&E Articles Qty				
TPCS-MPC: System development.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.300**	**0.500**
RDT&E Articles Qty				
TPCS-MPC: Training development and test support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**2.683**	**3.176**	**0.600**	**0.300**
RDT&E Articles Qty				
TPCS-MPC: Program support and management.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.499**
RDT&E Articles Qty				
TPCS-MPC: Contractor advisory assistance service.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.300**	**0.700**
RDT&E Articles Qty				
TPCS-MPC: Operational Test and Evaluation (OT&E).				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.059**	**0.161**	**0.175**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Logistic and Admin support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.018**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Development of configuration utillity for RSMS software.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.353**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Software development of HHPM and Low Cost Imager; Improved Air Delivered Sensor (IADS) II; Encoder Transmitter Unit (ETU); Windows 2000 migration; and RSMS				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.589**	**0.616**	**0.700**	**0.750**
RDT&E Articles Qty				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
TRSS-PIP: Engineering support.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**1.965**	**2.000**	**0.000**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Development of Unattended Ground Miniaturized Sensors (UGMS) and AADS electronic components.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.600**	**0.100**	**0.000**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Air Certification of Advanced Air Delivered Sensor (AADS) store.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.914**	**1.000**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Software Development of AADS and UGMS Monitoring System.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**2.453**	**2.916**	**0.243**
RDT&E Articles Qty				
TRSS-PIP: Development of Increment IV and software efforts				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.500**	**0.000**
RDT&E Articles Qty				
TRSS-PIP: Support IOT&E and Increment II efforts.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.420**	**0.422**
RDT&E Articles Qty				
TROJAN SPIRIT: Development of P3I upgrades.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**2.382**	**1.131**
RDT&E Articles Qty				
DCGS-MC - USMC DCGS Integrated Backbone (DIB).				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**2.382**	**1.131**
RDT&E Articles Qty				
DCGS-MC - Application Interface (API) and Application Process Development.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.583**	**0.517**
RDT&E Articles Qty				
DCGS-MC - Engineering and Technical Services.				
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.497**	**0.118**

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**	
RDT&E Articles Qty				
DCGS-MC - Studies, analysis and evaluation.				
(U) Total $	**19.677**	**22.299**	**27.025**	**22.440**

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**

(U) PROJECT CHANGE SUMMARY:	**FY2004**	**FY2005**	**FY2006**	**FY2007**
(U) FY 2005 President's Budget:	**17.759**	**32.294**	**27.668**	**20.964**
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Prog Reduction		-9.700		
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	1.934		0.134	2.163
(U) SBIR/STTR Transfer				
(U) Minor Affordability Adjustment	-0.016	-0.295	-0.777	-0.687
(U) FY 2006 President's Budget:	**19.677**	**22.299**	**27.025**	**22.440**

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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
PMC BLI 471400 TRSS PIP	TRSS-PIP	7.536	10.581	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.117
PMC BLI 474700 Intell Support Eq	TRSS-PIP	0.000	0.000	18.438	17.100	16.386	18.526	20.235	20.262	Cont	Cont

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**					PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**				
PMC BLI 474700 Intell Support Eq	CIHEP	1.299	1.483	1.503	1.601	1.761	1.862	1.935	1.970	Cont	Cont
PMC BLI 474700 Intell Support Eq	DCGSI	0.000	0.000	1.374	3.240	0.529	0.612	6.203	0.574	Cont	Cont
PMC BLI 474700 Intell Support Eq	JSIPS	2.778	1.014	3.586	5.280	2.049	1.283	1.813	0.299	0.000	18.102
PMC BLI 474700 Intell Support Eq	TPCS	0.000	6.335	8.056	7.771	6.000	0.301	0.000	0.000	0.000	28.463
PMC BLI 474700 Intell Support Eq	MSIDS	1.002	2.846	1.702	1.697	1.762	1.718	1.757	1.794	Cont	Cont
PMC BLI 474700 Intell Support Eq	IBR	1.451	3.531	1.396	0.401	0.420	0.422	0.429	0.434	Cont	Cont
PMC BLI 474700 Intell Support Eq	TPC	2.792	0.571	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.363
PMC BLI 474700 Intell Support Eq	RREP	1.100	0.000	4.209	0.034	1.019	5.191	0.100	1.294	Cont	Cont
PMC BLI 474700 Intell Support Eq	TSCM	2.146	0.000	1.222	0.000	1.323	0.000	1.448	0.000	Cont	Cont
PMC BLI 474900 MOD KITS Intell	IAS MOD Kit	1.486	1.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.835
PMC BLI 465200 Mod Kits	IAS MOD Kit	0.000	0.000	3.935	7.989	2.605	1.501	2.730	1.753	Cont	Cont
PMC BLI 474900 Mod Kits Intell	TCAC	0.626	1.539	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.165
PMC BLI 465200 Mod Kit	TCAC	0.000	0.000	0.933	3.904	0.945	1.127	0.000	0.772	Cont	Cont
PMC BLI 474900 Mod Kits Intell	JSTARS	3.192	5.582	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.774
PMC BLI 465200 Mod Kit	JSTARS	0.000	0.000	4.554	4.671	11.471	1.633	1.506	2.540	Cont	Cont
PMC BLI 474900 Mod Kits Intell	TERPES	2.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.493
PMC BLI 465200 Mod Kit	TERPES	0.000	0.000	2.982	0.000	3.182	0.000	0.000	0.000	0.000	6.164
PMC BLI 474900 Mod Kits Intell	ISR	0.000	1.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.044
PMC BLI 465200 Mod Kit	ISR	0.000	0.000	4.280	4.316	4.462	4.420	4.553	4.651	Cont	Cont
PMC BLI 463300 Radio Systems	TROJAN LITE	0.401	4.907	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.308
PMC BLI 474700 Intell Support Eq	TROJAN SPIRI	0.000	0.000	7.696	3.094	4.011	0.656	0.108	0.113	Cont	Cont

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **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) PE 0206313M (Marine Corps Communication Systems), Project C9273

(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 COBRA: COBRA System Development, Test and Demonstration based upon a competitive, multi-year, CPFF/CPIF contract awarded to Northrop Grumman 4Q 2001. Production will be FFP. Technology insertion will add objective capabilities as they are matured and integrated by other DOD organizations.

(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, interoperabiity, 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.

(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.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**

(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 FY05 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 compliancdee with the NGA US Imagery and Geospatial Information System. The TPC program uses existing Government contracts for hardware/software developmet 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.

(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 wil 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.

(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.

(U) E. MAJOR PERFORMERS:

MANPACK SIDS (MP SIDS)

FY 04 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.
FY 05 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.
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.
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.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**

INTELLIGENCE BROADCAST RECEIVER (IBR)

FY 04 NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA Provide funds for Engineering and Program management support.
COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA Provide funds to MDA Technologies for IBS Common Message format implementation assessment.
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.
FY 06 COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA 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 Provide funds to MDA Technologies for IBS Common Message format implementation assessment and Engineering and technical management support.

INTELLIGENCE ANALYSIS SYSTEM (IAS)

FY04 SPAWAR, CHARLESTON, S.C. Provide funds for development, joint interoperability, assessment and documentation and joint tactical terminal integration.
FY04 Navy Systems Management Activity (MTC, Stafford, VA). Provide funds for Integration and hardware upgrade study.
FY05 SPAWAR, CHARLESTON, S.C. Continue to provide funds for development, upgrades, integration, research and analysis of hardware for system refresh.
FY05 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.
FY06 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.
FY07 Navy Systems Management Activity (MTC, Stafford, VA). Continue to provide funds for Integration and hardware upgrade study.

INTELLIGENCE SYSTEM READINESS (ISR)

FY 04 - No Funding

FY 05 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC Services Corporation, Stafford, VA) - Provides 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) - Provides funding for engineering, testing, evaluation and training support.
FY 07 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC Services Corporation, Stafford, VA) - Provides funding for engineering, testing, evaluation and training support.

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

FY04 MCOTEA. Provide Operational testing of the TPCS-MPC Ground/Team system.
SPAWAR, Charleston, S.C.. Provide funds for prime system integrator for TPCS-MPC EDM.
COMPUTER SCIENCE CORP, Dumfries, VA Funds provided for SETA support for Configuration Management (CM).
TITAN, Dumfries VA Funds provide Contractor Engineering Technical Support (CETS) at RadBn for training support.
MCSC (Mainstream Corp), Provide funds for development of the Lightweight Mult-Fuel Generator SBIR program.
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. 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. 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

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**

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

FY 04 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 and inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc..
FY 05 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 and inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc..
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 and inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc..
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 and inoperability with US Army Intelligence System (ASAS), ASAS-Lite, etc..

COASTAL BATTLEFIELD RECONNAISSANCE AND ANALYSIS (COBRA)

FY 04 NAVAL SEA WARFARE COMMAND (NSWC), Panama City, FL Provide funds for program and technical support.
NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Melborne, FL Provide funds system engineering and development of Spiral A.
MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for Program and technical support.
FY 05 NAVAL SEA WARFARE COMMAND (NSWC), Panama City, FL Continue to provide funds for program and technical support.
NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Melborne, FL Continue to provide funds system engineering and development of Spiral A
MARCORSYSCOM, (MCSC), Quantico, VA Continue to provide funds for Program and technical support.

TOPOGRAPHIC PRODUCTION CAPABILITY (TPC)

FY 04 MARCORSYSCOM, (MCSC), Quantico, VA Provide funds to Northrop Grumman Information Technology, TASC,for integration and re-engineering support. Feb 04
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 Provide funds to TBD for sustained integration and re-engineering support. Dec 05
FY 07 MARCORSYSCOM, (MCSC), Quantico, VA Provide funds to TBD for sustained integration and re-engineering support. Dec 06

JOINT SURVEILLANCE TARGET ATTACK RADAR (JSTARS)

FY 04 Space and Naval Warfare Systems Center (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.
FY 05 Space and Naval Warfare Systems Center (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 06 Space and Naval Warfare Systems Center (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 Space and Naval Warfare Systems Center (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, RDT&E Project Justification		DATE: February 2005
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**

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

FY04 SPACE AND NAVAL WARFARE SYSTEMS CENTER (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 and technical management support.
FY05 SPACE AND NAVAL WARFARE SYSTEMS CENTER (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 and technical management support.
FY06 SPACE AND NAVAL WARFARE SYSTEMS CENTER (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 and technical management support.
FY07 SPACE AND NAVAL WARFARE SYSTEMS CENTER (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 and technical management support.

TACTICAL CONTROL AND ANALYSIS CENTER (TCAC)

FY 04 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. Oct 03
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. Oct 04

TACTICAL REMOTE SENSOR SYSTEM (TRSS)

FY04 MODERN TECHNOLOGIES (MTC), Springfield, VA. Funds provided for logistical and admin support to R&D efforts.
FY04 SPAWAR, Charleston, SC. Funds provided for development of configuration utility for RSMS software.
FY04 OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided for software development of HHPM, Imager, IADS II, ETU II, Windows 2K, and RSMS 3.1.
FY04 NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), Crystal City, VA. Funds provided to MTC Services Corp. for engineering and integration support to R&D efforts.
FY04 AIR FORCE ELECTRONIC SYSTEMS CENTER (ESC), Hanscom AFB, MA. Funds provided for development of AADS hardware.
FY04 NAVAIR, Patuxent River, MD. Funds provided for air certification of AADS.
FY05 MARCORSYSCOM, Quantico, VA. Funds provided to CEOss for ALA and Engineering support to R&D efforts.
FY05 NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), Crystal City, VA. Funds provided for engineering and integration support to R&D efforts.
FY05 AIR FORCE ELECTRONIC SYSTEMS CENTER (ESC), Hanscom AFB, MA. Funds provided for development of AADS hardware.
FY05 NAVAL SURFACE WARFARE CENTER, Crane Division, Crane, IN. Funds provided for development of UGMS.
FY05 NAVAIR, Patuxent River, MD. Funds provided for air certification of AADS.
FY05 OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided software development AADS and UGMS.
FY05 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided for development of Increment IV efforts.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2272 Intelligence C2 Systems**

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.
FY06 MARCORSYSCOM, Quantico, VA. Funds provided to CEOss for ALA and Engineering support to R&D efforts.
FY06 OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided software development AADS and UGMS.
FY06 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided for development of Increment IV efforts.
FY06 MARCORSYSCOM, Quantico, VA. Funds provided for IOT&E of Increment III efforts.
FY07 NAVY SYSTEMS MANAGEMENT ACTIVITY (NSMA), Crystal City, VA. Funds provided for engineering and integration support to R&D efforts.
FY07 MARCORSYSCOM, Quantico, VA. Funds provided to CEOss for Engineering support to R&D efforts.
FY07 OCEAN SYSTEMS ENGINEERING CORP. (OSEC), San Diego, CA. Funds provided for software development of Increment IV efforts

COUNTERINTELLIGENCE AND HUMAN INTELLIGENCE (HUMINT) EQUIPMENT PROGRAM (CIHEP)

FY04 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC, Stafford, VA) - Funds provided for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
FY04 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to Northrop Grumman IT, Stafford VA for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
FY04 MARCORSYSCOM (MCSC), Quantico, VA. Program Management support.
FY05 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC, Stafford, VA) - Funds provided for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
FY05 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to Northrop Grumman IT, Stafford VA for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
FY 05 ACTION SYSTEMS, Las Cruces, NM. Engineering, Integration and technical support for tech refresh and upgrade of program hardware and software.
FY06 MARCORSYSCOM (MCSC), Quantico, VA. Program Management support for tech refresh and upgrade of program hardware and software.
FY06 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC, Stafford, VA) - Funds provided for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
FY 06 ACTION SYSTEMS, Las Cruces, NM. Engineering, Integration and technical support for tech refresh and upgrade of program hardware and software.
FY07 MARCORSYSCOM (MCSC), Quantico, VA. Program Management support for tech refresh and upgrade of program hardware and software.
FY07 NAVY SYSTEMS MANAGEMENT ACTIVITY, (MTC, Stafford, VA) - Funds provided for Pgm Mgmt support for tech refresh and upgrade of program hardware and software.
FY 07 ACTION SYSTEMS, Las Cruces, NM. 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 - Provide funds for P3I prototype, technical and Engineering support to include EOA, DT and OT.
FY07 U.S. Army Cerdec I2WD, Ft Monmouth, NJ - 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.
FY06 Integrated Teams Solution Facility, Stafford, VA Engineering and technical services, and conducting of 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.
FY07 Integrated Teams Solution Facility, Stafford, VA Engineering and technical services, and conducting of studies, analysis and evaluation for DIB integration and integration support.

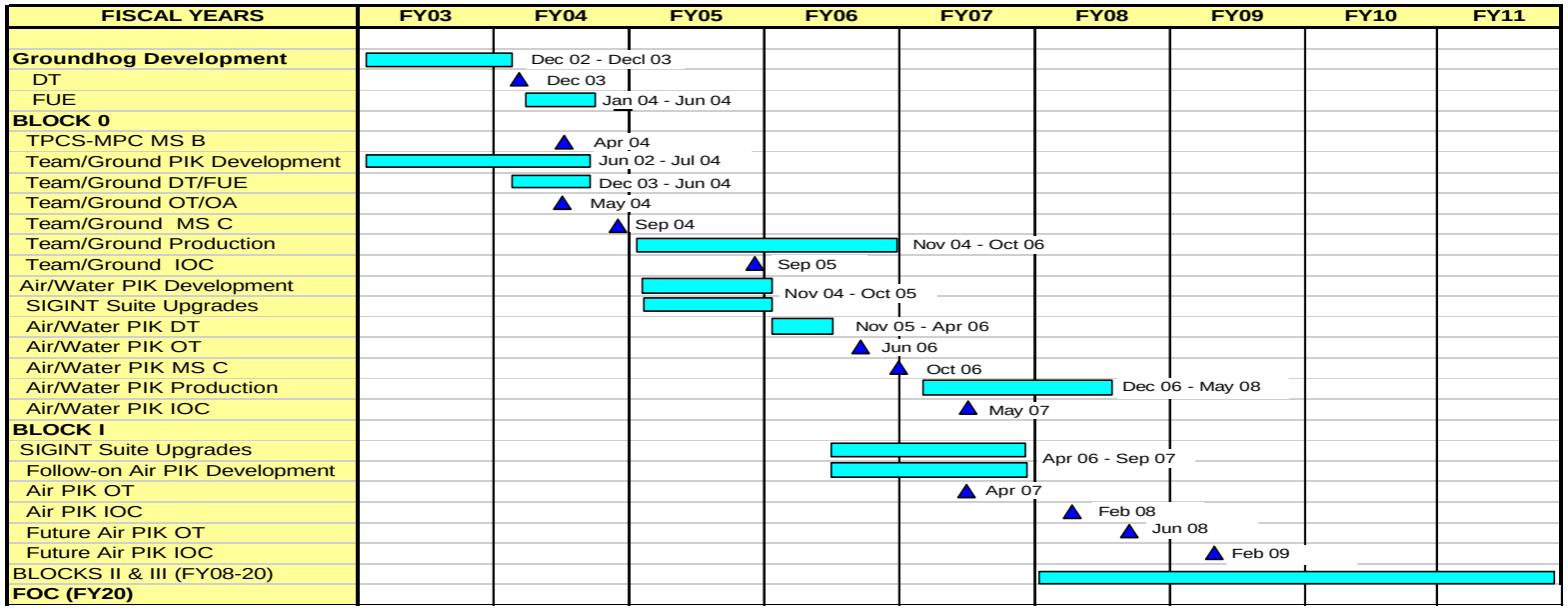
Exhibit R-3 Cost Analysis							DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Dev		PROGRAM ELEMENT 0206313M Marine Corps Communications Sys						PROJECT NUMBER AND NAME C2272 Intelligence C2 Systems						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TENCAP	Various	Titan	11.463	2.603	12/03	3.785	12/04	3.935	12/05	3.955	12/06	Cont	Cont	
TENCAP	TBD	TBD	0.685	0.000		0.015	12/04	0.015	12/05	0.015	12/06	Cont	Cont	
COBRA	RCP	NG,Melbourne	0.272	1.630	01/04							0.000	1.902	
TPCS	MPR	SPAWAR	2.335	1.928	04/04			1.407	11/05	1.500	11/06	Cont	Cont	
TPCS	RCP	MCC				2.000	01/05					0.000	2.000	
MSIDS	RCP	IDI		0.245	01/04	0.084	02/05	0.147	02/06	0.151	02/07	Cont	Cont	
CIHEP	RCP	Action Systems	0.127			0.020	11/04	0.028	11/05	0.020	11/06	Cont	Cont	
CIHEP	RCP	USAIMA		0.024	12/03	0.015	04/05			0.015	04/07	Cont	Cont	
CIHEP	RCP	NGIT	0.012			0.025	01/05	0.025	01/06	0.025	01/07	Cont	Cont	
CIHEP	RCP	MTC Service Corp	0.013			0.025	01/05	0.025	01/06	0.025	01/07	Cont	Cont	
CIHEP	RCP	MCSC	0.156	0.074	06/04	0.030	06/05	0.041	06/06	0.041	06/07	Cont	Cont	
TRSS-PIP	RCP	NAWC, Crane	3.366			0.000						0.000	3.366	
TRSS-PIP	RCP	ModernTC	0.509	0.059	03/04	0.000						0.000	0.568	
TRSS-PIP	RCP	OSEC	0.839	0.353	01/03	0.995	01/05	1.000	01/06	0.243	01/07	Cont	Cont	
TRSS-PIP	MIPR	ESC	0.615	1.965	02/04	0.396	11/04					Cont	Cont	
TRSS-PIP	MIPR	NAVAIR		0.600	03/04	0.053	02/05					0.000	0.653	
TRSS-PIP	MIPR	SPAWAR	0.044	0.018	03/04							0.000	0.062	
TRSS-PIP	RCP	NSMA (MTC)		0.352	06/04	1.810	01/05	0.500	01/06	0.525	01/07	Cont	Cont	
TRSS-PIP	RCP	MCSC		0.042	08/04	2.925	01/05	3.436	01/06			0.000	6.403	
TRSS-PIP	RCP	MCSC (CEOss)				0.000	01/05	0.355	01/06	0.225	01/07	Cont	Cont	
IBR	RCP	NGIT		0.140	03/04	0.000						0.000	0.140	
JSTARS	WR/MPR	SPAWAR		0.433	10/03	0.345	12/04	0.553	12/05	1.363	12/06	Cont	Cont	
JSTARS	RCP	MTC		0.304	01/04	0.389	01/05					0.000	0.693	
TROJAN SPIRIT	FFP	CERDEC		0.000				0.320	12/05	0.322	12/06	Cont	Cont	
DCGSI	RCP	NSMA (MTC)						1.080	12/05	0.635	12/06	Cont	Cont	
DCGSI	WR	USAF						4.764	11/05	2.262	11/06	Cont	Cont	
JSIPS - TEG	RCP	ASPO	0.970	0.361	03/04	0.572	02/05	0.785	02/06	0.902	02/07	Cont	Cont	
JSIPS - TEG	RCP	NSMA (MTC)	3.288	1.171	12/04	0.797	01/05	0.688	01/06	0.832	01/07	Cont	Cont	
JSIPS - TEG	WR	SPAWAR		0.489	10/03	0.833	11/04	0.501	11/05	0.668	11/07	Cont	Cont	
GCCS-I3	MPR	SPAWAR		0.024	08/04							0.000	0.024	
Subtotal Product Development			**24.694**	**12.815**		**15.114**		**19.605**		**13.724**		**Cont**	**Cont**	

Remarks:

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA 7 Operational Sys Dev		PROGRAM ELEMENT 0206313M Marine Corps Communications Sys						PROJECT NUMBER AND NAME C2272 Intelligence C2 Systems						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
COBRA	RCP	CSS	3.617	0.620	10/03							0.000	4.237	
COBRA	RCP	various		0.419	12/03	0.000						0.000	0.419	
TPC	RCP	MCSC	0.694	0.267	02/04	0.343	12/04	0.354	12/05	01/00	12/06	Cont	Cont	
TPC	MPR	SPAWAR		0.010	07/04							0.000	0.010	
TPCS	RCP	MTC	0.561	0.202	06/04	1.176	01/05	0.900	11/05	01/00	11/06	Cont	Cont	
TPCS	RCP	CSC	2.168	0.263	12/03							0.000	2.431	
TPCS	RCP	NSWC		0.304	04/04							0.000	0.304	
TPCS	MIPR	MCOTEA		0.000				0.300	10/05	0.700	10/06	Cont	Cont	
TRSS	MIPR	MCOTEA		0.195	05/04							0.000	0.195	
TRSS	RCP	MCSC		0.000		0.065	09/05					0.000	0.065	
MSIDS	RCP	NGIT				0.092	01/05	0.059	01/06	0.059	01/07	Cont	Cont	
IAS MOD KIT	MPR	SPAWAR		0.581	10/03	0.735	10/04	0.748	01/06	0.751	01/07	Cont	Cont	
IAS MOD KIT	RCP	MCSC		0.089	11/03	0.057	12/04					0.000	0.146	
IAS MOD KIT	RCP	NSMA (MTC)		0.358	11/03	0.200	11/04	0.286	01/06	0.287	01/07	Cont	Cont	
GCCS I3	RCP	MTC		1.365	03/04	0.937	10/04	0.954	12/05	0.964	12/06	Cont	Cont	
GCCS I3	MPR	G2 Technology		0.050	08/04	0.576	10/04	0.613	12/05	0.624	12/06	Cont	Cont	
TCAC	RCP	NSMA (TITAN)		0.819	04/04	0.892	01/05	0.912	01/06	1.511	01/07	Cont	Cont	
IBR	RCP	CSC/MDA		0.811	04/04	0.929	12/04	1.040	12/05	1.000	12/06	Cont	Cont	
IBR	WR	SPAWAR		0.040	04/04	0.068	12/04	0.097	12/05	0.087	12/06	Cont	Cont	
IBR	RCP	MCSC		0.009	04/04							0.000	0.009	
ISR	RCP	NSMA (MTC)				1.054	01/05	1.016	01/06	0.936	01/07	Cont	Cont	
TROJAN SPIRIT	Allot	MCSC				0.000		0.020	01/06	0.020	01/07	Cont	Cont	
TROJAN SPIRIT	FFP	NSMA (MTC)				0.000		0.030	01/06	0.030	01/07	Cont	Cont	
Subtotal Support			**7.040**	**6.402**		**7.124**		**7.329**		**7.626**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TPCS	RCP	TITAN	2.392							0.999	11/06	Cont	Cont	
TPCS	RCP	MCSC (Mainstream)		0.460	06/04								0.460	
TROJAN SPIRIT	MIPR	CERDEC		0.000				0.050	12/05	0.050	12/06		0.100	
Subtotal T&E			**2.392**	**0.460**		**0.000**		**0.050**		**1.049**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or System/Ite Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MSIDS	RCP	NGIT				0.061	01/05	0.041	01/06	0.041	01/07	Cont	Cont	
Subtotal Management			**0.000**	**0.000**		**0.061**		**0.041**		**0.041**		**Cont**	**Cont**	
Remarks:														
Total Cost				**19.677**		**22.299**		**27.025**		**22.440**		**Cont**	**Cont**	

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communications Sys**	**C2272 Intelligence C2 Systems**

TPCS - MPC Milestone Schedule



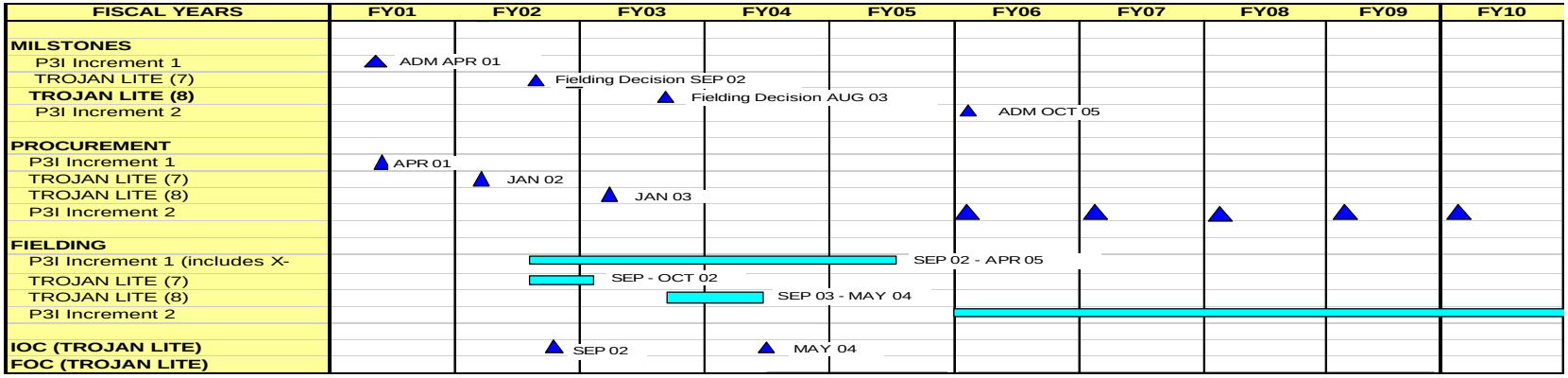
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	3.157	3.176	2.607	3.499	2.806	1.501	1.539	1.598	Cont	Cont
(U) PMC BLI# 474700 Intell Sup (TPCS)	0.000	6.335	8.056	7.771	6.000	0.301	0.000	0.000	0	28.463

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communications Sys**	**C2272 Intelligence C2 Systems**

TPCS-MPC SCHEDULE DETAIL	2004	2005	2006	2007	2008	2009	2010	2011
MS B EDM Dev and Demo	3Q							
DT/FUE	1Q----3Q							
IOT & E	3Q							
MS C	4(							
Ground/Team PIK IOC		4Q						
Air/Water PIK OT			3Q					
Air/Water PIK MS C				1Q				
Air/Water PIK IOC				3Q				
CH-53 OT				3Q				
CH-53 IOC					2Q			
MV-22 OT					3Q			
MV-22 IOC						2Q		
BLOCKS II & III					1Q----------	----------	----------	--------

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2272 Intelligence C2 Systems

TROJAN SPIRIT LITE



Line Item No. & Name (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	0.000	0.000	0.420	0.422	0.424	0.425	0.426	0.428	Cont	Cont
(U) PMC BLI# 463300 Radio Systems	0.401	4.907	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.308
(U) PMC BLI# 474700 Intell Sup	0.000	0.000	7.696	3.094	4.011	0.656	0.108	0.113	Cont	Cont

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									

Exhibit R-4/4a Schedule Profile/Detail			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT		PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communications Sys**		**C2272 Intelligence C2 Systems**

- TROJAN LITE (8) Fielding Decision		4Q									
P31 Increment 2 Fielding Decision					1Q						
PROCUREMENT											
P31 Increment 1 Fielding Decision											
- TROJAN LITE (7) Fielding Decision	2Q										
- TROJAN LITE (8) Fielding Decision		2Q									
P31 Increment 2 Fielding Decision					1Q----------	----------	----------	----------	----------	1Q	
FIELDING											
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----------						
IOC (TROJAN LITE)	4Q										
FOR (TROJAN LITE)			3Q								

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**

COST ($ in Millions)	FY2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost	**94.592**	**93.339**	**87.444**	**48.374**	**35.601**	**21.611**	**23.485**	**25.901**
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 Air Defense Communications Platform (ADCP) , deployed with the AN/TYQ-23(V)4, hosts the Joint Tactical Information Distribution System (JTIDS) termnal needed for Link 16 data and voice interoperability. In the standalone mode, when deployed with the AN/TPS-59(V)3 radar, the ADCP provides a capability for the missile detection and reporting mission of the TAOC.

2. The Aviaiton 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.

3. 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. CAC2S will provide the tools that perform aviation C2 planning and execution functions in a positive control environment.

4. The Composite Tracking Network (CTN), formerly known as Cooperative Engagement Capability (CEC), enables all CTN and CEC equipped, Anti-Air Warfare (AAW) weapons systems in a battle force to operate as a single, distributed AAW weapon system. This is accomplished providing timely sharing of fire control quality sensor data, correlated identification data, and AAW weapons management status. The sensor networking capability of CTN essentially allows forces to have a direct connection to the various sensors supported by forces throughout a battlefield enabling the development of a common understanding of the air situation. CTN consists of common processing units that interface with local and remote sensor data in order to develop a common track database and data communications pieces that enable the connectivity and networking of the sensors and processors.

5. The Critical Infrastructure will develop a new capability for video teleconferencing capability via service intranet capabilities.

6. The 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).

7. "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 prcedures and changes to Service operations.

8. 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.

9. The Unit Operations Center (UOC) project develops and transitions two Command and Control Imperative Advanced Technology Demonstration (ATDs) (the Expeditionary Integrated Combat Operations Center) and the Joint Tactical Communications ((JT COMMs) ATDs) into various Marine Corps and Joint Engineering and Manufacturing Development (E&MD) efforts. UOC development efforts focus on: Cognitive Task Analysis (CTA); enhanced ergonomic physical design; evaluation of advanced multimedia hardware, integration and networking with advanced development communication systems; and advanced software development to support systems integration and advanced battlefield visualization concepts. UOC developments are tailored to support transition of software and hardware developments as PIPs to the established MAGTF C4I baseline. Unit Operations Center (UOC) will provide a facility and components for the integration of current and planned battlefield automation systems.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2273 Air Operations C2 Systems**

It will be, in essence, a "system of systems" designed to optimize the positioning, interaction, and flow of nformation among the various staff agencies (G-2, G-3, Operations Directorate, etc.) and their automated information systems and between the unit and higher, adjacent or subordinate units or headquarters. The Marine Corps deploys Component/Joint Task Force (JTF/Marine Air Ground Task Force (MAGTF)) command elements throughout the world to fulfill operational requirements, often in joint/combined forcs arenas. The UOC is designed in garrison and tactical versions. The tactical version is called the Combat Operations Center (COC) which is an outgrowth of the inegrated (COC (ICOC), COC-Interim (COC(I), and the Enhanced COC (ECOC) developments over the last two years. The garrison version is called the Command Center (CC).

10. 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; thereforek it does not have specific milestone dates.)

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.178**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

ADCP: Tested and certified software enhancements.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**2.077**	**0.000**	**0.000**
RDT&E Articles Qty				

AN/TPS-59 Sustainment : Develop Engineering Change Proposals for software improvements and Diminishing Manufacturing Sources issues.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.500**	**0.000**	**0.000**
RDT&E Articles Qty				

AN/TPS-59 Sustainment : Development of Far Field radar Repeater to support system rebuilds at Barstow.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**3.240**	**4.037**	**4.382**	**3.985**
RDT&E Articles Qty				

CAC2S: Program management support.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**45.977**	**25.828**	**10.284**	**10.502**
RDT&E Articles Qty				

CAC2S: SDD. Engineering Development Model (EDM) hardware and software development, design of host processing system, and conduct software integration of Joint mandated applications, developmental testing and evaluation and baseline stabilization.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**13.381**	**32.815**	**31.694**	**9.527**
RDT&E Articles Qty				
CAC2S: System development, GFE, and testing in accordance with continued sensor interface/integration, communications interface/interoperability development.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.040**	**0.050**	**0.289**	**0.326**
RDT&E Articles Qty				
JCIET: Logistics support for JCIET exercise.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.500**	**0.500**	**1.000**	**1.000**
RDT&E Articles Qty				
JCIET: Data and analysis for exercise.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.668**	**0.801**	**0.025**	**0.025**
RDT&E Articles Qty				
JCIET: Program management support				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.834**	**0.250**	**0.275**	**0.000**
RDT&E Articles Qty				
CTN: Software development: Interface Design Document (IDD) development for CTN interfaces (sensor and C2).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**4.576**	**4.152**	**0.000**	**0.000**
RDT&E Articles Qty				
CTN: Engineer Design Model hardware and software development and support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.919**	**0.405**	**0.300**	**0.454**
RDT&E Articles Qty				
CTN: Testing and Evaluation: Developmental Testing. Operational assessment, and IOT&E support. Certification f CAC2S interface to CTN.testing support. Certification of CAC2S and CLAWS interfaces to CTN.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.530**	**0.430**	**0.464**	**0.511**
RDT&E Articles Qty				
CTN: Program management support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**6.610**	**1.527**
RDT&E Articles Qty				
CTN: System production (LRIP) and CAC2S interface support.				

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.491**	**1.486**	**0.000**	**0.000**
RDT&E Articles Qty				
CRITICAL INFRASTRUCTURE: VTC Coop Engineering.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**3.151**	**2.947**	**4.383**	**2.890**
RDT&E Articles Qty				
MACCS SUSTAINMENT: Hardware obsolescence upgrades for the TAOM, SAAWF, TIU, MCIU, ADCP, CIS and CDLS.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.367**	**2.914**	**4.063**	**1.795**
RDT&E Articles Qty				
MACCS SUSTAINMENT: Planned software sustainment for the TAOM, ADCP and CDLS.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**5.085**	**7.752**	**17.571**	**10.442**
RDT&E Articles Qty				
SIAP: Service System Engineering support to Joint SIAP System Engineering Organization.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.778**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
SIAP: Update MCTSSA SIE HWILT (AVN C2) hardware and software to reflect SIAP changes.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.200**	**1.115**	**1.250**	**1.300**
RDT&E Articles Qty				
SIAP: Engineering and analysis for SIAP system engineer Support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.174**	**0.300**	**0.300**	**0.325**
RDT&E Articles Qty				
TBMCS: USMC TBMCS development.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.100**	**0.169**	**0.188**	**0.191**
RDT&E Articles Qty				
TBMCS: MCTSSA TBMCS software support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.090**	**0.200**	**0.214**	**0.225**
RDT&E Articles Qty				
TBMCS: Program management support.				

EXHIBIT R-2a, RDT&E Project Justification | DATE: February 2005

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**	**C2273 Air Operations C2 Systems**

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.100**	**0.075**	**0.075**	**0.077**
RDT&E Articles Qty				

TBMCS: Test and Evaluation for TBMCS Upgrades Joint Interoperability.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**5.100**	**0.000**	**0.000**
RDT&E Articles Qty				

UOC: Funding to be used for high proiorty GWOT

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**6.793**	**2.608**	**2.440**	**1.946**
RDT&E Articles Qty				

UOC: Continue engineering and manufacturing development effort of production representative modules to include UOC Universal Communications Interface Module (UCIM).

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.420**	**2.589**	**0.503**	**0.408**
RDT&E Articles Qty				

UOC: Program Management Support

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**3.839**	**1.134**	**0.918**
RDT&E Articles Qty				

UOC:Configuration analysis for CSSE, CE, and FICCS Unit Operations Centers. Support wireless technology upgrade,web-based training tool, and rotary generator.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**-9.600**	**0.000**	**0.000**
RDT&E Articles Qty				

Execution Transaction Pending to restore funding

(U) Total $	**94.592**	**93.339**	**87.444**	**48.374**

(U) PROJECT CHANGE SUMMARY:	**FY2004**	**FY2005**	**FY2006**	**FY2007**
(U) FY 2005 President's Budget:	**94.832**	**99.834**	**81.526**	**105.786**
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases		4.100		
(U) Reprogrammings	-0.020		7.996	-56.013
(U) SBIR/STTR Transfer	-0.220			
(U) Minor Affordability Adjustments		-10.595	-2.078	-1.399
(U) FY 2006 President's Budget:	**94.592**	**93.339**	**87.444**	**48.374**

CHANGE SUMMARY EXPLANATION:

(U) Funding: The -$15.694 for FY05 includes the -$9.600 erroneously taken from this project for COBRA. A correction is pending.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification	DATE: February 2005	
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**	**C2273 Air Operations C2 Systems**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC, BLI#464000, ADCP PIP	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.263
(U) PMC, BLI #465000, AN/TPS-59	0.000	0.000	5.626	6.882	6.239	6.435	4.873	2.815	Cont	Cont
(U) PMC, BLI #465100, AN/TPS-59	13.160	24.371	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37.531
(U) PMC, BLI #464000, CAC2S	0.000	0.000	3.919	35.392	38.626	57.624	36.785	37.743	Cont	Cont
(U) PMC, BLI #464000, CEC/CTN	0.000	0.000	0.000	2.504	7.565	17.840	24.600	27.940	Cont	Cont
(U) PMC, BLI #464000, MACCS	3.850	6.790	5.514	1.892	1.476	1.776	6.423	1.222	Cont	Cont
(U) PMC, BLI #464000,TBMCS (CTAPS)	6.081	3.460	3.625	3.633	3.781	3.864	3.495	3.568	Cont	Cont
(U) PMC, BLI #419000, UOC	18.049	27.825	0.952	1.197	0.918	1.022	1.026	1.029	Cont	Cont

(U) D. ACQUISITION STRATEGY:

(U) **ADCP**: In support of the ADCP system, MACCS Sustainment has an In Service Engineering Agent (ISEA) relationship with Naval Surface Warfare Center (NSWC), Crane, IN. As part of the ISEA, Crane is tasked to develop, produce, and implement Engineering Change Proposals, or software modifications for the ADCP. Additionally, they host the ADCP website, conduct annual site visits, and provide services to the users via a Helpdesk.

(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 SDD phase was implemented after the successful completion of the established 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 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 COC is a Competitively Awarded Contract for design (cost type) and Firm Fixed Price production options.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2273 Air Operations C2 Systems**

(U) E. Major Performers:

UNIT OPERATIONS CENTER (UOC)

FY04 - 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)

FY04 - FY07 Raytheon E-Systems, San Diego, CA. System development, demonstration, integration, test and evaluation. May 04.

COMPOSITE TRACKING NETWORK (CTN)

FY04 - FY05 NSWC Crane, IN. Mobility platform integrator. Jan 04

FY04 - FY05 Lockheed Martin, Syracuse NY. Radar integration. Jan 04

CRITICAL INFRASTRUCTURE

FY04 SPAWAR, Charleston SC. Product Development. Mar 03.

MACCS SUSTAINMENT

FY04 - FY07 Northrop Grumman Electronic Systems, Woodland Hills, CA. TAOC Engineering and CETS services. Jan 04

FY04 - FY06 Mission Research Corporation, Fort Worth, TX. CDLS Engineering and Software services. May 04

FY04 - FY07 Carisle Research Incorporated, Van Nuys, CA. TAOM Software Sustainment services. Oct 03

FY04 - FY06 Naval Surface Warfare Center, Crane, IN. ADCP, CIS, DASCAS, CDLS Engineering services. Oct 03

SINGLE INTEGRATED AIR PICTURE (SIAP)

FY04 - 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.

CLASSIFICATION:

Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**			PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**				PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AN/TPS-59 SUSTAINMENT	C/CPFF	Lockheed Martin, NY				2.077	03/05					0.000	2.077	
AN/TPS-59 SUSTAINMENT	TBD	TBD				0.500	06/05					0.000	0.500	
CAC2S	RCP	Raytheon, San Diego, CA	7.469	56.178	06/04	53.649	01/05	23.719	02/06	20.679	01/07	Cont	Cont	
CAC2S	WR	SPAWAR	47.115	0.709	04/04	1.238	01/05	0.300	01/06	0.300	01/07	Cont	Cont	
CAC2S	WR	Center	1.728	0.592	02/04	0.600	01/05	0.600	01/06	0.520	01/07	Cont	Cont	
ADCP	WR	NSWC Crane, IN	2.272	0.178	05/04							0.000	2.450	
MACCS SUSTAINMENT	RCP	NGES, Woodland Hills,	2.127			1.000	01/05	1.095	01/06	0.291	01/07	Cont	Cont	
MACCS SUSTAINMENT	CPFF	CRL, Van Nuys, CA				0.732	01/05	2.000	01/06	1.000	01/07	Cont	Cont	
MACCS SUSTAINMENT	WR	GTACCS		0.125	10/03							0.000	0.125	
MACCS SUSTAINMENT	WR	NATICK		0.018	10/03							0.000	0.018	
MACCS SUSTAINMENT	WR	NSWC, Crane, IN		0.490	02/04							0.000	0.490	
MACCS SUSTAINMENT	RCP	MCSC, Quantico, VA		0.077	06/04							0.000	0.077	
MACCS SUSTAINMENT	RCP	APG, Aberdeen, MD		0.063	01/04							0.000	0.063	
MACCS SUSTAINMENT	RCP	MCSC, Quantico, VA		3.745	08/04							0.000	3.745	
SIAP	RCP	MCSC, Quantico, VA	11.400	4.391	06/04	8.867	01/05	18.821	01/06	11.742	01/07	Cont	Cont	
SIAP	WR	CECOM, Ft Monmouth		1.171	12/03							0.000	1.171	
SIAP	WR	SPAWAR		0.004	12/03							0.000	0.004	
SIAP	WR	NSWC, Crane, IN		2.169	06/04							0.000	2.169	
SIAP	WR	MCSC, Quantico, VA		0.157	03/04							0.000	0.157	
SIAP	RCP	SPAWAR		0.171	12/03							0.000	0.171	
TBMCS	MIPR	ESC, Hanscom AFB	0.673	0.050	08/04	0.300	01/05	0.300	01/06	0.325	01/07	Cont	Cont	
CTN	WR	NSWC, Crane, IN	1.955	1.151	02/04	1.297	01/05	1.406	01/06	0.829	01/07	Cont	Cont	
CTN	WR	NAWC Orlando	0.365	0.028	01/04							0.000	0.393	
CTN	WR	MarForRes	1.031	0.008	06/04							0.000	1.039	
CTN	RCP	Raytheon Col, FL	0.590	0.900	03/04	0.250	01/05	0.275	01/06			0.000	2.015	
CTN	RCP	SAIC, San Diego, CA		2.478	08/04	2.730	01/05	5.083	01/06	0.547	01/07	Cont	Cont	
CTN	RCP	MCSC, Quantico, VA		0.818	08/04							0.000	0.818	
CTN	RCP	Lockheed Martin, NY		0.919	12/03							0.000	0.919	
CTN	RCP	NavSea		1.020	08/04							0.000	1.020	
UOC	WR	SPAWAR	4.891	0.006	01/04	3.839	01/05	1.012	02/06	0.790	01/07	Cont	Cont	
UOC	RCP	MCSC, Quantico, VA	1.412	0.138	10/03							0.000	1.550	
UOC	RCP	General Dynamics		7.802	08/04	2.492	01/05	2.561	02/06	2.074	01/07	Cont	Cont	
CRITICAL INFRASTRUCTURE	WR	SSC Charleston	1.018	1.456	06/04	1.486	05/05					0.000	3.960	
CRITICAL INFRASTRUCTURE	WR	MCSC, Quantico, VA		0.035	09/04							0.000	0.035	
Subtotal Product Development				**87.047**		**81.057**		**57.172**		**39.097**		**Cont**	**Cont**	
Remarks:														

CLASSIFICATION:

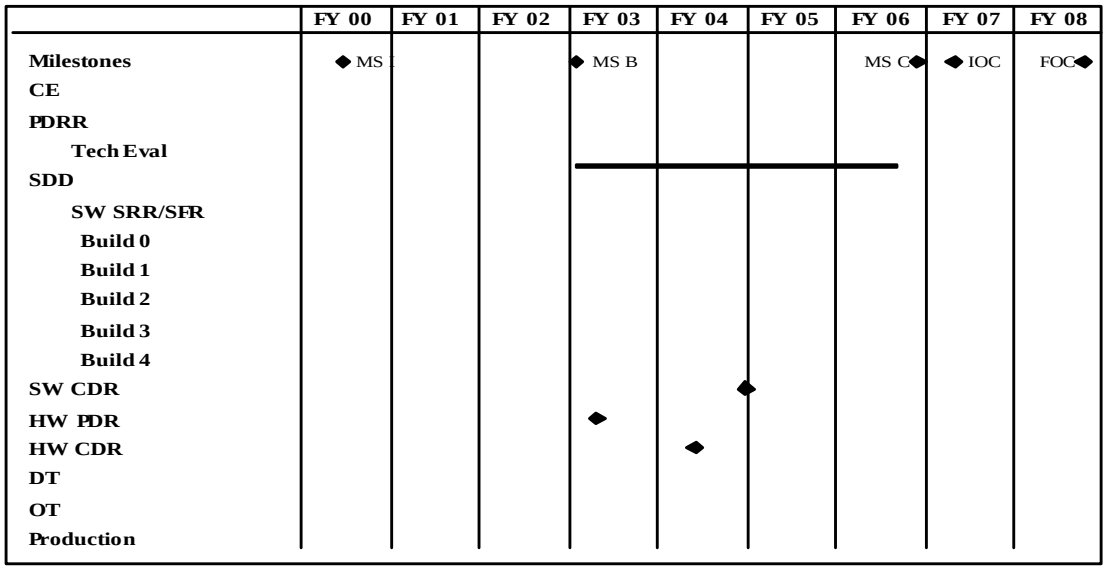
Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**					PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CAC2S	WR	MCSC, Quantico, VA	0.499	0.361	09/04	0.174	01/05	0.336	01/06	0.280	01/07	Cont	Cont	
CAC2S	RCP	MCSC, Quantico, VA	1.470	0.154	04/04	1.000	01/05	1.000	02/06	1.000	02/07	Cont	Cont	
CAC2S	WR	MCTSSA, CPndltn,CA				0.035	01/05	0.050	01/06	0.035	01/07	Cont	Cont	
CAC2S	WR	NSWC, Crane, IN	0.380	0.220	06/04	0.200	01/05	0.210	01/06	0.200	01/07	Cont	Cont	
CAC2S	RCP	PAE		0.050	04/04							0.000	0.050	
CAC2S	WR	JITC		0.080	12/03	0.075	01/05	0.150	01/06			0.000	0.305	
CAC2S	WR	NCTSI		0.018	01/04							0.000	0.018	
CAC2S	RCP	NSWC, Crane, IN		0.015	03/04							0.000	0.015	
CAC2S	RCP	MCSC, Quantico, VA		0.095	09/04							0.000	0.095	
CAC2S	RCP	Raytheon, Bedford, MA				1.559	01/05	1.835	01/06			0.000	3.394	
CAC2S	WR	MarForRes NO, LA		0.005	06/04							0.000	0.005	
CAC2S	RCP	Redstone		0.069	03/04							0.000	0.069	
JCIET	WR	MCSC, Quantico, VA		0.121	10/03	0.180	01/05	0.190	01/06	0.390	01/07	Cont	Cont	
JCIET	WR	NSWC, Crane, IN		0.319	10/03	0.300	01/05	0.325	01/06	0.335	01/07	Cont	Cont	
JCIET	RCP	MCSC, Quantico, VA		0.753	10/03	0.871	01/05	0.799	01/06	0.601	01/07	Cont	Cont	
JCIET	MIPR	CECOM, Ft Monmouth		0.015	03/04			0.000		0.025	01/07	Cont	Cont	
MACCS Sustainment	WR	NGES, Woodland Hills,				3.000	01/05	3.000	02/06	3.000	03/06	Cont	Cont	
MACCS Sustainment	RCP	MRC, Ft Worth, TX				0.200	01/05	0.400	01/06			0.000	0.600	
MACCS Sustainment	RCP	CRC, Woodland Hills, CA				0.160	01/05	0.160	01/06	0.160	01/07	Cont	Cont	
MACCS Sustainment	WR	Hill AFB, Utah				0.150	01/05	0.150	01/06	0.150	01/07	Cont	Cont	
MACCS Sustainment	WR	NSWC, Crane, IN				0.619	01/05	1.641	02/06	0.084	01/07	Cont	Cont	
TBMCS	WR	MCTSSA, CPndltn,CA	0.083			0.028	01/05	0.030	01/05	0.032	01/07	Cont	Cont	
TBMCS	RCP	MCSC, Quantico, VA		0.009	02/04							0.000	0.009	
TBMCS	MIPR	SER-CASU		0.100	01/04							0.000	0.100	
TBMCS	RCP	MCSC, Quantico, VA		0.100	09/04							0.000	0.100	
TBMCS	WR	NSWC, Crane, IN		0.050	06/04	0.100	01/05	0.105	01/06	0.105	01/07	Cont	Cont	
TBMCS	WR	MCSC, Quantico, VA		0.055	09/04	0.041	01/05	0.053	01/06	0.054	01/07	Cont	Cont	
CTN	WR	CG 1st MAW	0.014			0.015	01/05			0.018	01/07	Cont	Cont	
CTN	WR	MCSC, Quantico, VA	0.085			0.045	01/05	0.040	01/06	0.045	01/07	Cont	Cont	
CTN	MIPR	Anteon,		0.100	01/04	0.110	01/05	0.121	01/06	0.133	01/07	Cont	Cont	
CTN	RCP	BAE Systems, Huntsv		0.059	12/03							0.000	0.059	
Subtotal Support				**2.748**		**8.862**		**10.595**		**6.647**		**Cont**	**Cont**	
Remarks:														

CLASSIFICATION:

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**					PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CTN	WR	MCTSSA, CPndltn,CA	0.003			0.015	01/05	0.018	01/06	0.021	01/07	Cont	Cont	
CTN	WR	MACS-24	0.087			0.015	01/05	0.018	01/06	0.021	01/07	Cont	Cont	
CTN		MCOTEA TESTING		0.081	06/04	0.300	01/05	0.264	01/06	0.352	01/07	Cont	Cont	
CTN	WR	NWAS, Corona, CA	0.482	0.012	04/04	0.025	01/05			0.030	01/07	Cont	Cont	
CTN	RCP	MITRE, Bedford, MA				0.025	01/05			0.030	01/07	Cont	Cont	
CTN	WR	NSWC, Dahlgren, VA				0.025	01/05					0.000	0.025	
CAC2S	RCP	CECOM (MCOTEA)		0.130	05/04	0.250	01/05	13.840	03/06	1.000	02/07	Cont	Cont	
TBMCS	WR	NSWC, Crane, IN		0.100	01/04	0.075	01/05	0.075	01/06	0.077	01/07	Cont	Cont	
Subtotal T&E				**0.323**		**0.730**		**14.215**		**1.531**		**Cont**	**Cont**	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TBMCS	CPFF	NGIT, Stafford, VA	0.519			0.200	01/05	0.214	01/06	0.225	01/07	Cont	Cont	
CAC2S	IDIQ	NGIT, Stafford, VA	6.492	3.282	10/03	2.800	01/05	3.200	02/06			0.000	15.774	
CAC2S	RCP	MITRETEK	0.506	0.640	02/04	1.100	01/05	1.120	01/06			0.000	3.366	
CTN	IDIQ	NGIT, Stafford, VA	0.591	0.144	03/04	0.385	01/05	0.424	01/06	0.466	01/07	Cont	Cont	
CTN	RCP	CSC, Falls Church, VA		0.141	02/04							0.000	0.141	
UOC	IDIQ	NGIT, Stafford, VA	3.396			2.705	01/05	0.504	01/06	0.408	01/07	Cont	Cont	
UOC	RCP	SSC Charleston	0.064	0.235	02/04							0.000	0.299	
UOC	RCP	APG, Aberdeen, MD		0.032	02/04							0.000	0.032	
UOC	TBD	TBD	0.000			5.100						0.000	5.100	
Transaction pending to Restore Funding						-9.600						0.000	-9.600	
Subtotal Management				**4.474**		**2.690**		**5.462**		**1.099**		**Cont**	**Cont**	
Remarks:														
Total Cost				**94.592**		**93.339**		**87.444**		**48.374**		**Cont**	**Cont**	

Schedule		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Systems Development**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**

CAC2S Macro Program Schedule



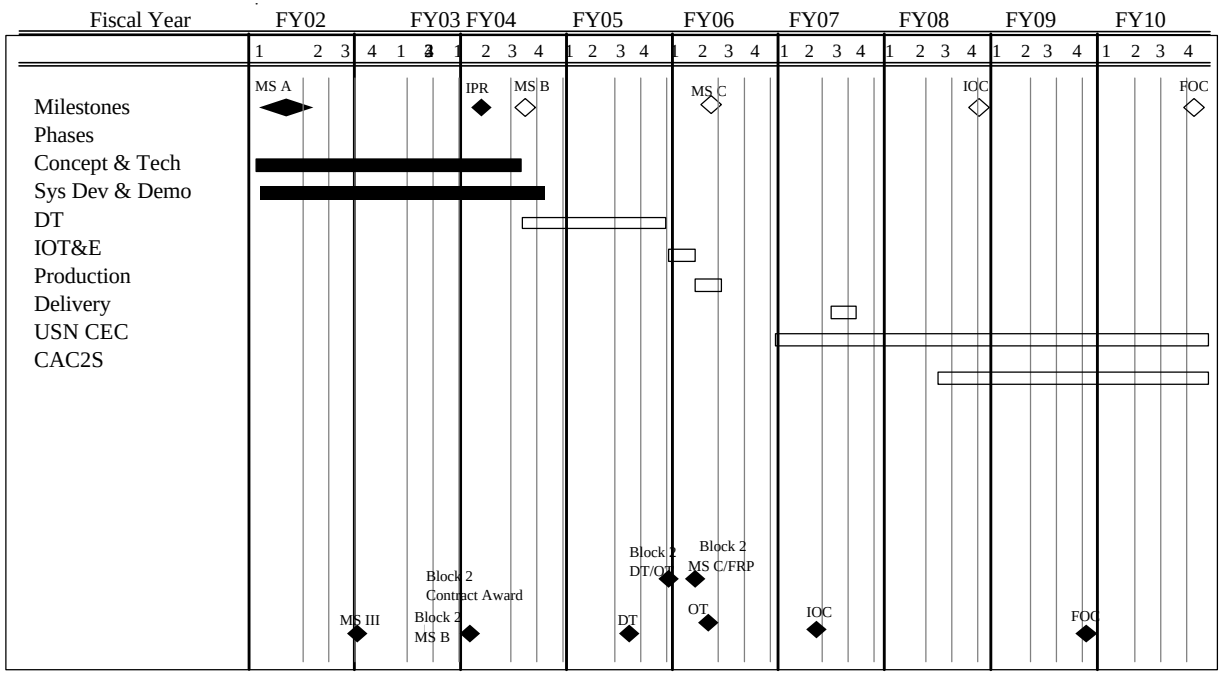
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N, C2273, CAC2S	62.598	62.680	46.360	24.014	18.827	6.966	0.334	0.000	Cont	Cont
(U) PMC, BLI# 464000, CAC2S	0.000	0.000	3.919	35.392	38.626	57.624	36.785	37.743	Cont	Cont

Schedule			DATE: February 2005
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			3rd Qtr						
OT				3rd Qtr					
Long Lead Items				3rd Qtr					
Milestone C				4th Qtr					
Production					1st Qtr++++++++++++++++				
IOC					2nd Qtr				
FOC						4th Qtr			

Schedule		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Systems Development**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**

CTN



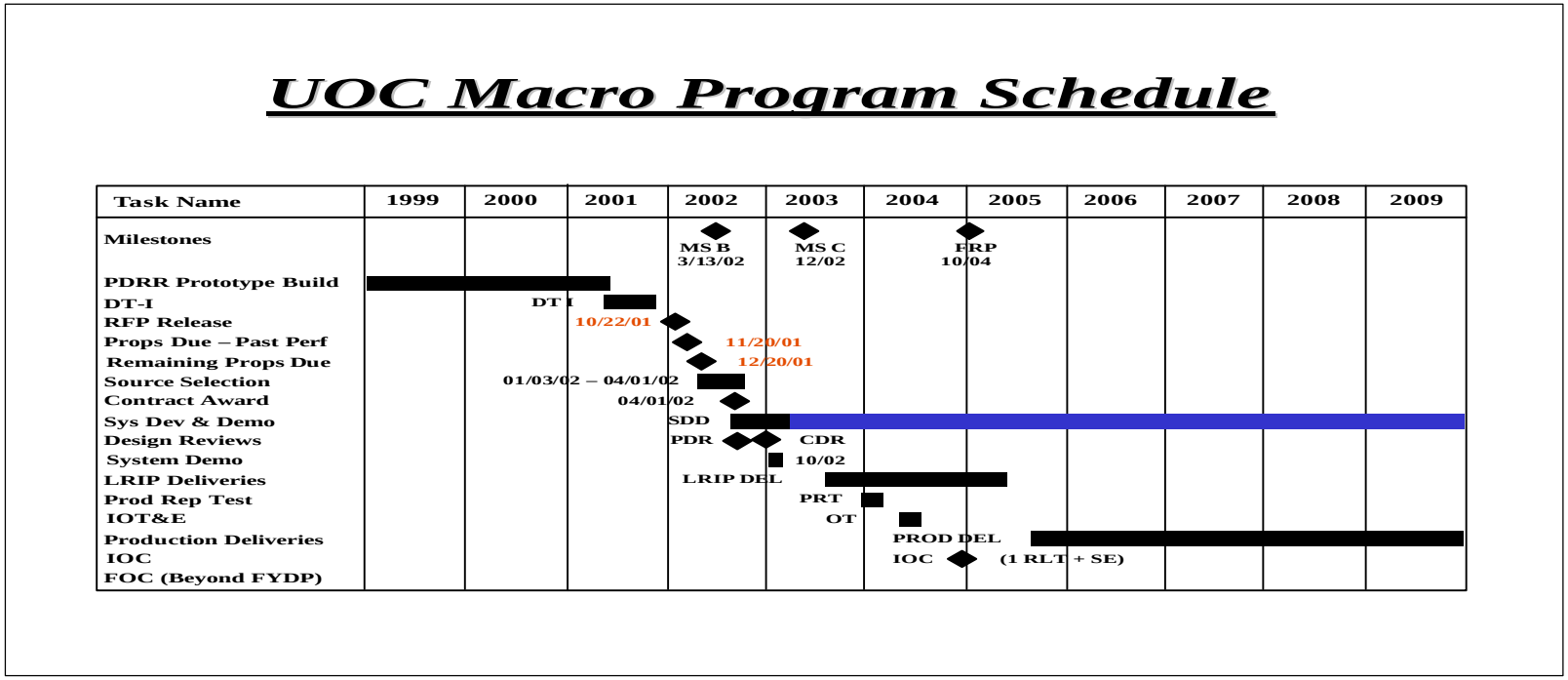
Program Funding Summary

(APPN, BLI #, NOMEN)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	**To Comp**	**Total Cost**
(U) RDT&E,N, C2273, CTN (formally CEC)	7.859	5.237	7.649	2.492	6.300	7.872	19.413	23.336	Cont	Cont
(U) PMC, BLI# 464000, CTN	0.000	0.000	0.000	2.504	7.565	17.840	24.600	27.940	Cont	Cont

Schedule		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Systems Development**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **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	3rd Qtr						
System Development and Demonstration							
DT	3rd Qtr++++++++++						
IOT&E			1st Qtr				
Milestone C			2nd Qtr ++++++++++++++++++++++				
Production			1st Qtr++++++++++				
Delivery				3rd Qtr+++++++++++++++			
IOC					3rd Qtr		

Schedule		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Systems Development**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2273 Air Operations C2 Systems**



Program Funding Summary **(APPN, BLI #, NOMEN)**	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N, C2273, UOC	8.213	14.136	4.077	3.272	2.366	1.060	0.553	0.347	Cont	Cont
(U) PMC, BLI# 419000, UOC	18.049	27.825	0.952	1.197	0.918	1.022	1.026	1.029	Cont	Cont

Schedule		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Systems Development**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **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)								
System Development and Demonstration								
IOT&E	2nd Qtr							
Milestone C								
LRIP Deliveries								
IOC	4th Qtr							
Full Rate Production		1st Qtr						
Production Deliveries		3rd Qtr ++						
Hardware/Software Development		3rd Qtr ++						
Engineering Support Services		3rd Qtr ++						

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2274 Intelligence C2 Warfare Systems**

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**9.493**	**11.358**	**5.989**	**3.829**	**3.595**	**4.167**	**4.702**	**3.722**
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:

1. The 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.

2. The 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.

3. The 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.

4. CESAS (FLAMES) - The Communication Emitter Sensing and Attacking System (CESAS) is 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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.500**	**0.120**	**0.030**	**0.000**
RDT&E Articles Qty				

CESAS - Perform integration efforts of AN/USQ-146(V) 5 and Spiral Development.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.460**	**0.060**	**0.250**	**0.080**
RDT&E Articles Qty				

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

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2274 Intelligence C2 Warfare Systems**

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.203**	**0.250**	**0.400**	**0.500**
RDT&E Articles Qty				

CESAS - Research and Development of techniques, tactics and procedures.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.291**	**0.650**	**0.250**
RDT&E Articles Qty				

CESAS - Research and Devlopment of Training Equipment; for USQ-146 real time simulation equipment to provide a "Miles Gear" type application for Electronic Attack equipment and Victim Receiver interface.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.350**	**0.397**	**0.174**	**0.196**
RDT&E Articles Qty				

CESAS - Program support and documentation Development and Maintainance.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.119**	**0.030**	**0.030**	**0.023**
RDT&E Articles Qty				

CESAS - Program Management Support.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

CESAS - TTP Development and Operational Analysis.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**1.000**	**0.000**	**0.000**
RDT&E Articles Qty				

MEWSS PIP: System software enhancements and Pre-Planned Product Improvement (P3I).

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**3.127**	**3.348**	**0.000**	**0.000**
RDT&E Articles Qty				

MEWSS PIP: ELINT System enhancements.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.141**	**2.162**	**0.461**	**0.000**
RDT&E Articles Qty				

MEWSS PIP: Operational Readiness enhancements.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications S**		PROJECT NUMBER AND NAME **C2274 Intelligence C2 Warfare Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.103**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

MEWSS PIP: Program Management Support

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

MEWSS PIP: Reprogrammed to COMM and INTEL

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.574**	**1.211**	**1.200**	**0.709**
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).

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.448**	**1.713**	**2.012**	**1.050**
RDT&E Articles Qty				

TERPES: Research TERPES software to provide improvements in the interfaces and interoperability with the EA-6B Improved Capabilities (ICAP) II and III aircraft, (TEPP/TSP application); improve overall system performamance (Tactical Data Correlation).

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.178**	**0.370**	**0.362**	**0.252**
RDT&E Articles Qty				

TERPES: Program Management Support.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.290**	**0.406**	**0.420**	**0.769**
RDT&E Articles Qty				

RREP: Research and development of the RREP SS-3 PIP to include integration of EA.

(U) Total $	**9.493**	**11.358**	**5.989**	**3.829**

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications S**	PROJECT NUMBER AND NAME **C2274 Intelligence C2 Warfare Systems**

(U) PROJECT CHANGE SUMMARY:	**FY2004**	**FY2005**	**FY2006**	**FY2007**
(U) FY 2005 President's Budget:	**12.965**	**8.136**	**5.437**	**4.527**
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases		3.400		
(U) Reprogrammings	-3.469		0.500	-0.750
(U) SBIR/STTR Transfer				
(U) Minor Affordability Adjustments	-0.003	-0.178	0.052	0.052
(U) FY 2006 President's Budget:	**9.493**	**11.358**	**5.989**	**3.829**

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

(U) C. OTHER PROGRAM FUNDING SUMMARY:A167

Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC BLI 463600 Modification Kits MEWSS	18.617	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.617
(U) PMC BLI 465200 Modification Kits MEWSS	0.000	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	1.100	0.000	4.209	0.034	1.019	5.191	0.100	1.294	0.000	12.947
(U) PMC BLI 474900 Mod Kits INTEL TERPES	2.493	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.493
(U) PMC BLI 465200 Mod Kit TERPES	0.000	0.000	2.982	0.000	3.182	0.000	0.000	0.000	0.000	6.164
(U) PMC BLI 463600 FLAMES (CESAS)	0.000	4.268	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.268
(U) PMC BLI 465200 Mod Kit FLAMES (CESAS)	0.000	0.000	5.595	5.521	0.475	1.356	0.000	0.000	0.000	12.947

(U) Related RDT&E:

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

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2274 Intelligence C2 Warfare Systems**

(**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.

(**U) D. ACQUISITION STRATEGY MEWSS PIP:** The MEWSS PIP initiates Marine Corps Systems Command-administered contracts as follow-on to the Army CECOM Intelligence and Electronic Warfare Common Sensor (IEWCS) contract used for development/fielding of the three MEWSS PIP LRIP vehicles. These contracts are sole source to Lockheed Martin Systems Integration in Owego, New York.

(U) D. ACQUISITION STRATEGY 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).

(U) D. ACQUISITION STRATEGY 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 protoype 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.

(U) E. MAJOR PERFORMERS:

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

FY04 LOCKHEED MARTIN, Owego NY Provide funds for software enhancements and P3I support.
Penn State Univ, State College, PA Funds for ELINT enhancements.
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Legacy MEWSS readiness enhancements.

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.

FY06 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.

FY07 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.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2274 Intelligence C2 Warfare Systems**

(U) E. MAJOR PERFORMERS: (Continued)

TACTICAL ELECTRONIC RECONNAISSANCE PROCESSING AND EVALUATION (TERPES)

FY04 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.

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.

FY06 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.

FY07 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 m

RADIO RECONNAISSANCE EQUIPMENT PROGRAM (RREP)

FY04 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds engineering and program management support for Suite-3. Nov 04
FY05 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds engineering and program management support for Suite-3. Nov 05
FY06 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds engineering and program management support for Suite-3. Nov 06
FY07 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds engineering and program management support for Suite-3. Nov 07

Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**						PROJECT NUMBER AND NAME **C2274 Intelligence C2 Warfare Systems**						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
MEWSS	CPFF	Lockheed Martin	16.061	0.000	11/03	1.000	11/04					Cont	Cont	
MEWSS	WR	SPAWAR, S.C	1.100	1.141		3.348		0.461	11/05			Cont	Cont	
MEWSS	WR	SPAWAR, S.C	0.828			2.162	11/04					Cont	Cont	
MEWSS	RCP	PSU/Albany	3.100	3.127	03/04	0.000						Cont	Cont	
TERPES	RCP	Lockheed Martin	1.875	1.474	10/03	1.713	12/04	2.012	12/05	1.050	12/06	Cont	Cont	
TERPES	WR	NAWC, Pt. Mugu CA	3.544	0.874	12/03	1.211	01/05	1.200	01/06	0.709	01/07	Cont	Cont	
RREP	RCP	NSWC, Crane	0.466	0.290	02/04	0.406	02/05	0.420	01/06	0.769	01/07	Cont	Cont	
CESAS	RCP	SPAWARSYSCEN		0.500	02/04	0.120	12/04	0.030	12/05			Cont	Cont	
CESAS	CPFF	CTI				0.291	12/04	0.650	12/05	0.250	12/06	Cont	Cont	
CESAS	RCP	MCLB		0.060	01/04	0.060	12/04	0.250	12/05	0.080	12/06	Cont	Cont	
CESAS	MPR	NAVAIR		0.400	05/04	0.250	12/04	0.400	12/05	0.500	12/06	Cont	Cont	
Subtotal Product Development			**26.974**	**7.866**		**10.561**		**5.423**		**3.358**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
TERPES	RCP	NSMA (MTC)	0.440	0.086	03/04			0.052	11/05	0.052	11/06	Cont	Cont	
TERPES	RCP	MCSC	0.787	0.701	02/04	0.370	02/05	0.310	02/06	0.200	02/07	Cont	Cont	
CESAS	RCP	NSMA (MTC)		0.350	06/04	0.397	10/04	0.174	11/05	0.196	11/06	Cont	Cont	
CESAS	RCP	MCSC		0.322	03/04	0.030	10/04					Cont	Cont	
TERPES	RCP	MCSC		0.045								0.000	0.045	
Subtotal Support			**1.227**	**1.504**		**0.797**		**0.536**		**0.448**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
Subtotal T&E			**0.000**	**0.000**		**0.000**		**0.000**		**0.000**		**0.000**	**0.000**	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
CESAS	RC	MCSC						0.030	12/04	0.023	12/05	Cont	Cont	
MEWSS	RC	MCSC		0.103	09/04							0.000	0.103	
TERPES	MPR	ESC		0.020	09/04							0.000	0.020	
Subtotal Management			**0.000**	**0.123**		**0.000**		**0.030**		**0.023**		**Cont**	**Cont**	
Remarks:														
Total Cost			**28.201**	**9.493**		**11.358**		**5.989**		**3.829**		**Cont**	**Cont**	

Exhibit 4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**	38384 **C2274 Intelligence C2 Warfare Systems**

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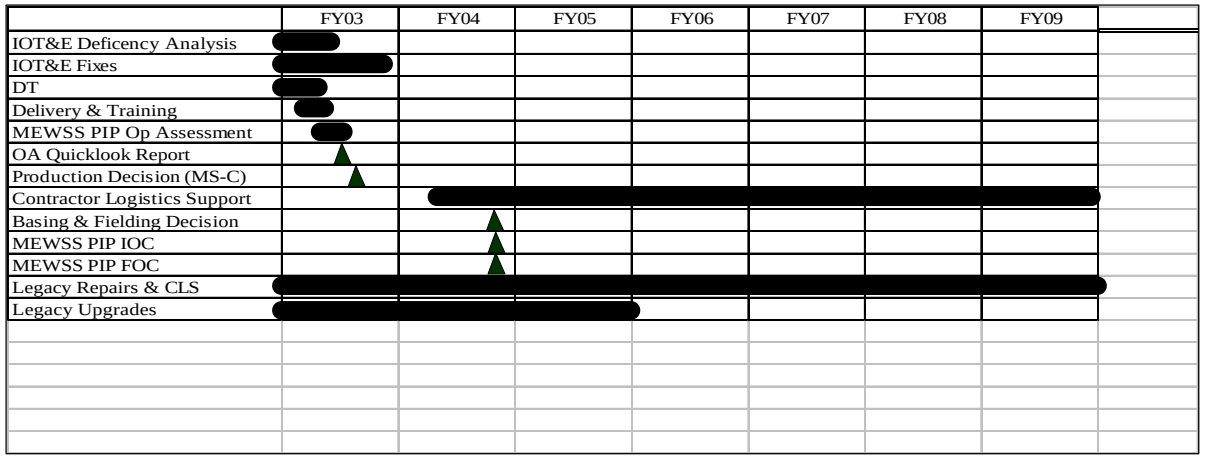
MEWSS Schedule



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Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	4.371	3.162	0.461	0.000	0.000	0.000	0.000	0.000	0.000	7.994
(U) PMC, BLI# 463600 Mod Kits MAGTF C4I MEWSS	18.617	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Cont	Cont
(U) PMC, BLI# 465200 Mod Kits MEWSS	0	0.000	1.332	0.209	0.000	0.000	0.000	0.000	0	20.158

Exhibit 4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**	38384 **C2274 Intelligence C2 Warfare Systems**

MEWSS SCHEDULE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Developmental Testing	4Q	1Q/2Q						
Operational Assessment		2Q/3Q						
MS C			2Q					
Field System MEWSS PIP 1-3			4Q					
Contractor Logistics Support (CLS)			2Q					
IOC MEWSS PIP			4Q					
MEWSS Legacy Block 0 and 1 Production			2Q					
MEWSS Legacy Block 0 and 1 Fielding			4Q					
FOC MEWSS PIP			4Q					
MEWSS Legacy Block 2 and 3 Production			3Q/4Q					
MEWSS Legacy Block 2 and 3 Fielding				1Q 3Q				

Exhibit 4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**	38384 **C2274 Intelligence C2 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	FY 2004	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	0.290	0.406	0.420	0.769	0.727	0.904	0.728	0.828	Cont	Cont
(U) PMC BLI 474700 Intell Suppt EQ RREP	1.100	0.000	4.209	0.034	1.019	5.191	0.100	1.294	0.000	12.947

Exhibit 4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**	38384 **C2274 Intelligence C2 Warfare Systems**

RREP UPGRADE SCHEDULE 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. RREP will become a series of independent efforts to spiral in technology.								

* MS-B AND MS-C will not take place. RREP will become a series of independent efforts to spiral in technology.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2275 Radio Systems**

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**8.904**	**8.536**	**15.640**	**14.542**	**13.790**	**12.088**	**8.820**	**8.039**
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. Providing 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. Providing 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 Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 Operational Sys Development		**0206313M Marine Corps Communication Systems**	**C2275 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-thePause (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:

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.283**	**1.100**	**0.112**	**0.115**
RDT&E Articles Qty				

JTRS: Migration/Integration Studies and Analysis. Manpack/Handheld JTRS.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.598**	**0.614**	**0.829**	**0.775**
RDT&E Articles Qty				

JTRS: Program Support and Management.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**3.946**	**4.421**	**0.000**	**0.000**
RDT&E Articles Qty				

JTRS: Gnd Vehicular Cluster 1 EMD Radio Manufacturing.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.075**	**1.313**	**2.674**	**1.746**
RDT&E Articles Qty				

JTRS: Gnd Vehicular (Cluster 1) Early Operational Assessment (EOA), Developmental and Operational Testing (DT/OT).

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.752**	**0.844**	**0.262**	**0.577**
RDT&E Articles Qty				

JTRS: Technical and Engineering Support.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2275 Radio Systems**	
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.325**	**0.244**	**0.240**	**0.570**
RDT&E Articles Qty					
JTRS: Contract Advisory and Assistance Services.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.180**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty					
GBS: Operational Test and Evaluation					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.000**	**0.100**	**0.000**
RDT&E Articles Qty					
IISR: Concept and Technical Development					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.000**	**0.100**	**0.000**
RDT&E Articles Qty					
IISR: Operational Test and Evaluation					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.000**	**1.432**	**1.831**
RDT&E Articles Qty					
SHF Wideband Replacement (HC3): USMC integration efforts.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.000**	**1.100**	**0.000**
RDT&E Articles Qty					
TSCT (LMST): Ka-Band Upgrade Effort.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.045**	**0.000**	**0.000**	**0.500**
RDT&E Articles Qty					
TSCT (LMST): LMST Technical Upgrades.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.290**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty					
TSCT (LMST): Integration HMMWV redesign initiative.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.310**	**0.000**	**0.200**	**0.200**
RDT&E Articles Qty					
TSCT (LMST): Contract support costs.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.100**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty					
TSCT (LMST): SHF Wideband Integration Effort.					

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**		PROJECT NUMBER AND NAME **C2275 Radio Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**2.190**	**1.670**
RDT&E Articles Qty				
Legacy Comm/Elec (Networks): Develop and test component upgrades for integration into legacy network equipment (ULCS/DTC)				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.381**	**0.123**
RDT&E Articles Qty				
Legacy Comm/Elec (Wireless): Develop and test component upgrades for integration into legacy radio systems (TRC-170 / PSC-5)				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.042**	**0.195**
RDT&E Articles Qty				
CONDOR: Spiral Development Studies and Integration Development				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.713**	**0.749**
RDT&E Articles Qty				
CONDOR: Program Support, Logistics Support & Management.				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.000**	**0.500**
RDT&E Articles Qty				
CONDOR: Point of Presence Vehicle **(**PoP-V) Engineering Development Model (EDM) Manufacturing				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.000**	**1.500**
RDT&E Articles Qty				
CONDOR: Jump Command and Control Vehicle **(**JC^2-V) EDM Manufacturing				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.215**	**0.226**
RDT&E Articles Qty				
CONDOR: Technical, Engineering Support and Contract Advisory, Assistance Services				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.510**	**0.538**
RDT&E Articles Qty				
CONDOR: Gateway OT				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.040**	**0.040**
RDT&E Articles Qty				
CONDOR: Travel/TAD				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.550**	**0.578**
RDT&E Articles Qty				
CONDOR: Point of Presence Vehicle (PoP-V) DT/OT				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.550**	**0.578**
RDT&E Articles Qty				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2275 Radio Systems**

CONDOR: Jump Command and Control Vehicle **(** JC^2-V) DT/OT				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.250**	**0.263**
RDT&E Articles Qty				
CONDOR: Integration, update support documentation and contract support costs.				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.150**	**0.158**
RDT&E Articles Qty				
CONDOR: MCTSSA interoperability/DISA on-orbit tests.				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.810**
RDT&E Articles Qty				
WCR: Contractor Support				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.250**
RDT&E Articles Qty				
WCR: Operational Testing, MCOTEA				
COST ($ in Millions)	FY2004	FY2005	FY2006	FY2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.050**
RDT&E Articles Qty				
WCR: MCTSSA Integration Testing				
(U) Total $	**8.904**	**8.536**	**15.640**	**14.542**

(U) PROJECT CHANGE SUMMARY:	**FY2004**	**FY2005**	**FY2006**	**FY2007**
(U) FY 2005 President's Budget:	**8.772**	**8.670**	**4.865**	**4.328**
(U) Adjustments from the NAVCOMPT Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.221		10.635	10.039
(U) SBIR/STTR Transfer	-0.089			
(U) Minor Affordability Adjustment		-0.134	0.140	0.175
(U) FY 2006 President's Budget:	**8.904**	**8.536**	**15.640**	**14.542**

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2275 Radio Systems**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC, BLI# 464300 Jt Tactical Radio Sys	0.000	0.000	0.000	0.000	121.342	172.866	115.027	117.571	Cont	Cont
(U) PMC, BLI# 464300 Legacy Bridge	11.068	25.909	14.837	10.827	0.000	0.000	0.000	0.000		62.641
(U) PMC BLI# 463300 Radio Systems (LMST)	8.934	17.157	4.336	11.195	4.813	1.292	1.131	1.385	0.000	50.243
(U) PMC BLI# 463300 LEGACY RADIO SYS	0.000	3.741	7.243	17.127	13.515	14.476	6.071	2.060	0.000	64.233
(U) PMC BLI# 463300 CONDOR	0.000	0.000	3.854	8.395	8.403	8.213	5.882	0.000	0.000	34.747
(U) PMC BLI# 463300 Wireless Cable Replacement	0.000	0.000	0.000	0.785	4.023	8.359	3.700	2.916	0.000	19.783

(U) Related RDT&E: Not Applicable

(U) D. ACQUISITION STRATEGY:

(U) LEGACY COMM ELECTRONICS MOD:
Networks: The Acquisition strategy for Legacy Comm/Elec would require the use of a integration contractor to develop and test new components prior to their procurement (as required). The individual components are primarily Commericial Off the Shelf (COTS) in nature, and a maximum effort will be made to procure components from existing contract.

(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- 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 C4I 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 Justification			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2275 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

Exhibit R-3 Cost Analysis								DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT						PROJECT NUMBER AND NAME						
RDT&E, N /BA 7 Operational Sys Dev		**0206313M Marine Corps Communication Systems**						**C2275 Radio Systems**						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
LMST HMMWV Integration/Redesign	FFP	Harris Corp, Florida		0.290	11/04							0.000	0.290	
LMST Ka-Band Upgrade	FFP	Harris Corp, Florida		0.000				1.100	01/06			0.000	1.100	
LMST Technical Upgrades	FFP	Harris Corp, Florida		0.045	08/04					0.500	TBD	Cont	Cont	
LMST Migration Study	FFP	PM WIN-T, CECOM		0.100	06/04							0.000	0.100	
SHF Wideband Replacement	MIPR	PM WIN-T, CECOM						1.432	TBD	1.831	TBD	Cont	Cont	
JTRS EMD Radio Manufacturing	CPAF	Boeing, Anaheim, CA	0.000	3.296	02/04	4.421	02/05	0.000		0.000		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		2.170	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 PoP-V EDM Manufacturin	TBD	TBD		0.000		0.000		1.000	11/05	0.500	11/06	Cont	Cont	
CONDOR JC2-V EDM Manufacturing	TBD	TBD		0.000		0.000		1.000	11/05	1.500	11/06	Cont	Cont	
Studies and Integration Development	TBD	TBD		0.000		0.000		1.042	11/05	0.195	11/06	Cont	Cont	
Subtotal Product Development			**0.000**	**3.731**		**4.421**		**8.215**		**6.289**		**Cont**	**Cont**	

Remarks:

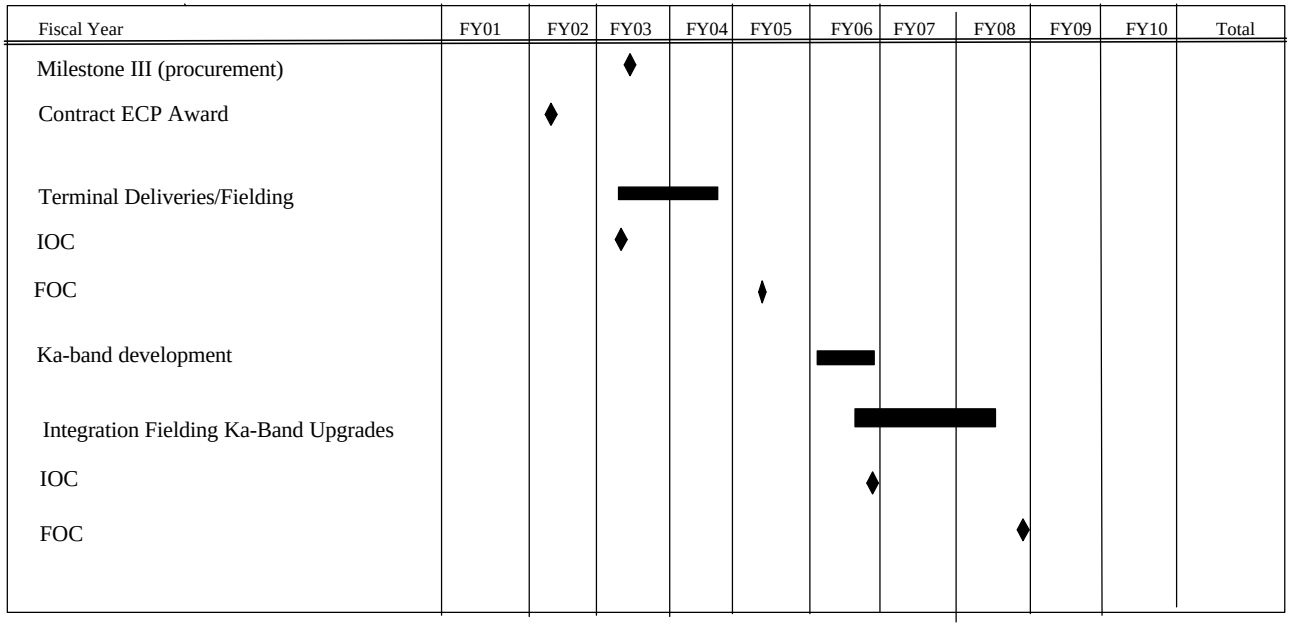
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JTRS TRAVEL	Allot	MARCORSYSCOM	0.020	0.040	10/03	0.040	10/04	0.040	10/05	0.040	10/06	Cont	Cont	
JTRS Integration/Migration	FFP	NORTH GRUMMAN	0.237	1.283	12/03	1.100	12/04	0.112	12/05	0.115	12/06	Cont	Cont	
JTRS Tech & Eng Support	FFP	NORTH GRUMMAN		0.752	10/03	0.844	10/04	0.262	10/05	0.577	10/06	Cont	Cont	
CONDOR Program travel	Allot	MARCORSYSCOM		0.000		0.000		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		0.000		0.250	11/05	0.263	11/06	Cont	Cont	
LMST Contractor Support	MIPR	Ft. Monmouth, NJ		0.310	10/04							0.000	0.310	
LMST Contractor Support	FFP	NGIT, Stafford, VA						0.200	10/05	0.200	10/06	Cont	Cont	
WCR Program Support	FFP	NGIT, Stafford, VA		0.000		0.000		0.000		0.440	10/06	Cont	Cont	
WCR Contract Adv & Asst	FFP	Titan, Stafford, VA		0.000		0.000		0.000		0.370	10/06	Cont	Cont	
Subtotal Support			**0.257**	**2.385**		**1.984**		**1.079**		**2.229**		**Cont**	**Cont**	

Remarks:

Exhibit R-3 Cost Analysis													DATE: February 2005		
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT										PROJECT NUMBER AND NAME		
RDT&E, N /BA 7 Operational Sys Dev			**0206313M Marine Corps Communication Systems**										**C2275 Radio Systems**		
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
JTRS Gnd Veh EOA/DT/OT	WR	MCOTEA		0.150	12/03	0.150	10/04	0.150	10/05	0.150	10/06	Cont	Cont		
JTRS Gnd Veh EOA/DT/OT	MIPR	PM WIN-T, CECOM		1.575	12/03	1.163	10/04	2.524	10/05	1.596	10/06	Cont	Cont		
IISR Operational T&E	MIPR	TBD		0.000		0.000		0.100	12/05	0.000		0.000	0.100		
LCE (Networks) Integration Tests	WR	MCTSSA		0.000		0.000		0.020	12/05	0.020	12/06	0.000	0.040		
LCE (Wireless) Integration Tests	WR	TBD		0.000		0.000		0.010	12/05	0.010	12/06	Cont	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		1.610	11/05	1.694	11/06	Cont	Cont		
WCR Integrqation Testing	FFP	MCTSSA, CA/TBD		0.000		0.000		0.000		0.050	11/06	Cont	Cont		
WCR MOT&E	FFP	MCOTEA		0.000		0.000		0.000		0.250	01/07	Cont	Cont		
GBS	WR	MCOTEA		0.180								0.000	0.180		
Subtotal T&E			**0.000**	**1.905**		**1.313**		**4.564**		**3.928**		**Cont**	**Cont**		
Remarks:															
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract	
JTRS Program Support	FFP	NGIT,Stafford, VA	0.308	0.558	10/03	0.574	10/04	0.789	10/05	0.735	10/06	Cont	Cont		
JTRS Contract Adv & Assist	FFP	TITAN VA		0.325	12/03	0.244	10/04	0.240	10/05	0.570	10/06	Cont	Cont		
CONDOR Program Support, Contract Adv & Asst	FFP	Titan, Stafford, VA		0		0		0.603	10/05	0.633	10/06	Cont	Cont		
CONDOR Logistics Support	FFP	NGIT,Stafford, VA		0		0		0.15	10/05	0.158	10/06	Cont	Cont		
Subtotal Management			**0.308**	**0.883**		**0.818**		**1.782**		**2.096**		**Cont**	**Cont**		
Remarks:															
Total Cost			**0.565**	**8.904**		**8.536**		**15.640**		**14.542**		**Cont**	**Cont**		

Exhibit 4/4a, Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communication Systems**	**C2275 Radio Systems**

TACTICAL SATELLITE COMMUNICATION TERMINAL (LMST)



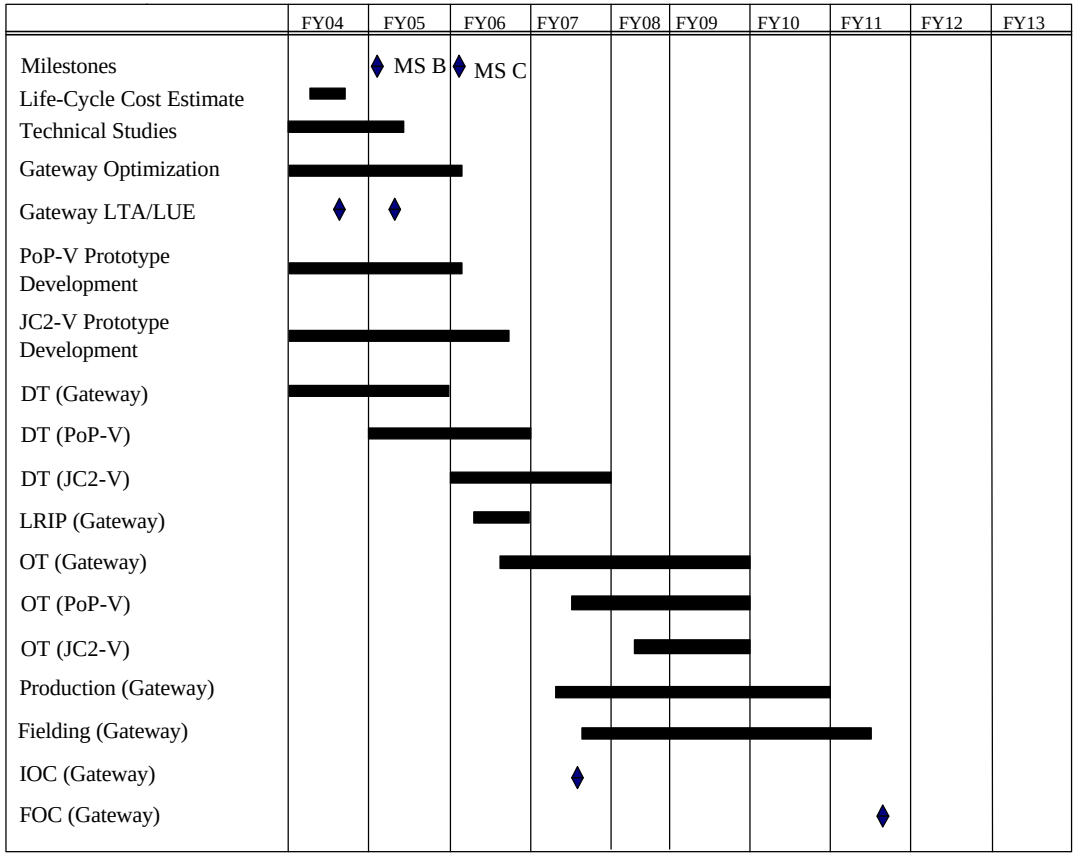
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	0.745	0.000	1.300	0.700	0.200	0.202	0.300	0.302	Cont	Cont
(U) PMC BLI# 463300 Radio Systems (LMST)	8.934	17.157	4.336	11.195	4.813	1.292	1.131	1.385	Cont	Cont

Exhibit 4/4a, Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2275 Radio Systems**

LMST SCHEDULE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Terminal Deliveries								
IOC		3rdQtr						
FOC				2ndQtr				
Ka-band Development					1st-4th Qtr			
Ka-band Integration								
IOC					4th Qtr			
FOC							4th Qtr	

Exhibit 4/4a, Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communication Systems**	**C2275 Radio Systems**

Command & Control On-the-move Network, Digital Over-the-horizon Relay (CONDOR)



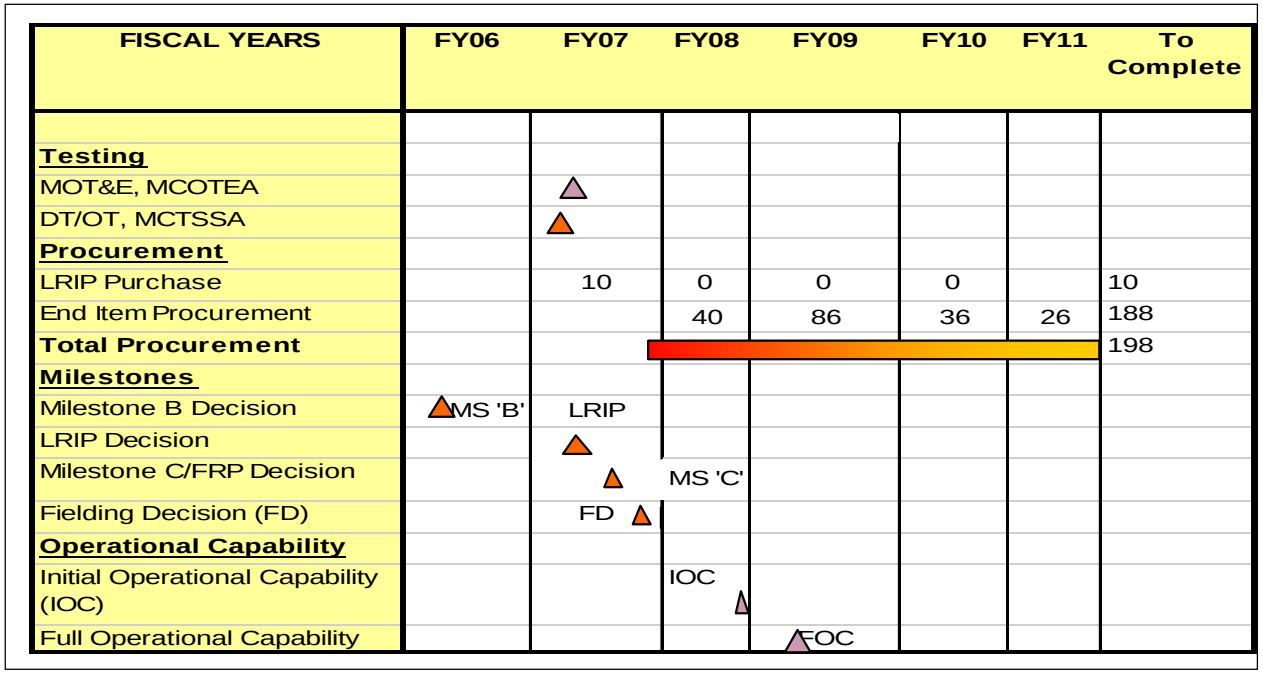
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	0.000	0.000	6.020	5.325	7.390	6.170	1.610	0.760	0.000	27.275
(U) PMC BLI# CONDOR	0.000	0.000	3.854	8.395	8.403	8.213	5.882	0.000	0.000	34.747

Exhibit 4/4a, Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communication Systems**	**C2275 Radio Systems**

CONDOR SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 20010	FY 20011	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 Development	1Q	----------	1Q						
JC2-V Prototype Development	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 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communication Systems**	**C2275 Radio Systems**

Wireless Cable Replacement (WCR)



Program Funding Summary	FY 2004	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	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	0.000	0.785	4.023	8.359	3.700	2.916	Continuing	Continuing

Exhibit 4/4a, Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	**0206313M Marine Corps Communication Systems**	**C2275 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 Project Justification			DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	**PROGRAM ELEMENT NUMBER AND NAME** **0206313M Marine Corps Communications Sys**			**PROJECT NUMBER AND NAME** **C2276 Communications Switching & Control Systems**				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**6.944**	**3.720**	**6.220**	**7.642**	**7.094**	**4.891**	**1.938**	**1.817**
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 communicatons 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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.391**	**1.001**	**0.000**	**0.000**
RDT&E Articles Qty				

NPM: JNMS MS C and FRP. Operational Tests for JNMS and Developmental work for SPEED RF analysis enhancement.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
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**		**C2276 Communications Switching & Control Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.843**	**2.321**
RDT&E Articles Qty				
NPM: Develop unique USMC models for JNMS and Developmental work for SPEED Net Centric enhancements.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**4.164**	**1.610**	**0.000**	**0.000**
RDT&E Articles Qty				
TSM: Development and testing of Engineering Development Models (EDM).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.671**	**1.140**
RDT&E Articles Qty				
TSM: Development of cellular telephone and Voice over IP (VoIP) capability for integration into TSM EDMs and test for interoperability/operational suitability.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.500**	**1.500**
RDT&E Articles Qty				
ECCS: Develop and test miniaturized components that provide DISN services while On-The-Move/Enroute.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.389**	**1.109**	**1.081**	**1.155**
RDT&E Articles Qty				
FICCS: Continue Development of miniaturization of hardware solutions, colaborate with MCTSSA SIE and conduct Interoperability Testing at JITC/Gigabite Ethernet, and Wireless Telephone Technology into the FICCS Platform.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.125**	**0.000**
RDT&E Articles Qty				
TDN: Test and Evaluate integrated software requirements.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**1.526**
RDT&E Articles Qty				
TDN: Test and integrate secure wireless LAN technologies into the TDN DDS platform.				
(U) Total $	**6.944**	**3.720**	**6.220**	**7.642**

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**C2276 Communications Switching & Control Systems**

(U) PROJECT CHANGE SUMMARY:

	FY 2004	FY 2005	FY 2006	FY 2007
(U) FY 2005 President's Budget:	**6.449**	**3.803**	**4.663**	**3.913**
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.539		1.500	3.638
(U) SBIR/STTR Transfer	-0.044			
(U) Minor Affordability Adjustment		-0.083	0.057	0.091
(U) FY 2006 President's Budget:	**6.944**	**3.720**	**6.220**	**7.642**

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 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U)PMC BLI 463400 Communications Switching and Control Systems										
NPM (JNMS)	0.001	5.254	6.894	3.570	2.222	0.000	0.000	0.000	0.000	17.941
ECCS	0.000	0.000	0.000	0.000	12.172	3.705	3.528	0.645	0.000	20.05
FICCS	12.879	11.243	11.469	1.950	0.765	0.843	0.000	0.000	0.000	39.149
TSM	0.000	0.000	29.085	34.005	20.033	8.056	0.000	0.000	0.000	91.179
(U)PMC BLI 468800 Transition Switch Module										
TSM	9.218	9.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.427

(U) Related RDT&E: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**	**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

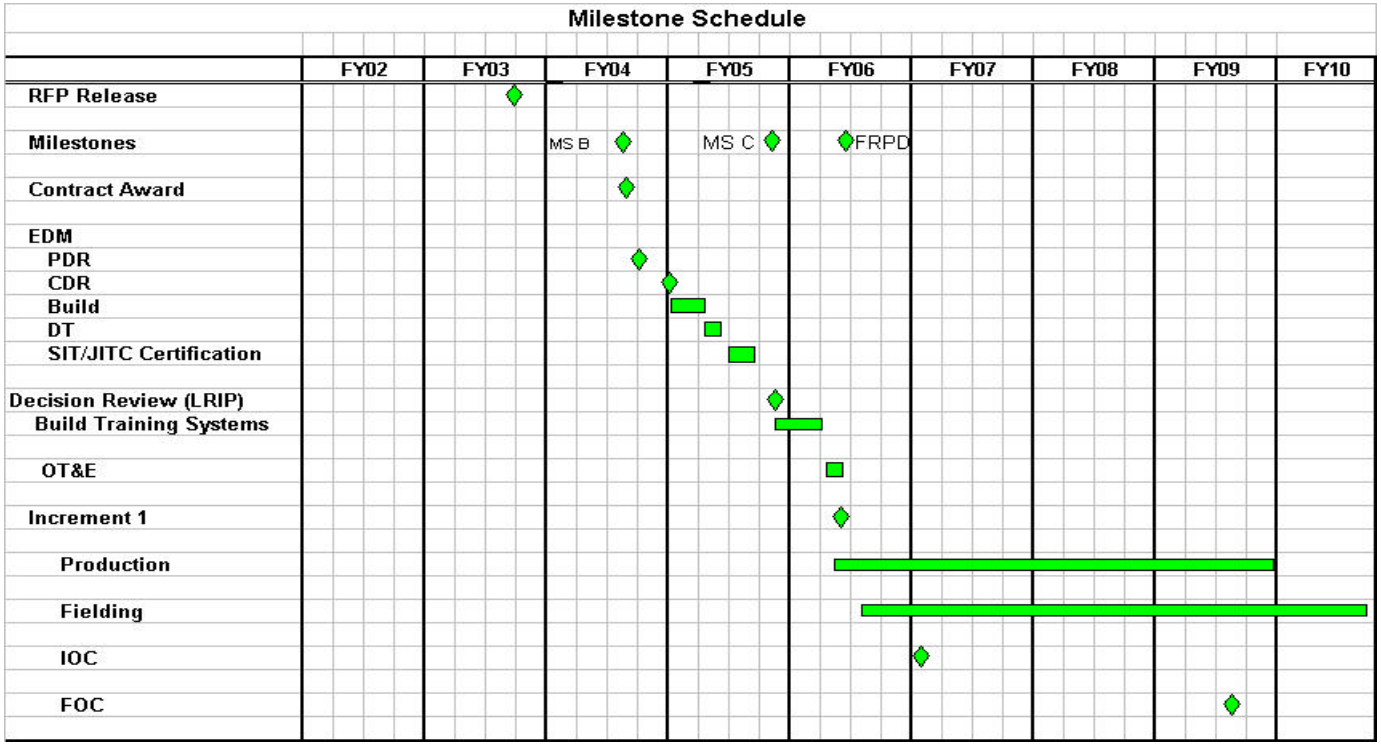
FY06 (TDN) - TBD

FY07 (TDN) - TBD

Exhibit R-3 Cost Analysis							DATE: **February 2005**								
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**			PROGRAM ELEMENT **0206313M Marine Corps Communications S**				PROJECT NUMBER AND NAME **C2276 Communications Switching & Control Systems**								
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract	
NPM (JNMS)	CP	CECOM, Monmouth, NJ	0.114	0.151	01/04	0.280	01/05			0.800	01/07	Cont	Cont		
NPM (SPEED)	FP	NGIT Winterpark, FL	0.722	0.683	01/04	0.320	01/05	0.500	01/06	1.100	01/07	Cont	Cont		
ECCS	FFP	MCSC, Quantico, Va						0.900	11/05	0.600	11/06	Cont	Cont		
FICCS	CPFF	GSA	0.000	0.682	01/04	0.000						0.000	0.682		
FICCS	CPFF	EDO/Darlington, Inc.		0.000	04/04	0.612	03/05	0.661	02/06	0.735	02/07	Cont	Cont		
TSM	FFP	MCSC, Quantico, Va	0.884	3.593	06/04	1.385	10/04	1.671	10/05	1.140	10/06	Cont	Cont		
Subtotal Product Dev			**1.720**	**5.109**		**2.597**		**3.732**		**4.375**		**Cont**	**Cont**		
Remarks:															
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract	
NPM (Program Support)	WR	MCSC/MCTSSA	0.164	0.150	01/04	0.142	10/04	0.143	10/05	0.150	10/06	Cont	Cont		
NPM (Support Contractor)	FP	CTQ/NGIT	0.355	0.329	01/04	0.121	10/04	0.200	10/05	0.271	10/06	Cont	Cont		
ECCS	FFP	Support Contractor						0.600	11/05	0.600	11/06	Cont	Cont		
FICCS	CPFF	Support Contractor	0.000	0.450	12/04	0.000	10/04	0.300	11/05	0.400	11/06	Cont	Cont		
TSM	FFP	NGIT, Aquia, VA	0.716	0.498	10/04	0.000						Cont	Cont		
TDN	FFP	NGIT, Aquia, VA						0.225	11/05	0.305	11/06	Cont	Cont		
Subtotal Support			**1.235**	**1.427**		**0.263**		**1.468**		**1.726**		**Cont**	**Cont**		
Remarks:															
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract	
JNMS	WR	MCOTEA/FMF	0.065	0.078	12/03	0.138	10/04					0.000	0.281		
ECCS	WR	MCOTEA								0.300	12/06	Cont	Cont		
FICCS	WR	MCTSSA	0.000	0.257	01/04	0.020	10/04	0.020	11/05	0.020	11/06	Cont	Cont		
FICCS	WR	JITC		0.000		0.120	02/05	0.100	03/06			0.000	0.220		
FICCS	WR	MCOTEA/FMF		0.000		0.357	03/05					0.000	0.357		
TSM	FFP	CECOM, FT Monmouth, NJ	0.243	0.000	11/03	0.000	12/04					0.000	0.243		
TSM	WR	MCOTEA	0.199	0.073	11/04	0.225	10/05					0.000	0.497		
TDN	FFP	TBD						0.900	11/05	1.221	11/06	Cont	Cont		
Subtotal T&E			**0.507**	**0.408**		**0.860**		**1.020**		**1.541**		**Cont**	**Cont**		
Remarks:															
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract	
Subtotal Management			**0.000**			**0.000**						**0.000**	**0.000**		
Remarks:															
Total Cost			**3.462**	**6.944**		**3.720**		**6.220**		**7.642**		**Cont**	**Cont**		

Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2276 Communications Switching & Control Systems**

TRANSITION SWITCH MODULE



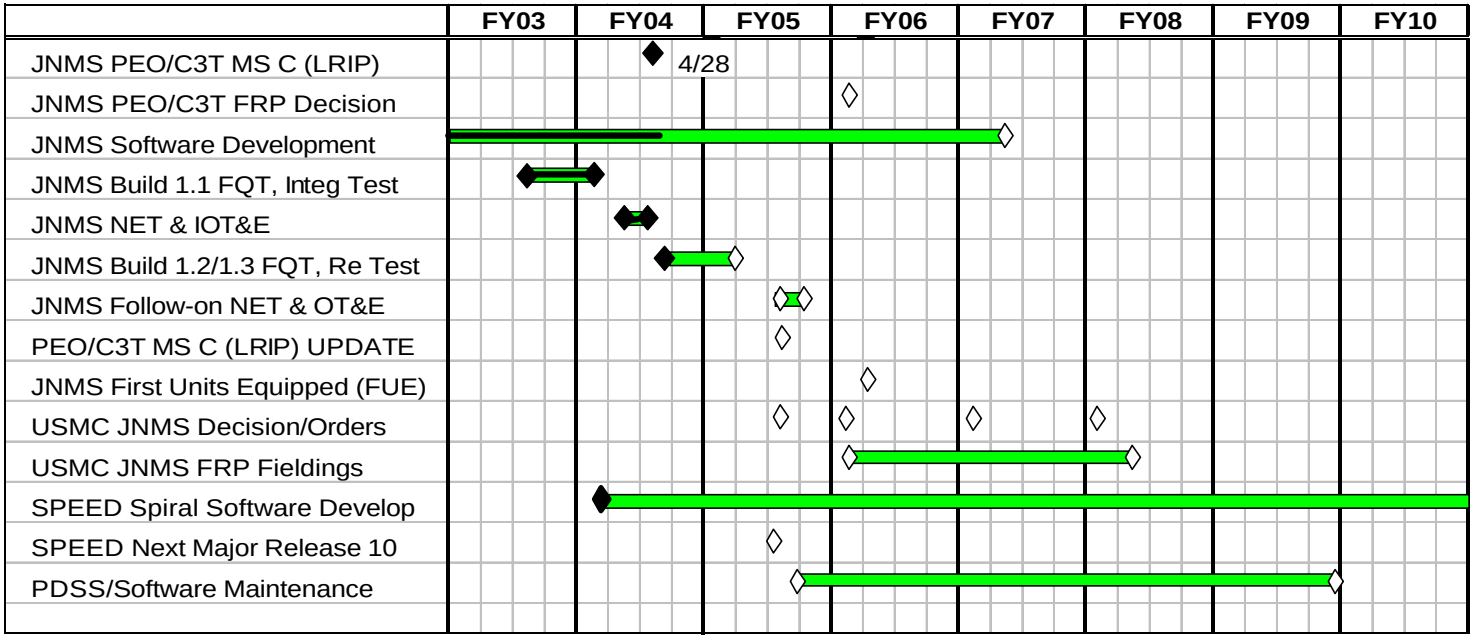
Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #,										
(U) RDT&E,N	4.164	1.610	1.671	1.140	0.906	0.921	0.300	0.315	0.000	11.027
(U) PMC BLI# 468800 Transition Switch Module (TSM)	9.218	9.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.427
(U) PMC BLI# 463400 Comm Switch & Control Sys	0.000	0.000	29.085	34.005	20.033	8.056	0.000	0.000	0.000	91.179

Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **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		

Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2276 Communications Switching & Control Systems**

NPM (JNMS)



Program Funding Summary	FY 2004	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	1.391	1.001	0.843	2.321	2.176	0.330	0.000	0.000	Cont	Cont
(U) PMC BLI# 463400 CommSwitch& Ctl Sys -NPM (JNMS)	0.001	5.254	6.894	3.570.	2.222	0.000	0.000	0.000	0.000	14.371

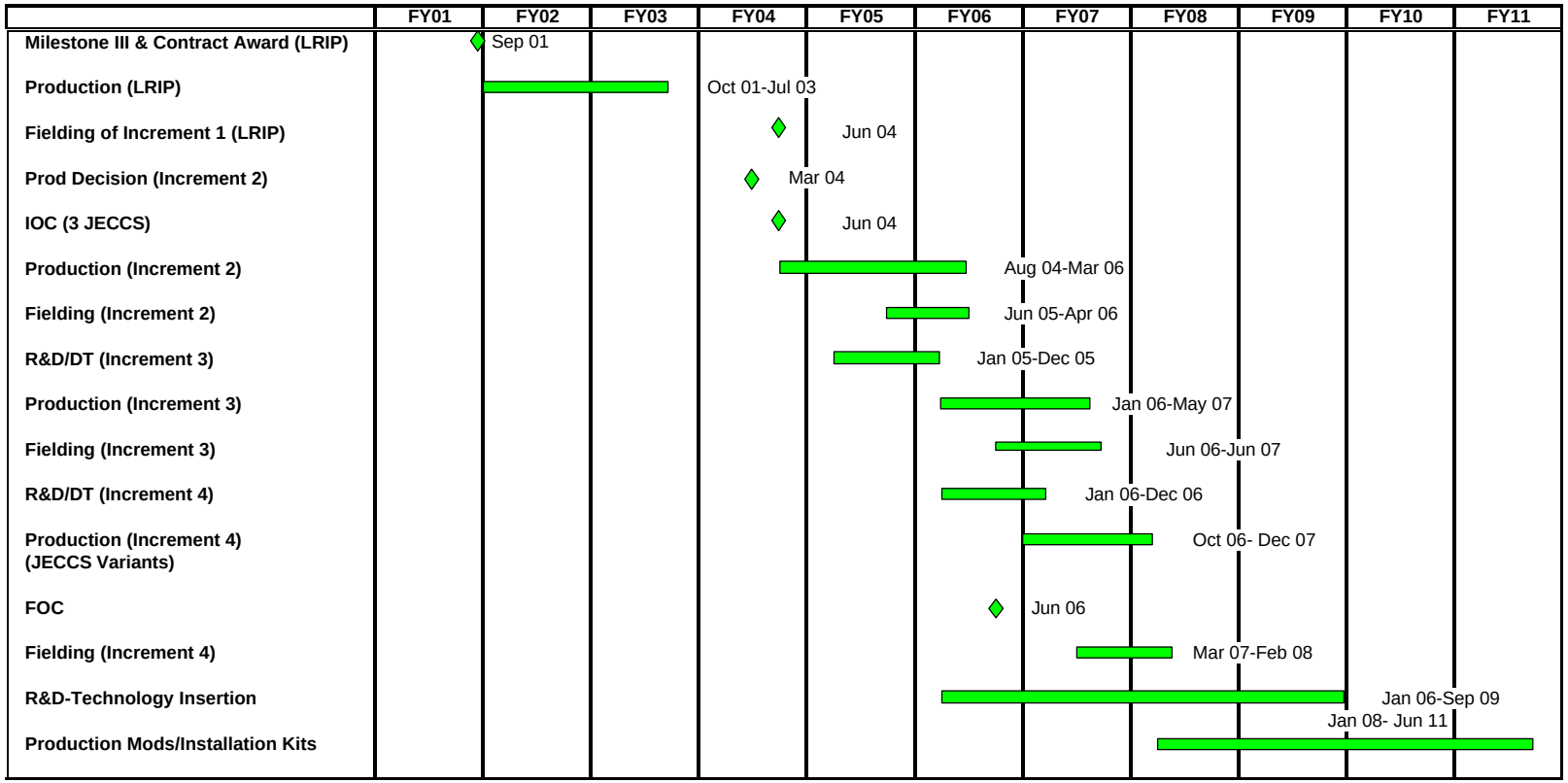
Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2276 Communications Switching & Control Systems**

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	1stQ	----------	----------	----------	----------	----------	----------	----------
PDSS/Software/Subsequent Releases		3Q	----------	----------	----------	----------		

Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2276 Communications Switching & Control Systems**

FICCS

Milestone Schedule / Total Resource Summary



Program Funding Summary	FY 2004	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	1.389	1.109	1.081	1.155	1.681	1.930	0.530	0.555	0.000	9.430
(U) PMC BLI# 463400 Comm Switch & Ctrl Sys - FICCS	12.879	11.243	11.469	1.950	0.765	0.843	0.000	0.000	0.000	39.149

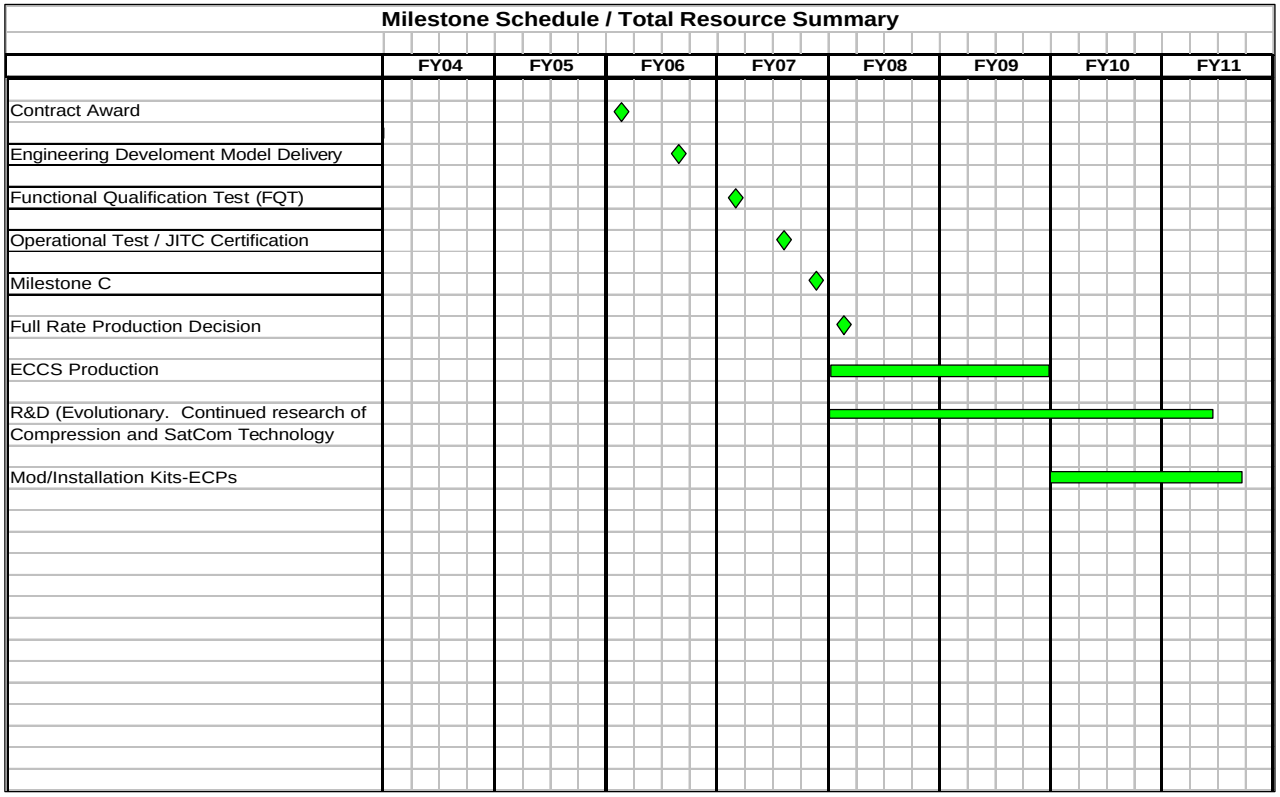
Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2276 Communications Switching & Control Systems**

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			

Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
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

Milestone Schedule / Total Resource Summary



Program Funding Summary	FY 2004	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	1.500	1.500	2.180	1.090	1.108	0.947	0.000	8.325
(U) PMC BLI# 463400 Comm Switch & Ctrl Sys - ECCS	0.000	0.000	0.000	0.000	12.172	3.705	3.528	0.645	0.000	20.050

Exhibit R-4/4a Schedule Profile/Detail		DATE: **February 2005**
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **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			DATE: February 2005					
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Syst**			PROJECT NUMBER AND NAME **C2277 Systems Engineering & Integration**				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**9.225**	**7.787**	**9.697**	**8.877**	**9.183**	**9.363**	**9.686**	**9.909**
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.

1. The 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 systems, and provide an environment for engineering analysis to correct systems deficiencies and develop new capabilities.

2. The 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 (DISA).

3. The 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.

4. The Marine Air-Ground Task Force Command, Control, Communications, Computers, and Intelligence Systems Engineering and Integration, Coordination. (MAGTF C4I SEI&C) subproject 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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.700**	**1.580**	**1.452**	**1.456**
RDT&E Articles Qty				

MAGTF SEI&C (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 engineeri

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Syst**		PROJECT NUMBER AND NAME **C2277 Systems Engineering & Integration**		
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.986**	**1.742**	**1.496**	**1.533**
RDT&E Articles Qty					

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

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.097**	**1.168**	**1.213**	**1.242**
RDT&E Articles Qty				

CWID: to deter, prevent, and defeat threats and aggressions aimed at the US.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**6.442**	**3.297**	**5.536**	**4.646**
RDT&E Articles Qty				

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 $	**9.225**	**7.787**	**9.697**	**8.877**

(U) PROJECT CHANGE SUMMARY:

	FY2004	FY2005	FY2006	FY2007
(U) FY 2005 President's Budget:	**8.762**	**7.960**	**9.567**	**8.744**
(U) Adjustments from the President's Budget:				
(U) Congressional Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	0.545			
(U) SBIR/STTR Transfer	-0.082			
(U) Minor Affordability Adjustment		-0.173	0.130	0.133
(U) FY 2006 President's Budget:	**9.225**	**7.787**	**9.697**	**8.877**

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.

(U) Schedule: Not Applicable.

(U) Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Syst**	PROJECT NUMBER AND NAME **C2277 Systems Engineering & Integration**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
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. A43

Exhibit R-3 Cost Analysis							DATE: February 2005							
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**					PROJECT NUMBER AND NAME **C2277 Systems Engineering & Integration**							
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CWID	MIPR	JPO Ft Monmouth NJ	1.977	0.506	12/04	0.680	12/04	0.700	12/06	0.750	12/06	Cont	Cont	
CWID	WR	MCSC Quantico, VA	0.073	0.043	10/04	0.030	10/04	0.040	12/06	0.045	12/06	Cont	Cont	
Subtotal Product Dev			**2.050**	**0.549**		**0.710**		**0.740**		**0.795**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CWID	C/FFP	NGIT, Stafford VA	1.176	0.548	10/03	0.458	10/04	0.473	12/05	0.447	12/06	Cont	Cont	
MAGTF SEI&C	C/FFP	NGIT, Stafford VA	1.467	2.949	10/03	1.909	10/04	3.684	10/05	2.753	10/06	Cont	Cont	
MAGTF SEI&C	WR	MCSC, Quantico, VA	0.618	0.150	10/03	0.155	10/04	0.158	10/05	0.161	10/06	Cont	Cont	
JDEP	WR	NSWC Dahlgren, VA	0.151	0.100	01/04							Cont	Cont	
JDEP	T&M	SENSIS Syracuse NY	0.593	0.000	05/04	0.066	05/05	0.063	05/06	0.069	05/07	Cont	Cont	
JDEP	MPR	DISA	0.017	0.307	02/04	0.313	02/05	0.319	02/06	0.326	05/07	Cont	Cont	
JINTACCS	C/FFP	NGIT, Stafford VA	0.151	0.442	10/03	0.693	10/04	0.389	10/05	0.404	10/06	Cont	Cont	
JINTACCS	WR	MCTSSA, Cp Pndltn, CA	0.017	0.544	10/03	1.049	10/04	1.107	10/05	1.129	10/06	Cont	Cont	
Subtotal Support			**4.173**	**5.040**		**4.643**		**6.193**		**5.289**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JDEP	WR	MCTSSA, Cp Pndltn, CA	0.363	0.293	04/04	1.201	10/04	1.070	10/05	1.061	10/06	Cont	Cont	
MAGTF SEI&C	RC	MCTSSA, Cp Pndltn, CA		3.119	10/03	0.899	10/04	1.350	10/05	1.378	10/06	Cont	Cont	
Subtotal T&E			**0.000**	**3.412**		**2.100**		**2.420**		**2.439**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MAGTF SEI&C	C/FFP	NGIT, Stafford VA	0.180	0.224	10/03	0.334	10/04	0.344	10/05	0.354	10/06	Cont	Cont	
Subtotal Management			**0.180**	**0.224**		**0.334**		**0.344**		**0.354**		**Cont**	**Cont**	
Remarks:														
Total Cost			**6.403**	**9.225**		**7.787**		**9.697**		**8.877**		**Cont**	**Cont**	

EXHIBIT R-2a, RDT&E Project Justification					DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**				PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**			
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**20.876**	**22.535**	**16.253**	**15.742**	**12.489**	**6.217**	**5.362**	**5.669**
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 shall complement existing Short Range Air Defense (SHORAD) capabilities and shall interface with current and proposed Marine Air Command and Control Systems, sensors, and data paths. CLAWS Block 0 will provide the initial capability. CLAWS Block I will align with and become the launcher for Army Surface Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM) Block I program. The Marine Corps relies on the Army SLAMRAAM Block I program to develop the final threshold capability with the CLAWS Block I launcher and the Integrated Fire Control System (IFCS).

2. The Low Altitude Air Defense (LAAD) Sustainment Transformation (S/T), formerly known as LAAD Sustainment, provides the LAAD Battalions with the technologies/equipment required to maintain a ground-based air defense capability in support of the Marine Air Ground Task Force (MAGTF) and joint/coalition forces. Funding will support the research and development of the next-generation air defense weapon that will facilitate the transformation of the LAAD Battalions into a true, multi-mission, force protection asset. The next generation weapon is envisioned to be the net-centric command and control node with a robust sensor suite and the ability to fire existing and future missiles. It is desired that the first block of this capability be fielded by FY08 with the ability to fire the Stinger missile.

3. Pedestal Mounted Stinger (PMS) or "Avenger" is a turreted, lightweight, highly mobile gun/missile hybrid mounted on a heavy HMMWV. The system delivers eight ready to fire Stinger missiles and 285 rounds of .50 caliber ammunition in a single upload. An upgraded Land Navigation System assists the slew-to-cue capability and the Forward Looking Infra Red Device provides a day/night and reduced visibility capability. Funding will support the transition from the Avenger solution to the next-generation solution.

4. 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: interrogator/transponder system for Advanced Amphibious Assault Vehicles (AAAVs), 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.

(U) B. ACCOMPLISHMENTS/ PLANNED PROGRAM:

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**5.407**	**3.695**	**1.141**	**0.622**
RDT&E Articles Qty				

CLAWS: Development, design, test and integration issues related to the four Production Representative Systems and a Milestone C Decision for for 2 Production Representative Systems (PRS) launchers.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**5.392**	**4.475**	**0.480**	**1.920**
RDT&E Articles Qty				
CLAWS: Complete Block 0 Developmental Testing (DT) and develop capability with the CLAWS Block I launcher and the IFCS.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**3.184**	**6.500**	**0.000**	**0.434**
RDT&E Articles Qty				
CLAWS: Operational Testing (OT)for CLAWS Block 0 and CLAWS/SLAMRAAM Block I.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**2.967**	**3.535**	**1.467**	**1.155**
RDT&E Articles Qty				
CLAWS: Program Management Support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.739**	**0.000**	**2.483**	**0.996**
RDT&E Articles Qty				
LAAD SUSTAINMENT TRANSFORMATION: Program Management Support				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.298**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
LAAD SUSTAINMENT TRANSFORMATION: Provides EADS V 7.4.2 and 8.0/Vx work development, integration and test activity				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.703**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
LAAD SUSTAINMENT TRANSFORMATION: Provides for Weapons System enhancement development and test, independent test and evaluation.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.064**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
LAAD SUSTAINMENT TRANSFORMATION: Provides EADS and AFCC integration development and test activity				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**1.976**	**6.682**	**6.219**
RDT&E Articles Qty				
LAAD SUSTAINMENT TRANSFORMATION: Development of the next generation Air Defense Weapons system				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.000**	**0.396**
RDT&E Articles Qty				
LAAD SUSTAINMENT TRANSFORMATION: Stinger Ground Support Equipment enhancements				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.130**	**0.188**	**0.000**	**0.000**
RDT&E Articles Qty				
PMS: Program management Support				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**		PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.207**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
PMS: Provide for utilization of test articles and integration efforts in support of OIF. Integration efforts for the FLIR, ECU/PPU and communicatio system for the Avenger				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.871**	**0.966**	**1.000**	**1.000**
RDT&E Articles Qty				
MCTIS: Program management support.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.550**	**0.500**	**1.000**	**1.000**
RDT&E Articles Qty				
MCTIS: Test and evaluation as part of the coalition CID ACTD program.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.179**	**0.300**	**1.200**	**1.200**
RDT&E Articles Qty				
MCTIS: Engineer Design Model.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.185**	**0.150**	**0.300**	**0.300**
RDT&E Articles Qty				
MCTIS: Risk reduction.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.250**	**0.500**	**0.500**
RDT&E Articles Qty				
MCTIS: Support software development.				
(U) Total $	**20.876**	**22.535**	**16.253**	**15.742**

(U) PROJECT CHANGE SUMMARY:	**FY2004**	**FY2005**	**FY2006**	**FY2007**
(U) FY 2005 President's Budget:	**23.338**	**22.765**	**6.429**	**11.075**
(U) Adjustments from the President's Budget:				
(U) Congressional Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-1.883		10.266	5.163
(U) SBIR/STTR Transfer	-0.557			
(U) Minor Affordability Adjustment	-0.022	-0.230	-0.442	-0.496
(U) FY 2006 President's Budget:	**20.876**	**22.535**	**16.253**	**15.742**

CHANGE SUMMARY EXPLANATION:

(U) Funding: See Above.

(U) Schedule: Not Applicable

(U) Technical: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Sys**	PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) PMC LINE BLI 489000 CLAWS	0.000	4.395	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.395
(U) PMC LINE BLI 305100 CLAWS	0.000	0.000	0.442	3.145	2.345	33.581	37.887	34.041	Cont	Cont
(U) PMC LINE BLI 300600 LAAD S/T	1.901	10.275	1.997	3.872	9.958	17.377	17.503	20.322	Cont	Cont
(U) PMC LINE BLI 301300 PMS	0.782	9.965	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.747

(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 will complete Developmental Test (DT) and Operational Test (OT) in FY04/05 to provide a FY06 Initial Operational Capability (IOC). CLAWS provides a Joint Emergency Operational Capability from FY06-FY09 and provides concept validation and risk mitigation for the SLAMRAAM program. CLAWS Block I will align with and become the launcher for SLAMRAAM Block I. Marine Corps relies on SLAMRAAM Block I program to develop the final threshold capability with the CLAWS Block I launcher and the Integrated Fire Control System (IFCS).

U) LAAD SUSTAINMENT TRANSFORMATION: The LAAD Sustainment Transformation Program, formerly know as LAAD Sustainment supports the Stinger, Advanced Medium Range Air-to-Air Missile (AMRAAM) and future based weapon systems by managing six separate areas: Concept and Development of the Future Weapons System, Expeditionary Air Defense Systems (EADS) hardware and software, Trainers and Simulators, Missiles, Ground Support Equipment (GSE), and the Avenger. The LAAD Sustainment Transformation acquisition strategy is to repair, sustain, or replace LAAD systems experiencing readiness degredation due to obsolescence. Examples include the replacement of RemoteTerminal Units, shelf life extensions to USMC Stinger Missiles, upgrading trainers to tactical configuration and upgrading the present target configurations. LAAD Sustainment Transformation will leverage Joint interests in every available endeavor.

U) PEDESTAL MOUNTED STINGER: A pending MROC decision is anticipated to divest the Avengers from the USMC inventory by the 2009/2010 timeframe.

(U) MCTIS: Economy of scales dictate a strategy that highly leverages Joint/coalition evolutionary development efforts. The FY03 through 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:

FY04 Raytheon, Tewsbury, MA. System Development & Demonstration.
FY05 Raytheon, Tewsbury, MA. System Development & Demonstration; Operational Testing.
FY06 Raytheon, Tewksbury, MA. Fielding/sustainment for CLAWS Block 0 Launchers. SLAMRAAM Block I System Development;CLAWS Block I Launcher DT.
FY07 Raytheon, Tewksbury, MA. System Development and Demonstration; Developmental Test.

MCTIS:

FY04-FY07 NSWC, Crane, IN Engineering Services. Oct 04
FY05-FY07 MarCorSysCom (PA&E) LCCE Effort. Contractor Techolote
FY05-FY07 MarCorSysCom CEOSS support contract recompeted in Sep 04. Contractor Anteon

Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communication Sys**					PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**							
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
CLAWS	RCP	Raytheon, Bedford, MA	12.309	4.531	04/01	3.695	01/05	1.134	01/06	0.615	01/07	Cont	Cont	
LAAD SUSTAINMENT	WR	NSWC, Crane, IN								0.396	10/06	Cont	Cont	
LAAD SUSTAINMENT	RCP	Raytheon, Bedford, MA	0.000	0.145	03/04							0.000	0.145	
LAAD SUSTAINMENT	RCP	Boeing, Huntsville, AL	0.030	0.034	11/03							0.000	0.064	
LAAD SUSTAINMENT	RCP	TBD				1.976	01/05	6.682	10/05	6.219	10/06	Cont	Cont	
PMS	WR	NSWC, Crane, IN		0.207	10/03							0.000	0.207	
MCTIS (CID)	WR	NSWC, Crane, IN	0.176	0.818	06/04	1.000	01/05	2.970	01/06	2.970	01/07	Cont	Cont	
Subtotal Product Dev			**12.515**	**5.735**		**6.671**		**10.786**		**10.200**		**Cont**	**Cont**	
Remarks:														

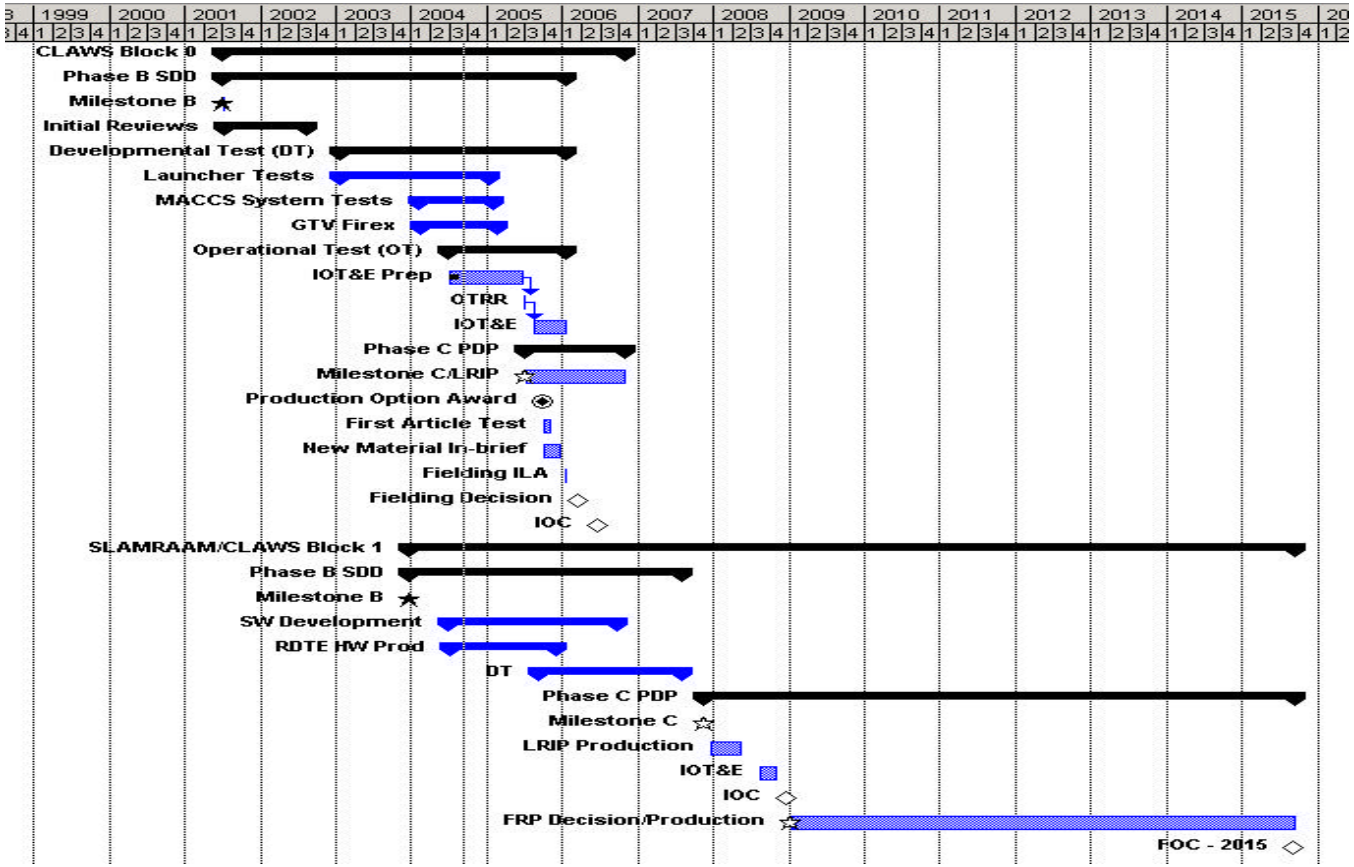
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
CLAWS	WR	MCSC, Quantico, Va	0.380	0.021	10/01	0.025	01/05	0.025	01/06	0.025	01/07	Cont	Cont	
CLAWS	WR	MCCDC, Quantico, VA	0.200	0.000		0.090	01/05	0.090	01/06	0.090	01/07	Cont	Cont	
LAAD SUSTAINMENT	WR	MCTSSA, Cp Pndltn, CA	0.000					0.440	03/06	0.440	10/06	Cont	Cont	
LAAD SUSTAINMENT	WR	NSWC, Crane, IN	0.000	0.130	09/04			0.660	10/05			Cont	Cont	
LAAD SUSTAINMENT	RCP	AT&T, Vienna, Va	0.000	0.285	03/04							Cont	Cont	
LAAD SUSTAINMENT	MIPR	Redstone Arsenal, AL	0.095	0.005	10/03							0.000	0.100	
LAAD SUSTAINMENT	WR	NSWC, Crane, IN	0.000	0.149	10/03							0.000	0.149	
MCTIS (CID)	RCP	MCSC, Quantico, VA	0.000	0.003	02/04							0.000	0.003	
MCTIS (CID)	WR	MCSC, Quantico, VA	0.030	0.026	02/04	0.030	01/05	0.030	01/06	0.030	01/07	Cont	Cont	
MCTIS (CID)	RCP	MCSC, Quantico, VA	0.947	0.085	09/04	0.157	01/05					0.000	1.189	
MCTIS (CID)	RCP	MCSC, Quantico, VA	0.000	0.070	06/04							0.000	0.070	
MCTIS (CID)	RCP	MCSC, Quantico, VA	0.000	0.007	09/04							0.000	0.007	
Subtotal Support			**1.652**	**0.781**		**0.302**		**1.245**		**0.585**		**Cont**	**Cont**	
Remarks:														

Exhibit R-3 Cost Analysis					DATE: February 2005									
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communication Sys**					PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**							
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
CLAWS	RCP	Raytheon, Tewksbury, MA	2.803	1.196	10/03	1.700	01/05	0.487	01/06	0.557	01/07	Cont	Cont	
CLAWS	RCP	MCSC Quantico, VA		0.646		1.080	01/05					Cont	Cont	
CLAWS	MIPR	White Sands, NM	1.100	1.451	12/03	1.700	01/05			0.434	01/07	Cont	Cont	
CLAWS	WR	MCOTEA, Quantico, VA	0.265	0.460	10/03	1.072	01/05			0.620	01/07	Cont	Cont	
CLAWS	MIPR	Aberdeen, Md	0.181	0.650	10/03	0.000				0.000		Cont	Cont	
CLAWS	MIPR	JSPO, Eglin, AFB, FL	0.150	3.004	10/03	1.260	01/05			0.750	01/07	Cont	Cont	
CLAWS	MIPR	Pt. Mugu, CA		2.045	04/04	2.150	01/05					Cont	Cont	
LAAD SUSTAINMENT	WR	NSWC, Crane, IN		0.100	10/03							Cont	Cont	
MCTIS (CID)	WR	CECOM, Ft Monmouth	0.000	0.055	06/04							Cont	Cont	
Subtotal T&E			**4.499**	**9.607**		**8.962**		**0.487**		**2.361**		**Cont**	**Cont**	
Remarks:														

Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Comp	Total Cost	Target Value of Contract
CLAWS	RCP	NGIT, Stafford, VA	2.779	1.425	10/03	3.513	01/05	0.632	01/06	0.320	01/07	Cont	Cont	
CLAWS	WR	MCTSSA Cp Pendleton CA		0.024	10/03	0.050	01/05	0.050	01/06	0.050	01/07	Cont	Cont	
CLAWS	WR	NSWC Crane, IN	0.000	0.618	10/03	0.500	01/05	0.150	01/06	0.150	01/07	Cont	Cont	
CLAWS	MIPR	AMRDEC Redstone Arsenal, AL	0.000	0.598	10/03	0.750	01/05	0.150	01/06	0.150	01/07	Cont	Cont	
CLAWS	RCP	MCSC, Quantico	0.250	0.281	10/03	0.620	01/05	0.370	01/06	0.370	01/07	Cont	Cont	
LAAD Sustainment	RCP	EG&G, Gaithersburg, VA	0.000	0.250	04/04							0.000	0.250	
LAAD Sustainment	RCP	TBD						0.770	10/05			0.000	0.770	
LAAD Sustainment	WR	MCSC, Quantico		0.206	10/03			0.132	10/05	0.159	10/06	Cont	Cont	
LAAD Sustainment	WR	NSWC, Crane, IN		0.500	10/03			0.481	10/05	0.397	10/06	Cont	Cont	
PMS	RCP	EG&G, Gaithersburg, MD		0.130	04/04	0.188	01/04					0.000	0.318	
MCTIS (CID)	RCP	Anteon, Stafford, VA	0.570	0.721	10/04	0.979	10/04	1.000	10/05	1.000	10/06	Cont	Cont	
Subtotal Management			**3.599**	**4.753**		**6.600**		**3.735**		**2.596**		**Cont**	**Cont**	
Remarks:														
Total Costs				**20.876**		**22.535**		**16.253**		**15.742**		**Cont**	**Cont**	

Exhibit R-4/4a Project Schedule/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Sys**	PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**

CLAWS



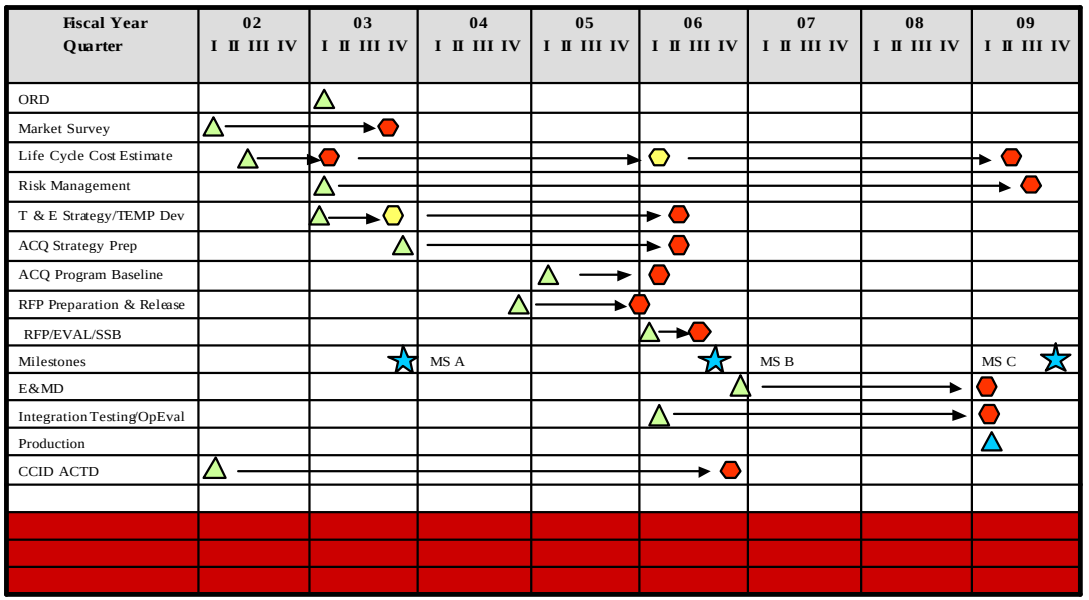
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N C2278	16.950	18.205	3.088	4.131	8.315	1.825	1.574	1.438	Continuing	Continuing
(U) PMC BLI# 489000 CLAWS	0.000	4.395	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.395
(U) PMC BLI# 305100 CLAWS	0.000	0.000	0.442	3.145	2.345	33.581	37.887	34.041	Continuing	Continuing

Exhibit R-4/4a Project Schedule/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Sys**	PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**

CLAWS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
BLOCK 0								
Development Testing		4TH QTR						
LRIP Decision		3RD QTR						
Operational Testing			1ST QTR					
Fielding Decision			1ST QTR					
Initial Operational Capability			2ND QTR					
BLOCK 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		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Sys**	PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**

MCTIS Program Schedule



Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) R&D Air Def Weaps Sys (MTIS)	1.785	2.166	4.000	4.000	0.000	0.000	0.000	0.000	0.000	11.951

Exhibit R-4/4a Project Schedule/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Dev**	PROGRAM ELEMENT **0206313M Marine Corps Communication Sys**	PROJECT NUMBER AND NAME **C2278 Air Defense Weapons Systems**

MCTIS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Milestone A								
Milestone B			4th Qtr					
Integration Testing			1st Qtr			1st Qtr		

EXHIBIT R-2a, RDT&E Project Justification			DATE: Feburary 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2315 Training Devices/Simulators**

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**8.440**	**4.804**	**8.941**	**7.333**	**15.023**	**13.960**	**10.765**	**10.884**
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.

B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.114**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

JSIMS: Provided technical expertise to the US Army, US Navy and US Air Force in the development of USMC specific requirements. Participated in Federate Integration Event 4 and 5 and Functional Assessment 2. Completed Version Release Milestone (VRM) 1.0 in FY03. THIS PROGRAM HAS BEEN TERMINATED BEYOND FY04.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**2.338**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

CLASS: Mapped system design functions to requirements. Evaluated system design and software for CLASS subsystems. Developed Instructor Management System and software support system. Developed highest priority database; developed Master Control Station (MCS) subsystem and Forward Observer stand alone sub-system. Completed garrison versionand completed prototype. THIS PROGRAM HAS BEEN TERMINATED BEYOND FY04.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**3.874**	**3.087**	**5.735**	**3.029**
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.

EXHIBIT R-2a, RDT&E Project Justification			DATE: Feburary 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2315 Training Devices/Simulators**

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.691**	**0.984**	**1.615**	**1.712**
RDT&E Articles Qty				

MILES: Continuing to Develop and integrate ground position location into fielded MILES 2000 equipment. Integrate MK19 40 mm machine gun and other new ground weapons systems into existing MILES 2000 inventory.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.591**	**2.592**
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 communiation 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 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.078**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

Combat Team Decision: Contracted tasks for the development of a decision making tool to prepare Marines for Iraqi Stability and Security Operations.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.345**	**0.733**	**0.000**	**0.000**
RDT&E Articles Qty				

SESAMS: Continued Development and integration of SESAMS capability into MILES 2000 to create compatibility between two systems.

(U) Total $	**8.440**	**4.804**	**8.941**	**7.333**

EXHIBIT R-2a, RDT&E Project Justification			DATE: Feburary 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2315 Training Devices/Simulators**

(U) PROJECT CHANGE SUMMARY:

	FY2004	FY2005	FY2006	FY2007
(U) FY 2005 President's Budget:	**12.278**	**4.863**	**8.267**	**5.634**
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-3.542		0.921	1.920
(U) SBIR/STTR Transfer	-0.296			
(U) Minor Affordability Adjustment		-0.059	-0.247	-0.221
(U) FY 2006 President's Budget:	**8.440**	**4.804**	**8.941**	**7.333**

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

EXHIBIT R-2a, RDT&E Project Justification			DATE: Feburary 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Development**		PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**	PROJECT NUMBER AND NAME **C2315 Training Devices/Simulators**

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2004	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	55.663	56.744	17.722	13.753	30.553	55.756	17.832	18.531	Cont	Cont

(U) Related RDT&E: Not Applicable

(U) D. ACQUISITION STRATEGY:

(U) JSIMS - Development efforts terminated on 30 Sep 03. FY04 close out.
(U) CLASS - Awarded R & D to Aegis Technology, July 02 (CPFF). Program Cancelled in FY04 and out.
(U) CACCTUS - Competitive Cost plus Fixed Fee contract (CPFF).
(U) MILES - Competitively award Cost Plus Incentive Fee (CPIF) development contract.
(U) Combat Team Decision - Firmed Fixed Price (FFP) development contract.
(U) MTWS Enhancements - Competitively award Cost Plus Incentive Fee (CPIF) development contract.
(U) SESAMS - Competitively award Cost Plus Incentive Fee (CPIF) development contract.

(U) E. MAJOR PERFORMERS:

Not Applicable for any programs with Training Devices/Simulators, C2315.

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME							
RDT&E, N /BA 7 Operational Sys Development			**0206313M Marine Corps Communication System**				**C2315 Training Devices/Simulators**							
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Product Dev - JSIMS	RCP	SPAWAR, San Diego, CA	15.325									0.000	15.325	15.325
Product Dev - JSIMS	MIPR	CECOM, FT Monmouth, NJ	0.111									0.000	0.111	0.111
Product Dev - JSIMS	RCP	PM TRASYS, Orlando, FL	3.612	0.764	04/04							0.000	4.376	4.376
Product Dev - MILES	RCP	Cubic, San Diego, CA	0.000			0.340	02/05	0.735	11/05	0.707	12/06	Cont	Cont	
System Eng - MILES	MIPR	PEO STRI, Orlando, FL	0.000	0.500	03/04							0.000	0.500	0.500
System Eng - SESAMS	MIPR	PEO STRI, Orlando, FL	0.000	0.245	03/04	0.733	03/05					0.000	0.978	0.978
Product Dev - CLASS	MIPR	PEO STRI, Orlando FL	0.327	2.010	10/03							0.000	2.337	2.337
Product Dev- CACCTUS	MIPR	PEO STRI, Orlando FL	3.916	2.296	02/04							0.000	6.212	6.212
Subtotal Product Dev			**23.291**	**5.815**		**1.073**		**0.735**		**0.707**		**Cont**	**Cont**	
Remarks:														

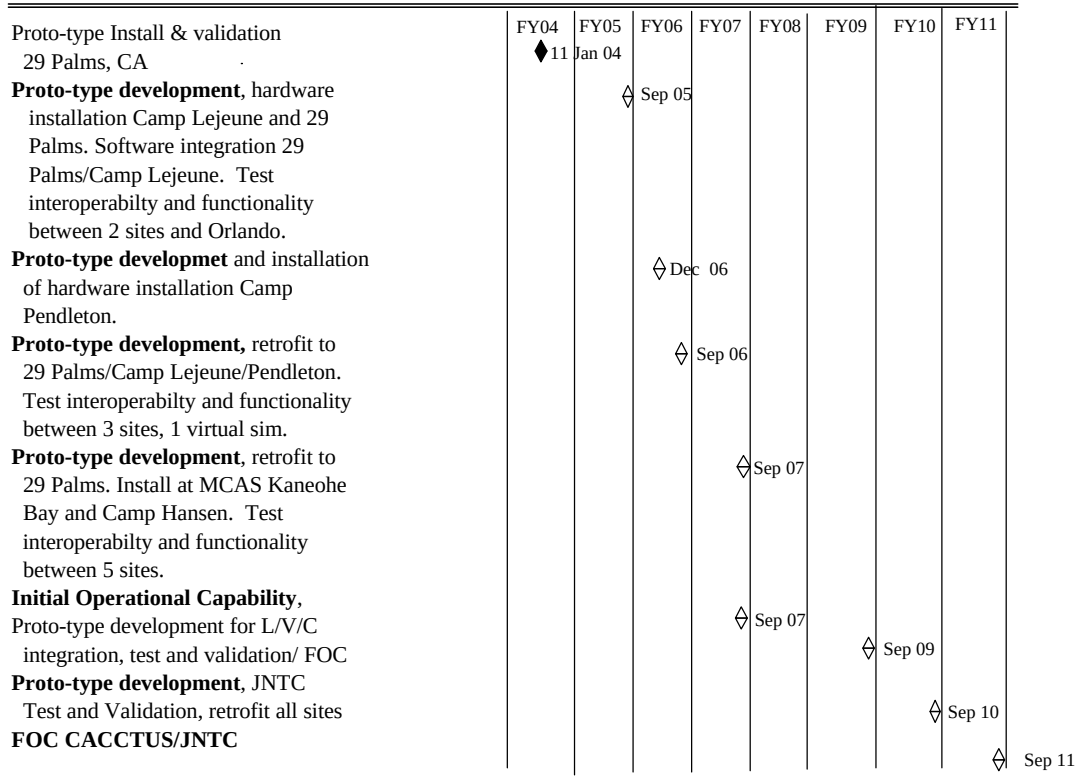
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Software Dev - JSIMS	RCP	PM TRASYS, Orlando, FL	0.614									0.000	0.614	0.614
Software Dev - JSIMS	MIPR	US Dept of Energy	0.000	0.350	03/04							0.000	0.350	0.350
SW Dev - Miles	RCP	Cubic, San Diego, CA	0.000			0.339	02/05	0.500	11/05	0.600	12/06	Cont	Cont	
Software Dev-CACCTUS	RCP	PM TRASYS, Orlando, FL	0.000			1.700	10/04	2.000	10/05	1.640	10/06	Cont	Cont	
Software Dev-CACCTUS	RCP	MTS, Orlando, FL	8.853	0.799	06/04							0.000	9.652	9.652
SW Dev, CACCTUS	RCP	NAWC, Orlando, FL	1.400	0.000		0.300	10/04	1.753	10/05	1.000	10/06	0.000	4.453	4.453
SW Dev, CACCTUS	MIPR	PEO STRI, Orlando FL	1.379	0.575	04/04	1.087	10/04	1.982	10/05	0.389	10/06	0.000	5.412	5.412
SW Dev, DVTE	RCP	PM TRASYS, Orlando, FL	0.280									0.000	0.280	0.280
Dev Support - MTWS	RCP	PM TRASYS, Orlando, FL	0.000					1.341	10/05	2.342	10/06	Cont	Cont	
CD Video Dev - CDT	RCP	PM TRASYS, Orlando, FL	0.000	0.078	01/04								0.078	0.078
Subtotal SW Dev Support			**12.526**	**1.802**		**3.426**		**7.576**		**5.971**		**Cont**	**Cont**	0.000
Remarks:														

Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
T & E - MILES	RCP	MCSC, Quantico, VA	0.000			0.145	01/05	0.180	11/05	0.205	12/06	Cont	Cont	
Dev Test & Eval -CACCTUS	MIPR	CECOM, FT Monmouth, NJ	3.294									0.000	3.294	3.294
Subtotal Dev T&E			**3.294**	**0.000**		**0.145**		**0.180**		**0.205**		**Cont**	**Cont**	
Remarks:														

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA 7 Operational Sys Development**			PROGRAM ELEMENT **0206313M Marine Corps Communication System**				PROJECT NUMBER AND NAME **C2315 Training Devices/Simulators**							
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Govt Engineering Spt-JSIMS	WR	NAWC, Orlando, FL	0.104									0.000	0.104	0.104
Program Support - MTWS	RCP	MCSC, Quantico, VA	0.000					0.250	10/05	0.250	10/06	Cont	Cont	
Program Spt - MILES	WR	NAWC, Orlando, FL	0.000	0.191	12/03	0.160	01/05	0.200	11/05	0.200	12/06	Cont	Cont	
Program Spt - SESAMS	WR	NSWC, Crane, Ind	0.000	0.100	12/03							0.000	0.100	0.100
Govt Engineering Spt -CLASS	WR	NAWC, Orlando, FL	0.500	0.328	10/03							0.000	0.828	0.828
Contractor SW Spt-CLASS	RCP	MCSC, Quantico, VA	2.132									0.000	2.132	2.132
Contractor Engineering Suppt	WR	NAWC, Orlando, FL	0.450	0.000		0.000						0.000	0.450	0.450
Govt Engineering Suppt	WR	NAWC, Orlando, FL	1.159	0.000		0.000						0.000	1.159	1.159
Army PM Spt, CACCTUS	MIPR	PEO STRI, Orlando, FL	0.456	0.082	12/04	0.000						0.000	0.538	0.538
PM Spt, CACCTUS	WR	NAWC, Orlando, FL	0.484	0.122	12/04							0.000	0.606	0.606
PM Spt, DVTE	WR	NAWC, Orlando, FL	0.070									0.000	0.070	0.070
Subtotal Management Spt			**5.355**	**0.823**		**0.160**		**0.450**		**0.450**		**Cont**	**Cont**	
Remarks:														
Total Cost			**44.466**	**8.440**		**4.804**		**8.941**		**7.333**		**Cont**	**Cont**	

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	**0206313M Marine Corps Communication Systems**	**C2315 Training Devices/Simulators**

CACCTUS PROGRAM SCHEDULE



Other Program Funding Summary

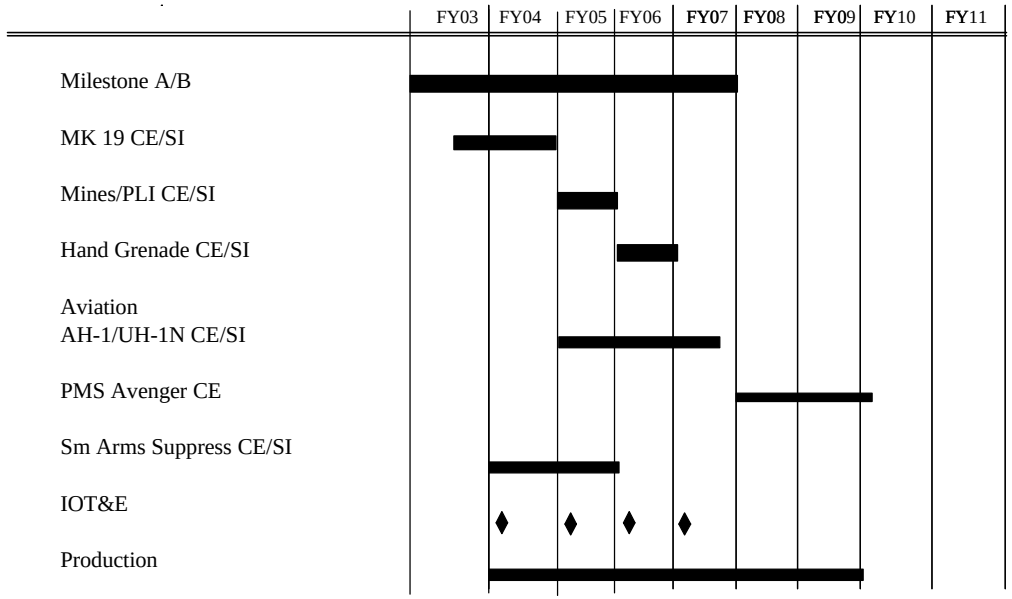
(APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N (CACCTUS)	3.874	3.087	5.735	3.029	5.492	5.993	6.073	5.563	Cont	Cont
(U) PMC, BLI# 653200 Trng Dev/Sims (CACCTUS)	0.975	5.105	5.139	3.555	4.762	4.736	4.889	4.883	Cont	Cont

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	**0206313M Marine Corps Communication Systems**	**C2315 Training Devices/Simulators**

CACCTUS SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Software Development	1Q/3Q							
Proto-type Functionality Evaluation User Input	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q	1Q/2Q/ 3Q/4Q
Hardware Integration/Installation/Test								
TTECG 29 Palms	1Q							
Hardware Integration/Installation/Test								
Camp Lejeune		4Q						
Hardware Integration/Installation/Test								
Camp Pendleton			1Q					
Camp Hansen			3Q					
MCAS Kaneohe Bay				1Q				
Proto-type Hardware Installation/Test all Site			3Q	3Q	3Q	3Q	3Q	3Q
P3I 29 Palms			4Q					
P3I Camp Lejeune/Camp Pendleton				4Q				
P31 MCAS Kaneohe Bay/Camp Butler					4Q			
P3I 29 Palms						4Q	4Q	4Q
IOC				4Q				
CACCTUS FOC						4Q		
CACCTUS/JNTC FOC								4Q

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	**0206313M Marine Corps Communication Systems**	**C2315 Training Devices/Simulators**

MILES PROGRAM SCHEDULE



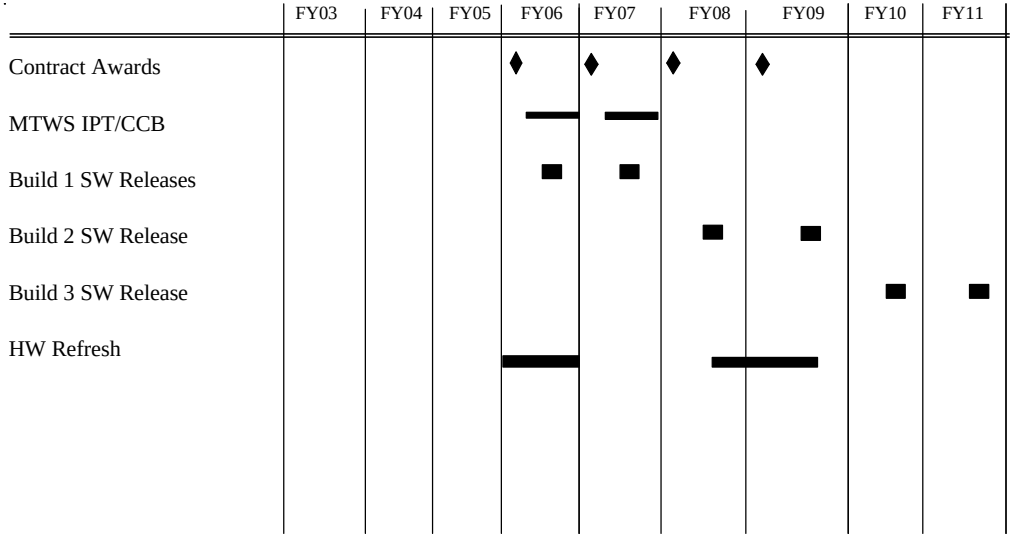
Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(APPN, BLI #, NOMEN)										
(U) RDT&E,N (MILES)	0.691	0.984	1.615	1.712	0.738	0.400	0.200	0.050	Cont	Cont
(U) PMC, BLI# 653200 Trng Dev/Sims (MILES)	0.031	2.148	1.525	2.279	1.155	0.679	0.012	0.015	Cont	Cont

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	**0206313M Marine Corps Communication Systems**	**C2315 Training Devices/Simulators**

MILES SCHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Contract Award		2Q	2Q	1Q	1Q		
Development/Demonstration/Prototype		2Q	2Q	2Q	2Q		
Test & Evaluation		1Q	1Q	1Q	1Q		
Program Support		2-4Q	1-4Q	1-4Q	1-4Q		

Exhibit R-4/4a Schedule Profile/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	**0206313M Marine Corps Communication Systems**	**C2315 Training Devices/Simulators**

MTWS PROGRAM SCHEDULE



Other Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N (MTWS Enhancements)	0.000	0.000	1.591	2.592	3.793	2.567	2.192	2.971	Cont	Cont

Exhibit R-4/4a Schedule Profile/Detail			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME	
RDT&E, N /BA 7 Operational Sys Development	**0206313M Marine Corps Communication Systems**	**C2315 Training Devices/Simulators**	

MTWS CHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Contract Award				1Q	1Q	1Q	1Q		
MTWS IPT/CCB				2-4Q	2-4Q				
Build 1 SW Release				3Q	3Q				
Build 2 SW Release						3Q	3Q		
Build 3 SW Release								3Q	3Q
HW Refresh				1-4Q		4Q	1-3Q		

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Systems Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Systems**					PROJECT NUMBER AND NAME **C2510 MAGTF CSSE & SE**			
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY2010	FY2011
Project Cost	**13.682**	**17.829**	**17.724**	**21.273**	**26.212**	**27.788**	**23.633**	**16.343**
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.

1. 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.

2. Transportation Systems Portfolio (formerly know 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 tasking 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 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). CMOS is 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.
- 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.
- TCAIMS 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.

3. Common Computer Resources (CCR) 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.

4. Global Combat Support System (GCSS)MC is the physical implementation of the enterprise information technology architecture designed to support both improved and enhanced MAGTF Combat Service Support functions and MAGTF Commander and Combatant Commander/Joint Task Force (JTF) combat support information requirements. As such, GCSS-MC is not a single system but a portfolio of information technology capabilities tied to discrete performance measures that support required combat service support mission objectives.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Systems Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Systems**	PROJECT NUMBER AND NAME **C2510 MAGTF CSSE & SE**

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.

5. MAGTF CSSE&SE: The CSSE Shared Data Environment is a cornerstone concept of the Integrated Logistics Capability. It will incorporate data warehousing technologies and products to provide one-stop shopping for data supporting CSSE/SE decision-making processes. It will stage CSSE/SE data and integrate decision support tools (DST) to enable command and control (C2), situational awareness, and total asset visibility at all levels of command, from the Combatant Commander to the Company Commander. The establishment of the CSSE SDE will eliminate the need for individual applications to perform these tasks for themselves and will contribute to a more cost-effective, efficient application development environment.

6. Joint Forces Requirment Generation II (JFRG II) : The mission of JFRG II is to enchance 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.

(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.058**	**0.990**	**0.970**	**0.950**
RDT&E Articles Qty				
CCR/MCHS: Environmental testing of CISC/RISC workstations.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.528**	**0.509**	**0.463**	**0.502**
RDT&E Articles Qty				
CCR/MCHS: Environmental testing of CISC/RISC servers.				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Systems Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Systems**		PROJECT NUMBER AND NAME **C2510 MAGTF CSSE & SE**	
COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**0.100**	**0.250**
RDT&E Articles Qty				
GCSS/AIT: Development of software with AIT capabilities in conjunction with the DOD AIT implementation plan.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**10.465**	**13.824**	**10.502**	**13.343**
RDT&E Articles Qty				
GCSS-MC Logistics Chain Management: Program/Engineering support, analysis, integration, development, testing, and enhancements for blocks one (1) through three (3).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.200**	**1.436**	**3.341**	**4.095**
RDT&E Articles Qty				
GCSS-MC Logistics Command and Control: Program/Engineering support, analysis, integration, development, testing, and enhancements for blocks one (1) through three (3).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.431**	**1.070**	**0.680**	**0.488**
RDT&E Articles Qty				
Transportation Portfolio System: Conduct operational test and evaluation of TC-AIMS II per JPMO schedule. Supports the development and sustainment of Joint/Multi-Service transportation and distribution systems.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.668**	**1.645**
RDT&E Articles Qty				
Joint Forces Requirment Generation II (JFRG II) : Funds are for software development and integration into GCCS 4.X and legacy systems from all services to pass deployment data to GCCS.				
(U) Total $	**13.682**	**17.829**	**17.724**	**21.273**

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Systems Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Systems**	PROJECT NUMBER AND NAME **C2510 MAGTF CSSE & SE**

(U) PROJECT CHANGE SUMMARY:	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
(U) FY 2005 President's Budget:	**22.238**	**18.034**	**10.611**	**8.123**
(U) Adjustments from the President's Budget:				
(U) Congressional Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-7.937		7.611	13.807
(U) SBIR/STTR Transfer	-0.619			
(U) Minor Affordability Adjustments		-0.205	-0.498	-0.657
(U) FY 2006 President's Budget	**13.682**	**17.829**	**17.724**	**21.273**

CHANGE SUMMARY EXPLANATION:

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

(U) C. OTHER PROGRAM FUNDING SUMMARY:

Line Item No. & Name	FY 2004	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	0.000	0.679	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.679
PMC BLI 463000 CCR: MCHS Svrs/Wkstns	45.550	58.520	41.760	57.152	88.757	86.809	72.814	64.721	Cont	Cont
PMC BLI 461400 GCSS	5.230	12.409	0.000	0.000	0.000	0.000	0	0	0.000	17.639
PMC BLI 461700 COMBAT SPT SYS: GCSS	0.000	0.000	12.843	11.708	8.581	11.348	10.604	14.434	Cont	Cont
PMC BLI 461400 GCSS: AIT	0.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.104
PMC BLI 461400 GCSS: AIT	4.800	2.852	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.652
PMC BLI 461700 COMBAT SPT SYS: AIT	0.000	0.000	7.962	9.731	12.824	13.237	9.142	10.179	Cont	Cont

(U) Related RDT&E: Not Applicable.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Systems Dev**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communications Systems**	PROJECT NUMBER AND NAME **C2510 MAGTF CSSE & SE**

(U) D. ACQUISITION STRATEGY:

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

Common Computer Resourses (CCR): 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

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

CCR/MCHS

FY04 - NWSC, Crane, IN, Environment testing of servers and workstations, December 2003.

FY05 - Spawar, Charleston, SC Environmental testing of servers and workstations Jan 2005.

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

MAGTF CSSE &SE

FY04 - Stanley Associates, Provide technical and functional expertise to develop the functionality in the GCSS MC Expanded Validation Oracle 11i Environment

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

FY07 - 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)

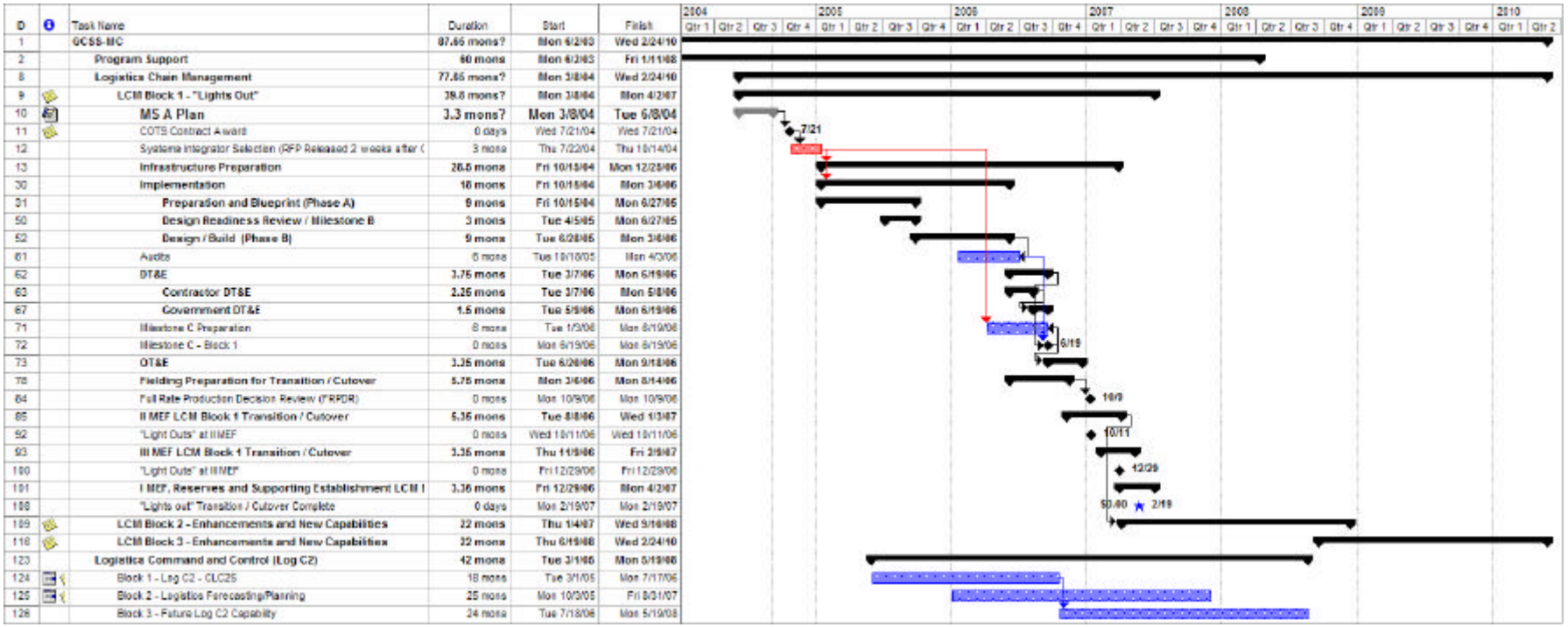
FY06 - Contracting information will be determined at a later date.

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

Exhibit R-3 Cost Analysis						DATE: February 2005								
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 Operational Sys Dev**		PROGRAM ELEMENT **0206313M Marine Corps Communications Systems**					PROJECT NUMBER AND NAME **C2510 MAGTF CSSE S&E**							
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract
Transportation Portfolio Syster	C/FFP	MCSC, Quantico, VA	0.000			0.882	01/05	0.185	12/05	0.340	12/06	Cont	Cont	
CCR/MCHS	WR	NSWC, Crane, Indiana	0.000	1.058	12/03	0.928	01/05	0.772	01/06	0.826	01/07	Cont	Cont	
GCSS Logistics Chain Man	TBD	TBD	0.000	10.465	08/04	8.274	12/04	6.700	01/06	7.867	01/07	Cont	Cont	
GCSS Log C2 Systems	TBD	TBD	0.000	1.200	08/04	0.862	12/04	2.004	01/06	2.457	01/07	Cont	Cont	
JFRG II	RCP	MCSC, Quantico, VA						1.668	10/05	1.645	10/06	Cont	Cont	
MAGTF CSSE & SE	C/FFP	Various	0.726	0.000	04/03	0.008	01/04			Cont.	Cont.			
Subtotal Product Dev			**0.000**	**12.723**		**10.946**		**11.329**		**13.135**		**Cont**	**Cont**	
Remarks:			8.068											
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract
GCSS Logistics Chain Man	TBD	Various	0.000		01/04	0.000	01/05					0.000	1.000	
GCSS Log C2 Systems	TBD	TBD				0.000						0.000	0.000	
GCSS/ AIT	TBD	TBD	0.046	0.000				0.100	01/06	0.250	01/07		0.645	
Subtotal Support			**0.000**	**0.000**		**0.000**		**0.100**		**0.250**		**0.000**	**0.350**	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract
CCR/MCHS	WR	NSWC, Crane Indiana	0.000	0.528	12/03	0.509	01/05	0.463	01/06	0.502	01/07	Cont	Cont	
Transportation Portfolio System	WR	MCPD	0.423	0.431	06/04	0.100	01/05	0.205	12/05		01/07	0.000	1.159	
Transportation Portfolio System	WR	MCPD	0.133			0.100	01/05	0.150	12/05		01/07	0.000	0.383	
Transportation Portfolio System	RCP	ANTEON	0.584					0.140	12/05	0.148	12/06	0.000	0.872	
GCSS Logistics Chain Man						4.200	01/05	3.000	01/06	4.200	01/07		11.400	
GCSS Log C2 Systems						0.430	01/05	1.003	01/06	1.228	01/07		2.661	
Subtotal T&E			**1.140**	**0.959**		**5.339**		**4.961**		**6.078**		**Cont**	**Cont**	
Remarks:														
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Compl	Total Cost	Target Value of Contract
GCSS Logistics Chain Man			0.000			1.400	01/05	1.000	01/06	1.400	01/07		3.800	
GCSS Log C2 Systems			0.000			0.144	01/05	0.334	01/06	0.410	01/07		0.888	
Subtotal Management			**0.000**	**0.000**		**1.544**		**1.334**		**1.810**		**Cont**	**Cont**	
Remarks:														
Total Cost				**13.682**		**17.829**		**17.724**		**21.273**		**Cont**	**Cont**	

Exhibit R-4-4a Project Schedule/Detail		DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communications Systems	C2510 GCSS-MC Modernization

GCSS



Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N	11.665	15.260	13.843	17.438	22.471	23.889	19.711	12.410	Cont	Cont
(U) PMC BLI 461400 GCSS	5.230	12.409	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.639
(U) PMC BLI 461700 GCSS	0.000	0.000	12.843	11.708	8.581	11.348	10.604	14.434	Cont	Cont

Exhibit R-4-4a Project Schedule/Detail			DATE: February 2005
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 OPERATIONAL SYS DEV	**0206313M Marine Corps Communications Systems**	**C2510 GCSS-MC Modernization**	

GCSS-MC (Logistics Chain Mgmt, Log C2)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
LCM Block 1 - "Lights Out"				3rd Qtr				
MS A Plan	3rd Qtr							
Implementation	1st Qtr ++++++++++++++++							
DT&E			3rd Qtr					
Milestone C - Block 1			3rd Qtr					
II MEF LCM Block 1 Transition/Cutover			4th Qtr +++++++					
II MEF "Lights Out"				1st Qtr				
III MEF "Lights Out"				1st Qtr				
LCM Block 1 - "Lights Out"/Transition Complete				2nd Qtr				
LCM Block 2 - Enhancements, New Capabilities					4th Qtr			
LCM Block 3					3rd Qtr ++++++++++++++++			
Log C2		2nd Qtr ++++++++++++++++++++++++						
Block 1 - Log C2 - CLC2S		2nd Qtr ++++++++++++++++						
Block 2 - Logistics Forecasting/Planning		1st Qtr ++++++++++++++++						
Block 3 - Future Log C2 Capability			4th Qtr ++++++++++++++++					

EXHIBIT R-2a, RDT&E Project Justification						DATE: February 2005			
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 OPERATIONAL SYS DEV**	PROGRAM ELEMENT NUMBER AND NAME **0206313M Marine Corps Communication Systems**					PROJECT NUMBER AND NAME **C3099 RADAR SYSTEMS**			
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Project Cost	**19.393**	**51.055**	**23.741**	**42.380**	**103.321**	**117.917**	**66.526**	**63.975**
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 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**4.666**	**4.303**	**1.751**	**7.808**
RDT&E Articles Qty				

AN/TPS-59 (Sustainment): Develop Engineering Change Proposals for software improvements and Diminishing Manufacturing Sources issues.

COST ($ in Millions)	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
Accomplishment/Effort Subtotal Cost	**1.352**	**0.850**	**0.750**	**0.750**
RDT&E Articles Qty				

AN/TPS-59 (Sustainment): Contractor service support.

COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.323**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				

HELRASR (Modernization): Developmental test and evaluation/risk reduction.

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
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**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.217**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Perform Risk Mitigation analysis.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.028**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Develop a Manpower Training Plan (MTP).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.004**	**0.982**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Develop Operational Requirement Document analysis and Technical System Requirements Document (TSRD).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.129**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Perform risk assessment analysis**.**				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**9.800**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Source Selection & Contractor System Development.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.200**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Develop Business Case Analysis (BCA) for Performance Based Logistics (PBL).				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.520**	**0.583**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): Contractor service support**.**				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.816**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
HELRASR (Modernization): System development and demonstration for modernization initiative.				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
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**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**1.267**	**1.328**	**2.199**	**0.750**
RDT&E Articles Qty				
GWLR: Radar Processor Redesign.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.160**	**0.665**	**0.389**	**1.207**
RDT&E Articles Qty				
GWLR: AN/TPQ-46A Re-cap/Up-grade.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.126**	**0.060**	**0.050**	**0.050**
RDT&E Articles Qty				
GWLR: Program office management/travel.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.075**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
GWLR: Life Cycle Cost Estimate.				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.100**	**0.000**	**0.900**
RDT&E Articles Qty				
G/ATOR: Test and Evaluation				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.200**	**0.000**	**0.200**	**0.000**
RDT&E Articles Qty				
G/ATOR: Performance Based Logistics Studies				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.255**	**0.350**	**0.000**	**0.900**
RDT&E Articles Qty				
G/ATOR: Modeling and Simulation				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.407**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
G/ATOR: Operational Mode Summary				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.076**	**0.050**	**0.050**	**0.050**
RDT&E Articles Qty				
G/ATOR: Life Cycle Cost Estimate				

EXHIBIT R-2a, RDT&E Project Justification			DATE: February 2005	
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**	
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.199**	**0.200**	**0.000**	**0.000**
RDT&E Articles Qty				
G/ATOR: Risk Management/Technology Readiness				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**2.802**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
G/ATOR: Operational Employment Risk Mitigation				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**2.040**	**3.794**	**2.823**	**2.605**
RDT&E Articles Qty				
G/ATOR: Contractor Technical and Programmatic Support				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.810**	**1.527**	**2.574**	**2.951**
RDT&E Articles Qty				
G/ATOR: In-house program management				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**1.366**	**0.000**	**0.000**
RDT&E Articles Qty				
G/ATOR: Government Furnished Equipment (GFE)				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**15.240**	**6.925**	**11.295**
RDT&E Articles Qty				
G/ATOR: Development Engineering/EDM Hardware Production				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**9.100**	**4.150**	**9.660**
RDT&E Articles Qty				
G/ATOR: Software Requirement Engineering and Development				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.000**	**0.000**	**1.527**	**3.200**
RDT&E Articles Qty				
G/ATOR: Manufacturing (tooling, facilities, data)				
COST ($ in Millions)	FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost	**0.093**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty				
MRRS OT Testing: Continue work towards the Multiple Role Radar System TEMP Test Integrated Working Group (TIWG).				

EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2005	
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**	
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.112**	**0.120**	**0.125**	**0.134**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Program mgmt support.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.206**	**0.137**	**0.028**	**0.120**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Engineering and technical support.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.165**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Studies conducted on the Grid Pulse/Filament Supply Assy, Turn-off Pulser, and Auto Sequence Circuit Card Assembly.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.145**	**0.000**	**0.000**	**0.000**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Engineering Change Proposal development and engineering trade study on the Multi-Level Power Supply.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.250**	**0.000**	**0.000**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Feasibility study for the Multi-Level Power Supply.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.250**	**0.000**	**0.000**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Feasibility study for the Frequency Generator.					
COST ($ in Millions)		FY 2004	FY 2005	FY 2006	FY 2007
Accomplishment/Effort Subtotal Cost		**0.000**	**0.000**	**0.200**	**0.000**
RDT&E Articles Qty					
SHORT/MEDIUM RANGE AIR DEFENSE RADAR: Feasibility study for the Compressor/Dehydrator.					
(U) Total $ (C3099 Radar Systems)		**19.393**	**51.055**	**23.741**	**42.380**

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**

(U) PROJECT CHANGE SUMMARY:	**FY 2004**	**FY 2005**	**FY 2006**	**FY 2007**
(U) FY 2005 President's Budget:				
(U) Adjustments from the President's Budget:	**20.141**	**51.552**	**48.008**	**38.842**
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-0.375		-23.615	4.874
(U) SBIR/STTR Transfer	-0.354			
(U) Minor Affordability Adjustment	-0.019	-0.497	-0.652	-1.336
(U) FY 2006 President's Budget:	**19.393**	**51.055**	**23.741**	**42.380**

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 2004	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	13.160	24.371	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**37.531**
(U) PMC, BLI#465000, AN/TPS-59 Sustainment	0.000	0.000	5.626	6.882	6.239	6.435	4.873	2.815	Cont	**Cont**
(U) PMC, BLI#465100, Combat ID (OIF II)	1.312	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**1.312**
(U) PMC, BLI#464200, Grnd Weapon Locator Radar	2.888	0.859	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**3.747**
(U) PMC, BLI#465000, Grnd Weapons Locating Radar	0.000	0.000	6.015	9.746	9.218	2.128	2.541	2.845	Cont	**Cont**
(U) PMC, BLI#464200, Short/Med Range Radar	1.950	1.415	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**3.365**
(U) PMC, BLI#465000, Short/Medium Range Radar	0.000	0.000	0.526	0.436	0.448	0.453	0.407	0.340	Cont	**Cont**
(U) PMC, BLI#465000, Grnd/Air Task Oriented Radar	0.000	0.000	0.000	0.000	0.000	44.564	104.123	113.349	Cont	**Cont**

(U) Related RDT&E:
(U) PE 0206313M (Marine Corps Communication Systems), Project C2278, Project C2273, and Project C9276.

EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2005
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**

(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. Beginning in FY04, the program office will start 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 8 of the 11 systems. The refurbishing and sustaining of 8 systems will enable 3 active units (2 per MEF), and 2 reserve units to have a system with current technology, extend system life cycle and lower the radars' overall operating cost. The remaining 4 systems will transition during the modernization effort.

(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.

(U) G/ATOR: The Ground/Air Task Oriented Radar, formerly known as MRRS, is an Evolutionary Acquisition / Incremental Development Program. G/ATOR is comprised of four Increments which will fill the MRRS's and GWLR's requirements. Four legacy systems (TPS-63, MPQ-62, TPS-73/79 & TPQ-46A) will be replaced by a single material design that offers an opportunity to reduce development cost and combine training and logistics assets. MRRS's Authorized Acquisition Objective (AAO) is 41 systems which replaces the TPS-63, MPQ-62 and TPS-73/79 systems as well as additional systems in support of the SHORAD mission (CLAWS weapon cue); GWLR's AAO is 22 systems, a one for one replacement of the TPQ-46A. The Increments' System Development & Demonstration (SDD) phases are staggered to allow for technology insertion due to obsolescence and technology growth issues. Early Increment I builds will be back fitted to current then year technology as required. As they become available, Increment III Tactical Enhancements will parallel field to then year Increment I builds and back fitted to earlier builds. A single Eng Development Model (EDM) will be developed during Increment I's SDD phase and flowed down to support later increments.

(U) SHORT/MEDIUM RANGE AIR DEFENSE RADAR: This effort requires R&D funds to develop modifications to keep the Short/Medium Range Air Defense Radar System's electronics and hardware viable and safe, providing sustainment for the fielded system. Efforts are underway to award a sole source Engineering Services and procurement contract with the AN/TPS-63's Original Equipment Manufacturer, Northrop Grumman. The main focus of the contract will be the development and procurement of replacement sub-assemblies currently identified as containing obsolete components, as well as those assemblies experiencing reliability, maintainability and safety related issues.

(U) E. MAJOR PERFORMERS:

(U) Lockheed Martin Corp, Syracuse, NY. Contract awarded 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 year to develop ECPs for software improvements an

(U) Contractor TBD by competitive sourcing. Projected to be put on contract in Jan 05 to support the HELRASR (AN/TPS-59 modernization initiative) for source selection & contractor system development.

(U) Contractor TBD by competitive sourcing, projected to be put on contract in Mar 05 for MRRS software design and development. FY 06 and FY 07 project contract with TBD contractor in Dec of each year for software design and development.

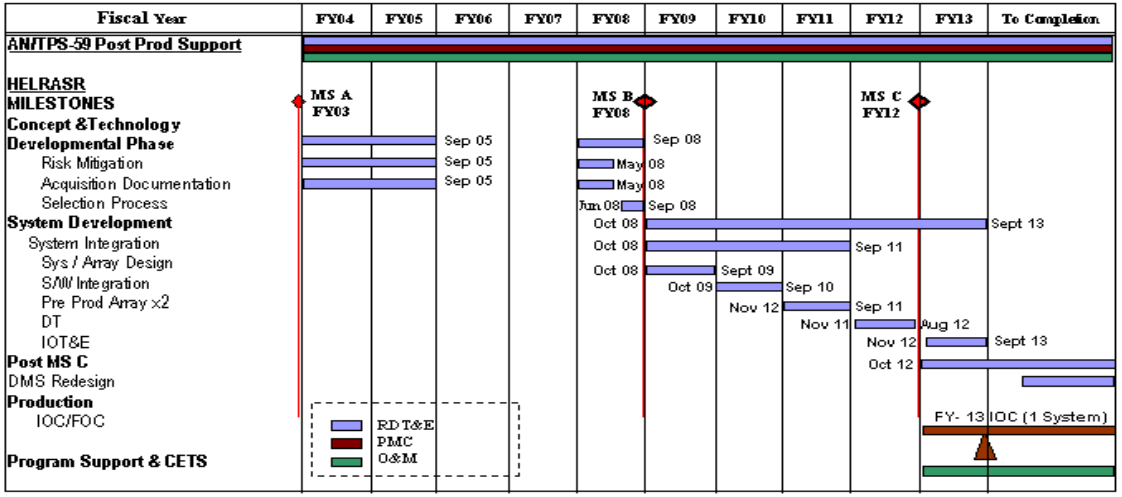
Exhibit R-3 Cost Analysis									DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 OPERATIONAL SYS DEV**		PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**							PROJECT NUMBER AND NAME **C3099 RADAR SYSTEMS**						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
AN/TPS-59 Sustainment	C/CPFF	Lockheed, Syracuse NY	0.000	4.666	01/04	4.303	01/05	1.751	01/06	7.808	01/07	Cont	Cont	
HELRASR (Modernization)	C/CPFF	Sensis, Dewitt, NY	0.000	1.234	12/03	0.000	N/A	0.000	N/A	0.000	N/A	0.000	1.234	
HELRASR (Modernization)	TBD	TBD	0.000	0.000	N/A	9.800	01/05	0.000	N/A	0.000	N/A	Cont	Cont	
HELRASR (Modernization)	WR	NSWC Crane	0.000	0.217	10/03	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.217	
HELRASR (Modernization)	WR	MCSC Orlando	0.000	0.028	10/03	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.028	
HELRASR (Modernization)	WR	NRL	0.000	0.660	11/03	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.660	
HELRASR (Modernization)	WR	Johns Hopkins Univ/APL	0.000	0.128	11/03	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.128	
HELRASR (Modernization)	MIPR	BMPCOE	0.000	0.129	03/04	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.129	
HELRASR (Modernization)	RCP	MCCDC	0.000	0.140	11/03	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.140	
HELRASR (Modernization)	WR	MCOTEA	0.000	0.076	01/04	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.076	
HELRASR (Modernization)	RCP	EG&G Tech Svc, Dumfries, V	0.000	0.200	09/04	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.200	
G/ATOR	MIPR	Redstone Arsenal, AL	0.634	2.802	01/04	0.000	N/A	0.000	N/A	0.000	N/A	0.000	3.436	
G/ATOR	MIPR	ONR, Arlington, VA	0.000	0.199	06/04	0.200	01/05	0.000	01/06	0.000	01/07	Cont	Cont	
G/ATOR	CPIF	Contractor TBD	0.000	0.000	N/A	24.340	01/05	12.602	10/05	24.155	10/06	Cont	Cont	
G/ATOR	RCP	MCSC, Quantico, VA	0.000	0.076	01/04	0.050	01/05	0.050	01/06	0.050	01/07	Cont	Cont	
G/ATOR	RCP	MCSC, Quantico, VA	0.000	0.000	N/A	1.366	10/04	0.000	N/A	0.000	N/A	Cont	Cont	
SHORT/MEDIUM RANGE	RCP	Northrop Grumman	0.274	0.310	03/04	0.500	01/05	0.200	01/06	0.000	N/A	Cont	Cont	
GWLR	RCP	MCSC Quantico, VA	0.000	0.075	04/04	0.000	N/A	0.000	N/A	0.000	N/A	0.000	0.075	
Subtotal Product Dev			**0.908**	**10.940**		**40.559**		**14.603**		**32.013**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
GWLR	WR	NSWC, Dahlgren, VA	0.000	0.550	10/03	1.328	11/04	0.699	11/05	0.305	11/06	Cont	Cont	
GWLR	MIPR	US Army CECOM	0.000	0.717	02/04	0.312	11/04	1.500	11/05	0.750	11/06	Cont	Cont	
GWLR	WR	MCLB Barstow	0.000	0.160	07/04	0.138	02/05	0.389	11/05	0.902	11/06	Cont	Cont	
GWLR	WR	NSCW, Crane, IN	0.000	0.000	N/A	0.215	02/05	0.000	N/A	0.000	N/A	Cont	Cont	
G/ATOR	C/FFP	EG&G Tech Svc, Dumfries, V	0.000	0.200	03/04	0.000	N/A	0.200	N/A	0.000	N/A	0.000	0.400	
G/ATOR	MIPR	MITRE, Boston, MA	0.000	0.255	01/04	0.350	02/05	0.000	N/A	0.900	N/A	0.000	1.505	
G/ATOR	C/FFP	MTC Tech, Quantico, VA	0.000	0.407	03/04	0.000	N/A	0.000	N/A	0.000	01/07	Cont	Cont	
SHORT/MEDIUM RANGE	WR	NSWC, Crane, IN	0.000	0.206	01/04	0.137	01/05	0.028	01/06	0.120	01/07	Cont	Cont	
Subtotal Support			**0.000**	**2.495**		**2.480**		**2.816**		**2.977**		**Cont**	**Cont**	
Remarks:														

Exhibit R-3 Cost Analysis									DATE: February 2005						
APPROPRIATION/BUDGET ACTIVITY **RDT&E, N /BA-7 OPERATIONAL SYS DEV**		PROGRAM ELEMENT **0206313M Marine Corps Communication Systems**							PROJECT NUMBER AND NAME **C3099 RADAR SYSTEMS**						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
G/ATOR	MIPR	MCOTEA, Quantico, VA	0.000	0.000	N/A	0.100	01/05	0.000	01/06	0.900	01/07	Cont	Cont	
MRRS OT Testing	WR	MCOTEA, Quantico, VA	0.000	0.093	11/05	0.000	N/A	0.000	N/A	01/00	N/A	0.000	0.093	
Subtotal T&E			**0.000**	**0.093**		**0.100**		**0.000**		**0.900**		**Cont**	**Cont**	
Remarks:														
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 06 Cost	FY 06 Award Date	FY 07 Cost	FY 07 Award Date	Cost to Complet	Total Cost	Target Value of Contract
AN/TPS-59 Sustainment	C/CPFF	Anteon, Stafford, VA	1.739	1.352	10/03	0.850	01/05	0.750	01/06	0.750	01/07	Cont	Cont	
HELRASR (Modernization)	C/CPFF	Anteon, Stafford, VA	0.000	0.353	01/04	0.583	01/05	0.000	N/A	0.000	N/A	Cont	Cont	
HELRASR (Modernization)	WR	MCSC, Quantico, VA	0.000	1.072	01/04	0.982	01/05	0.000	N/A	0.000	N/A	Cont	Cont	
GWLR	WR	MCSC, Quantico, VA	0.000	0.126	10/03	0.060	10/04	0.050	10/05	0.050	10/06	Cont	Cont	
G/ATOR	WR	MCSC, Quantico, VA	2.200	0.810	12/03	1.527	12/04	2.574	12/05	2.951	12/06	Cont	Cont	
G/ATOR	C/CPFF	Anteon, Stafford, VA	0.800	2.040	10/03	3.794	10/04	2.823	10/05	2.605	10/06	Cont	Cont	
SHORT/MEDIUM RANGE	C/CPFF	Anteon, Stafford, VA	0.000	0.097	10/03	0.102	10/04	0.105	10/05	0.110	10/06	Cont	Cont	
SHORT/MEDIUM RANGE	WR	MCSC, Quantico, VA	0.000	0.015	10/03	0.018	12/04	0.020	12/05	0.024	12/06	Cont	Cont	
Subtotal Management			**4.739**	**5.865**		**7.916**		**6.322**		**6.490**		**Cont**	**Cont**	
Remarks:														
Total Cost			**5.647**	**19.393**		**51.055**		**23.741**		**42.380**		**Cont**	**Cont**	

Exhibit R-4-4a Project Schedule/Detail	DATE: February 2005

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**

Milestone Schedule
AN/TPS-59(V)3 & HELRASR



Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N, C2273 AN/TPS-59 Sustainment	0.000	2.577	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.577
(U) RDT&E,N, C3099 AN/TPS-59 (Sustainment)	6.018	5.153	2.501	8.558	5.123	5.102	5.500	2.300	Cont	Cont
(U) RDT&E,N, C3099 HELRASR (Modernization)	4.237	11.365	0.000	0.000	7.674	36.925	27.939	20.416	Cont	Cont
(U) PMC, BLI#465100, AN/TPS-59 (Sustainment)	13.160	24.371	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37.531
(U) PMC, BLI#465100, Combat ID (OIF II)	1.312	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.312
(U) PMC, BLI#465000, AN/TPS-59 Sustainment	0.000	0.000	5.626	6.882	6.239	6.435	4.873	2.815	Cont	Cont

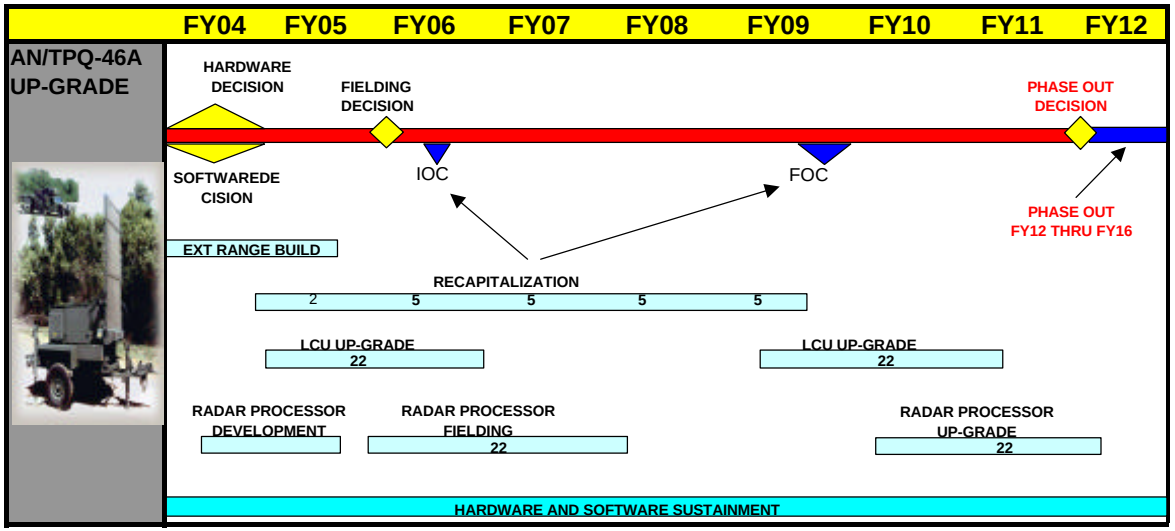
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
AN/TPS-59 Sustainment Schedule	FY 02----------							

Exhibit R-4-4a Project Schedule/Detail		DATE: February 2005
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**

HELRASR (AN/TPS-59 Modernization) Schedule									
Milestone A	FY 03								
Concept & Technology Developmental Phase	FY 03----------4th Q				1st Q-4th Q				
Acquisition Documentation					1st Q-3rd Q				
Selection Process					3rd Q--4th Q				
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----------								

Exhibit R-4-4a Project Schedule/Detail		DATE: February 2005
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



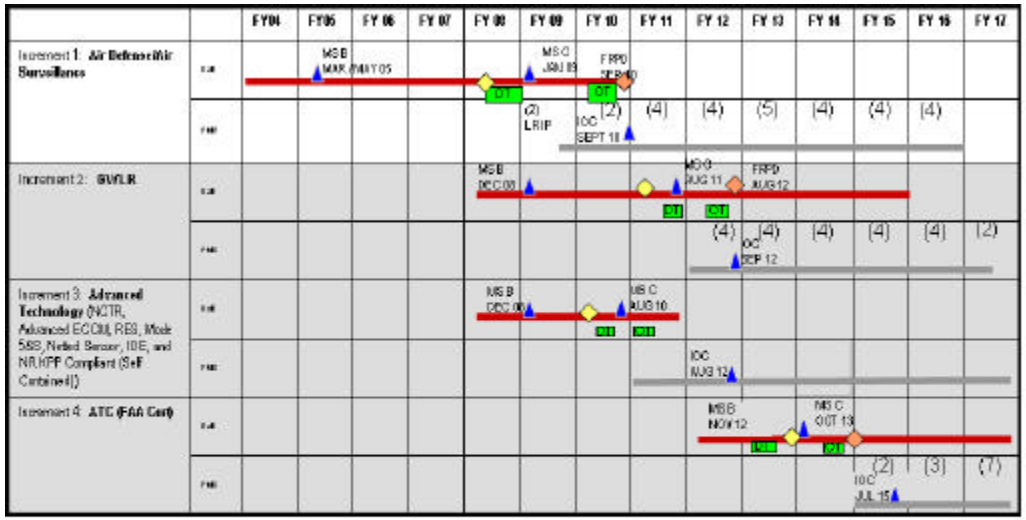
Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N, C3099, GWLR	1.628	2.053	2.638	2.007	1.734	1.777	1.821	1.867	Cont	**Cont**
(U) PMC, BLI#465000, GWLR	0.000	0.000	6.015	9.746	9.218	2.128	2.541	2.845	Cont	**Cont**
(U) PMC, BLI#464200, GWLR	2.888	0.859	0.000	0.000	0.000	0.000	0.000	0.000	0.000	**3.747**

Exhibit R-4-4a Project Schedule/Detail		DATE: February 2005
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**

GWLR SCHEDULE DETAIL	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Extended Range Software Build		2nd Q----------4th Q							
Re-Cap			3rd Q----------3rd Q						
LCU Replacement			3rd Q----------3rd Q				2nd Q----------2nd Q		
MILTOPE 750M Refresh							1st Q		
Radar Processor ECP		2nd Q----------1st Q							
Radar Processor Refresh							2nd Q		
Software PDSS			4th Q----------						
IOC Upgrade ECPs				3rd Q					
FOC Upgrade ECPs							3rd Q		

Exhibit R-4-4a Project Schedule/Detail		DATE: February 2005
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**

G/ATOR *Overall Program Schedule*



Program Funding Summary (APPN, BLI #, NOMEN)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
(U) RDT&E,N, C3099, G/ATOR	6.789	31.727	18.249	31.561	88.539	73.860	31.047	39.202	Cont	**Cont**
(U) PMC, BLI#465000, G/ATOR	0.000	0.000	0.000	0.000	0.000	44.564	104.123	113.349	Cont	**Cont**

G/ATOR SCHEDULE DETAIL	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Increment I								
Concept & Technology Developmental Phase	----------3rd Q							

Exhibit R-4-4a Project Schedule/Detail			DATE: February 2005
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**	

Selection Process	3rd Q-------3rd Q							
Milestone B		3rd Q						
System Development and Demonstration Phase		3rd Q----------3rd Q						
System Integration (EDM)				2nd Q---------2nd Q				
System Demonstration (DT)			3rd Q----------2nd Q					
Long Lead Items (EDM, LRIP & Production)				3rd Q----------Cont				
Milestone C						2nd Q		
Production Phase						2nd Q ----------Cont		
LRIP						2nd Q------2nd Q		
IOT&E						2nd--3rd Q		
IOC							4th Q	
Program Support							1st Q----------Cont	
Increment II								
Concept & Technology Developmental Phase					1st Q--------1st Q			
Milestone B						1st Q		
System Development and Demonstration Phase						1st Q----------4th Q		
System Demonstration (DT)								3rd Q-4th Q
Long Lead Items							4th Q	
Milestone C								4th Q
Increment III								
Concept & Technology Developmental Phase					1st Q--------1st Q			
Milestone B						1st Q		
System Development and Demonstration Phase						1st Q-------4th Q		
System Demonstration (DT)							2ndQ-3rd Q	
Milestone C							4th Q	
Production Phase								1st Q--Cont
IOT&E								1st-2ndQ