USER'S LOGISTICS SUPPORT SUMMARY

UNEXPLODED ORDNANCE STANDOFF DISRUPTER MK 40 MOD 0 (UXO SD)

NSN 1385-01-483-4575



MARINE CORPS SYSTEMS COMMAND QUANTICO, VA 22134-5010

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DEPARTMENT OF THE NAVY Headquarters, U.S. Marine Corps Washington, DC 20380-0001

30 May 2003

- 1. This User's Logistics Support Summary (ULSS), authenticated for Marine Corps use and effective upon receipt, advises the Marine Operating Forces and other selected commands of the plan to field and logistically support the Unexploded Ordnance Standoff Disrupter, NSN 1385-01-483-4575.
- 2. Submit notice of discrepancies or suggested changes to this ULSS to the Program Office at the following address: Commanding General, MARCORSYSCOM Attn: PMM-152, 2033 Barnett Ave, Suite 315, Quantico, Virginia 22134-5010.
- 3. This ULSS supersedes Letter of Adoption and Procurement LAP 93-02.
- 4. This ULSS is not applicable to Marine Corps Reserve.

BY DIRECTION OF THE COMMANDING GENERAL, MARINE CORPS SYSTEMS COMMAND

OFFICIAL:

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USER'S LOGISTICS SUPPORT SUMMARY (ULSS) FOR THE UNEXPLODED ORDANCE STANDOFF DISRUPTER MK 40 MOD 0

- 1. <u>Introduction</u>. The Purpose of this ULSS is to provide guidance relative to the procurement of (73) Unexploded Ordnance Standoff Disrupter MK 40 Mod 0 (UXO SD). The Explosive Ordnance Disposal (EOD) forces are increasingly challenged due to the alarming proliferation of arms and ammunition throughout the world and the trend toward greater weapon sophistication. The objectives of the program are to: increase readiness, availability, maintainability, dependability; decrease life cycle cost; and to incorporate new technology enhancements. The UXO SD is an inert tool until it is readied for use by loading military or commercially available ammunition. The UXO SD shall be capable of rendering safe and/or disrupting Unexploded Ordnance (UXO) and improvised explosive device targets.
- a. <u>Source of Requirement</u>. The Statement Of Need for a Stand-Off Disrupter of 28 Mar 2000 addresses the need to resolve deficiencies in performing render safe mission for UXO and disruption of Improvised Explosive Devices (IED). MNS #M043-85-93 for EOD was signed December 1993. The Operational Requirements Document (ORD) for Standoff Disrupters was approved on 6 December 1999 and states that the Standoff Disrupters will be used to eliminate hazards from ordnance which jeopardize operations conducted in support of national military concepts.

b. Points of Contact

Title	Activity	Telephone		
Program Manager	MARCORSYSCOM, PMM-152 Quantico, VA 22134	(703) 432-3598 DSN 378-3598		
Project Officer	MARCORSYSCOM, PMM-152 Quantico, VA 22134 (703) 432-3745 DSN 378-3745			
Integrated Logistics Support Specialist	MARCORSYSCOM GTES-ES Quantico, VA 22134	(703) 432-3739 DSN 378-3739		
Equipment Specialist	Marine Corps Detachment (SSED-038) NAVEODTECHDIV 2008 Stump Neck Road Indian Head, MD 20640	(301) 744-6814 DSN 354-6814		
Contractor	DTI Associates INC 2920 S. Glebe Road Arlington, VA 22206	(703)-299-1660		

c. <u>System Description</u>. The UXO SD is a modular, recoilless, inert tool specifically designed to render-safe and disrupt UXOs. The tool comprises a recoilless cannon, lightweight multi position stand, sights, tools, inert consumables, and a one hand portable transit case which

houses all items including the stand. The UXO SD features a Capture Gate that fits onto the Breech Plug and has a fixed compensator that is completely recoilless with a projectile mass of 200 g in the 40 mm barrel configuration. The UXO SD is stored in a transit case that can contain the multi position stand, inert consumables and nine projectiles.



Figure 1. Unexploded Ordnance Standoff Disrupter MK 40 Mod 0 (UXO SD)

- d. Operational Characteristics. The UXO SD will provide the EOD technician the capability to render safe or disrupt UXO from a stand off position and decrease the probability of initiating the UXO by sensor activation. This capability exceeds the requirement as stated in the ORD. The UXO SD utilizes a sighting device to aid in accuracy during standoff attacks. EOD technicians using standard EOD operating procedures will operate all Surface EOD equipment. All equipment listed in this NTSP will be operable by standard EOD detachment. The equipment has been designed as portable equipment to support the mobility and quick deployment requirements of the EOD operating forces. As such, the equipment is not permanently installed on ship platforms or shore activities but is assigned to individual EOD Units and Detachments and is manned only when in use.
- e. <u>Replaced Weapons Systems and Equipment</u>. MK 2 .50 caliber Dearmer will be maintained until all Render Safe Procedure(s) (RSP) reflect the use of the UXO SD. MARCORSYSCOM will provide disposition instructions via naval message upon completion of RSP update. Logistics costs associated with the retention of the MK 2.50 until disposition instructions are received, are minimal.

2. Administrative Information

- a. Nomenclature. Unexploded Ordnance Standoff Disrupter MK 40 Mod 0 (UXO SD)
- b. Table of Authorized Materiel Control Number (TAMCN). E3019 IIEP
- c. Stores Account Code (SAC). 3
- d. National Stock Number (NSN). 1385-01-483-4575
- e. Item Designator (ID). 10910A
- f. Unit of Issue (UI). SE
- g. Unit Cost (UC). \$5672.00
- h. Support Costs. \$75.00
- i. Physical Characteristics

Dimensions	Operational Configuration	Storage/Shipping Configuration
Length	24.6 in.	24.6 in.
Width	17.8 in.	17.8 in.
Height	Adjustable	8.26 in.
Square	3.04 sq ft	3.04 sq ft
Cube	2.09 cu ft	2.09 cu ft.
Weight	45 lbs	55 lbs.
Stowage	Cubed	Cubed

j. <u>Petroleum, Oil and Lubricants (POL)</u>. Actual POL requirements will differ between units based on usage data. Minimum estimated annual consumption rates:

TYPE	NSN	QUANTITY
Cleaner Lubricant Preservative	9150-01-053-6688	1qt

- k. Equipment Density. Normal
- 1. <u>Resource Reporting</u>. The UXO readiness is not reportable per MCO 3000.11C (Marine Corps Ground Equipment Resource Reporting) and MCO P3000.13C (Marine Corps SORTS SOP).
 - m. Power Requirements. N/A
- n. <u>Associated Weapons System and Equipment</u>. The UXO SD uses standard military M174 cartridges, NSN 1385-00-605-0253 to propel the projectile.

3. Fielding Methodology

a. <u>General Fielding Plan</u>. The UXO SD will be fielded horizontally beginning in the 3rd quarter, FY 2003 and will be shipped directly from Marine Detachment, Indian Head, MD over a six month period in order to support production and training schedules.

b. Method of Fielding

- (1) The UXO SD will be force-fed horizontally to Marine Expeditionary Force (MEF) EOD units for distribution per Appendix A.
- (2) Fielding of the UXO SD will be accomplished by Materiel Fielding Team (MFT). Upon fielding of the UXO SD, the unit will be employed for RSPs as published.
- (3) Request each gaining MEF will assign a Materiel Fielding Coordinator (MFC) as the point of contact for coordination of the UXO SD fielding plan.

c. Fielding Responsibilities

(1) Gaining Command

- (a) Request each gaining command ensure that personnel who receive and operate the UXO SD have been formally school trained in the 2336 MOS.
- (b) Specific training requirements will be promulgated via naval message prior to New Equipment Training Team (NETT) arrival.
- (c) Each gaining command will contact the UXO SD Project Officer to confirm UXO SD delivery.

(2) MARCORSYSCOM

- (a) Provide an MFT to conduct joint inventory, and all other actions required to introduce the UXO SD to the operational forces.
 - (b) Designate a MFT & NETT POC.
- (c) Transmit a Naval Message to the gaining commands 90 days prior to the MFT/NETT arrival, identifying team members and itinerary.
- (d) Coordinate all MFT administrative requirements (billeting, funding and transportation).
- (e) Coordinate with the gaining commands the administrative support requirements required to complete the fielding.

- (3) Marine Corps Logistics Command, Albany.
 - (a) No fielding responsibilities.
- (4) Software Support Activity. N/A
- 4. Logistical Support
 - a. Maintenance Support
 - (1) Maintenance Concept.
- (a) <u>Organizational Maintenance</u>. Consist of visually inspecting the UXO SD prior to operational setup, and cleaning and inspecting the UXO SD after each use in accordance (IAW) EODB 60A-2-1-79 publication. A commercial Operations and Maintenance (O&M) manual will detail all organizational maintenance tasks, identify spare/replacement parts, tools required, and man-hours required to accomplish each task. Preventative maintenance will be conducted per the O&M Manual. After warranty expiration, parts will be requisitioned through the normal supply chain.
 - (b) Intermediate Maintenance. N/A
- (c) <u>Depot Maintenance</u>. The unit will request disposition instructions via naval message to Marine Corps Detachment (MCD), Naval EOD Technology Division (NavEODTechDiv), Indian Head, MD.
 - (2) Designated Support Depots. N/A
- (3) <u>Calibration Requirements</u>. N/A. A test-firing requirement exists for zeroing the UXO SD to verify the laser aiming system.
 - b. Contractor Support Requirement.
 - (1) ICS. N/A.
 - (2) CLS. N/A
 - c. Manpower, Personnel, and Training
- (1) <u>Personnel Requirements</u>. No new or additional personnel requirements exist with this tool set. The UXO SD will be used by existing MOS's 2336 and 2305.
- (2) <u>Training Requirements</u>. NETT will provide initial training and handoff Computer Based Training (CBT). Naval School EOD (NavScolEOD) has initiated training at joint service school.

- (3) Training Support Items. N/A
- d. <u>Supply Support</u>. Marine Corps Logistics Command, Albany, will ensure timely availability of spares, repair parts, and other materiel required to support the operation, training and maintenance of the UXO SD.
- e. <u>Support Equipment</u>. The UXO SD will not require support equipment, however, tools required for the UXO SD are included in the respective item's tool kit.

(1) Special Tools. N/A

Nomenclature	TAMCN	NSN	Part Number
Tool Set, Field Operations, Explosive	E2250	5180-00-754-0644	SC4925-
Ordnance Disposal Team			95CLA02

- (2) Common Tools. N/A.
- (3) Special Purpose Test Equipment. N/A
- (4) General Purpose Test Equipment. N/A
- (5) Application Program Sets and Test Program Sets. N/A
- (6) Other Support Equipment. N/A
- f. <u>Technical Publications</u>. Technical manuals are stocked, distributed, and maintained by the Naval EOD Technical Division using a CD-ROM format to be used with the Automated EOD Publication Systems. Technical manual, 60A-2-1-79, will be force issued quarterly to units.
 - g. Computer Resources Support. N/A
 - h. Facilities.
 - (1) Existing Facilities. Existing facilities are sufficient for storage of the UXO SD.
 - (2) New Facilities. N/A
 - (3) Interim Facilities. N/A
 - i. Packing, Handling, Storage, and Transportation (PHS&T)
 - (1) Packaging.
- (a) <u>General</u>: The UXO SD is shipped and received in a container. This container shall be maintained for future storage or shipment of the UXO SD.

- (b) <u>From the Manufacturer</u>: The UXO SD systems scheduled for shipment from the manufacturer shall be preserved and packaged in accordance with the best commercial practices of ASTM D 3951-98 ensuring equipment delivery free from damage. Marking for shipment and storage shall be in accordance with MIL-STD-129.
- (c) <u>From the Gaining Command</u>: In the event that a UXO SD system is required to be returned for repair or returned to stock, etc., the using unit shall be responsible for preservation and packaging of the item(s) in accordance with current policy and procedures of MCO 4030.36, Marine Corps Packing Manual, as directed below:
- 1 Return to Stock: Items to be returned for stock shall be preserved and packaged to level A requirements.
- $\underline{2}$ Return for Repair: Items to be returned for repair shall be to level B requirements.
- <u>3 Marking</u>: Marking for shipment and storage shall be in accordance with MIL-STD-129.
- (2) <u>Handling</u>. Properly preserved and packaged there is no special handling equipment required for the UXO SD. Handling shall be in accordance with the policy and procedures of MCO 4450.14, Joint Service Manual for Storage and Materials Handling.
- (3) <u>Storage</u>. Properly preserved and packaged there are no special storage requirements for the UXO SD. Storage shall be in accordance with the policy and procedures of MCO 4450.14, Joint Service Manual for Storage and Materials Handling.
- (4) <u>Transportation</u>. Properly preserved and packaged there are no special transportation requirements for the UXO SD. The UXO SD is capable of being transported by all means available to the U.S. Marine Corps (i.e. Ground (Military and Commercial), Air (Military and Commercial), Rail and Marine (Military and Commercial). Transportation control shall be in accordance with MCO P4600.7 (Marine Corps Transportation Manual) and MCO P4600.14 (Defense Traffic Management Regulation).

j. Transportability and Naval Integration. N/A

k. Warranties. The UXO SD will be warranted for one year from the date of the gaining commands acceptance. I MEF, II MEF, and III MEF will coordinate warranty issues with their respective MEF Warranty Administrator. For shipment of failed equipment for warranty work, the unit will request disposition instructions via naval message to Marine Corps Detachment (MCD), Naval EOD Technology Division (NavEODTechDiv), Indian Head, MD, in accordance with Supply Instruction (SI), SI 10910A-12/1. The MEF Warranty Administrators are identified in the following chart.

Warranty	Name	Location	Phone	E-mail
Coordinator				
I-MEF	Mr. Carl Adams	EG&G Services, Bldg. 2291	760-725-4923	adamscw@1fssg.usmc.mil
I-MEF	Mr. Dave Santos	EG&G Services, Bldg. 2291	760-725-4065	santosda@1fssg.usmc.mil
II-MEF	Mr. Jeff	EG&G Services,	910-451-1902	mccrackenjl@2fssg.usmc.mil
	McCracken	Bldg. 2291	DSN 751-1902	
II-MEF	Mr. Steve Davis	FC-286, Rm 131,	910-451-1902	davisps@2fssg.usmc.mil
		2d Maint Bn, MOS,	DSN 751-1902	
		2d FSSG		
III-MEF	Mr. Joe White	PSC 567 Box 6714	DSN 637-5023	whitejl@3fssg.usmc.mil
		FPO AP 96384-		
		6714		
III-MEF	Mr. Paul	PSC 567 Box 6714	DSN 637-5023	zackeroffp@3fssg.usmc.mil
	Zackeroff	FPO AP 96384-		
		6714		
Sr. Warranty	Mr. Eric	16 Center Street,	540-288-5932	Eric.Balgoyen@baesystems.com
Coordinator	Balgoyen	Stafford, VA 22555		

1. Environmental, Safety, and Health (ESH)

- (1) <u>Environmental</u>. The UXO SD's environmental risks are low; no toxic materials are used in manufacturing. All components are manufactured in alloy steel to a United Kingdom Ministry of Defense (UK MoD) gun barrel specification. The UXO SD is comprised of inert hardware currently available on the open market for military EOD use and presents no hazards to the environment. The ammunition required to propel the projectile is available through the standard military stock system, and is controlled through Department of Defense regulations for transport and storage. The training and tools employed by the EOD technician are designed to minimize the environmental and safety related risks during operational missions. The existing environmental risk presented by the UXO itself is of much greater magnitude than the environmental risk posed by the UXO SD.
- (2) <u>Safety</u>. The UXO SD combines the features of lightweight, accuracy, recoilless operation, and speed and ease of deployment. The total balanced Annular Compensator System is a key feature in enhancing accuracy. This feature also enables each of the systems to be much lighter than recoiling tools, and more user friendly. It removes the danger of collateral damage from recoil and features a Capture Gate that stops the Annular Compensating Piston from exiting the system. This greatly reduces potential hazard immediately behind the UXO-SD. Normal operational safety precautions for handling explosives must be observed at all times.
- (3) <u>Health</u>. The UXO SD is initiated from a safe standoff distance drastically reducing the EOD technician's exposure to the UXO hazard. Under normal operating scenarios, with all safety precautions observed as outlined in the NAVSEA SW060-AA-MMA-010, Demolition Materials Technical Manual and the Tech Manual, the UXO SD will be a safe tool to use. EOD technicians undergo special training to ensure they can identify hazards and understand the best

methods to avoid them. The specific procedures that EOD technicians must adhere to when deploying the UXO SD will be documented in an EOD 60-A series publication.

- m. Plan of Action & Milestone (POA&M). N/A.
- 5. Actions Required to Place Equipment in Service
 - a. Gaining Commands
 - (1) Accomplishes an acceptance Inspection upon receipt of equipment.
- (2) Notifies CG, MARCORSYSCOM and COMMARCORLOGBASES when new equipment is placed in service.
 - (3) Accounts for the new assets per MCO P4400.150E and MCO P4400.82F.
- (4) Materiel Defects Reporting. Submit all fit, form, or function deficiencies in accordance with standard Product Quality Deficiency Reporting (PQDR) procedures contained in TM 4700-15/1 and MCO 4855.10 to Operations and Business Center, ATTN: PQDR Section (L150), 814 Radford Blvd., STE 20330, Albany, GA 31704-0330. Disposition for the failed item will be furnished to the user based on the PQDR. The PQDR form is available at website: http://www.ala.usmc.mil/pqdr/default.asp and may be forwarded to the PQDR Screening Point via e-mail, mail to: mbmatcompqdrs@matcom.usmc.mil. Submit Supply Discrepancy Reports, SF 364, per UM-4400-124 and SECNAVINST 4355.18 (reporting of Item and Packaging Discrepancies) on shortages, overages and packaging and preservation discrepancies. Any damage due to improper packaging will be submitted via SDR procedures. Damage due to shipping discrepancies will be submitted as a Transportation Discrepancy Report, SF361. Damage caused by other than shipping and packaging will be reported on PQDR.
- (5) <u>Retrograde of Existing Equipment</u>. Provide disposition instructions to units for the MK 2 .50 caliber Dearmer, IAW para. 1.e., after all RSPs are updated.
 - (6) Obtaining Supporting Consumables. No supporting consumables required.
- (7) <u>Security Requirements</u>. No system security requirements and procedures are necessary for product management.
 - (8) Controlled Item Reporting. The UXO SD is not classified as a controlled item.
- (9) <u>Marine Corps Ground Equipment Resource Reporting(MCGERR)</u>. Not Marine Corps Bulletin (MCBUL) 3000 reportable.
 - b. Marine Corps Logistics Command, Albany.
 - (1) Administrative control mechanisms for supply support.

- (2) There are no T/E deficiencies associated with the UXO SD.
- (3) Not MCBUL 3000 reportable.
- (4) Initial Issue Provisioning (IIP) projects and documentation are not applicable.
- (5) Post the published ULSS on the Albany document repository.

c. MARCORSYSCOM

- (1) Program for funds and budget for the initial fielding of the UXO SD.
- (2) Assigned a Project Officer to provide on-site control, coordination, and oversight of the entire fielding process, assisting commanders and the manufacturer.
 - (3) Initiate action to ensure allowance data in the Equipment Allowance File is updated.
- (4) Ensure Item Data File information is updated in the LMIS prior to fielding and that the information is kept current.
- (5) Provide MARCORLOGBASES, Albany the digital signed ULSS for posting on documentation repository.
 - (6) Maintain life cycle management of the system per MCO 4105.4.
 - d. Designated SW Support Activity. N/A

6. Appendices

- a. Appendix A: List of Allowance and Delivery Schedules
- b. Appendix B: Schedule of Events

APPENDIX A

ALLOWANCES AND DELIVERY SCHEDULES

UNEXPLODED ORDANCE STANDOFF DISRUPTER MK 40 MOD 0 (UXO SD)

Allowances for the UXO SD will remain as currently listed in the Equipment Allowance File (EAF).

Subsequent changes to EOD unit allowances or deliveries are reflected through modification of quantities in the EAF.

UXO SD Unit Distribution

TE No.	Unit Title	Unit QTY	X	Total	_1	FY03 Allowance By QTR 1 2 3		
	UXO SD (TAMCN E3019 HEP)							
N3151	H&SCO, ENGR SPTBN, 1 ST FSSG	12	1	12				12
N8702	MWSS-371 & MWSS-373 MWSG 37	1	2	2				2
N8702	MWSS-171 MWSG 17	1	1	1				1
028702	MWSS-271 & MWSS-273 MWSG 27	1	2	2				2
N8703	MWSS- 372 & MWSS-374 MWSG 37	1	2	2				2
N8703	MWSS-172 MWSG-17	1	1	1				1
028703	MWSS-272 & MWSS-274 MWSG-27	1	2	2				2
M4958	CHEM-BIO INCIDENT RESPONSE FORCE, MARFORLANT	1	1	1			1	
N3251	H&SCO, ENGR SPTBN. 2D FSSG	12	1	12				12
B3341	LDGSPTCO CSSG-3	1	1	1			1	
N3351	H&SCO, ENGR SPTBN, 3D FSSG	8	1	8				8
H3251	DET, H&SCO, ENGR SPTBN/MPS 1	1	2	2			2	
H8702	DET, MWSS (FW)/MPS 1	1	1	1			1	
H8703	DET, MWSS (RW)/MPS 1	1	1	1			1	
I3251	DET, H&SCO, ENGR SPTBN/MPS 2	1	2	2			2	
I8702	DET, MWSS (FW)/MPS 2	1	1	1			1	
I8703	DET, MWSS (RW)/MPS 2	1	1	1			1	
J3251	DET, H&SCO, ENGR SPTBN/MPS 3	1	2	2			2	
J8702	DET, MWSS (FW)/MPS 3	1	1	1			1	
J8703	DET, MWSS (RW)/MPS 3	1	1	1			1	
7401	HQ MCCDC, QUANTICO VA	1	1	1			1	
7511	HQ&SPTBN, MCB CAMP LEJEUNE, NC	1	1	1			1	
7611	HQ&SPTBN, MCB CAMPEN, CA	1	1	1			1	
7700	MCB MC AIR-GROUND COMBAT CTR, 29 PALMS, CA	1	1	1			1	
7801	HQ BN CAMP FUJI, JAPAN	1	1	1			1	
7850	MARCOR BASES, HAWAII	1	1	1			1	
8340	H&HS MCAS CHERRY POINT, NC	1	1	1			1	

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TE No.	Unit Title		X	Total	_1	Allo	Y03 owanc QTR	
8365	H&HS, MCAS, MIRAMAR	1	1	1			1	
8362	H&HS MCAS CAMPEN, CA	1	1	1			1	
8321	H&HS MCAS IWAKUNI, JAPAN	1	1	1			1	
8476	SOMS, MCAS, YUMA, AZ	1	1	1			1	
8342	H& HS MCAS BEAUFORT, SC	2	1	2			2	
155060	MARCOR EOD DET, NAVORDSTA, INDIAN HEAD, MD	1	1	1			1	
W3251	DET, H&SCO, ENGRSPTBN, FSSG.PREPONOR	1	1	1			1	
W8702	DET, MWSS (FW) , MWSG, MAW/NALMEB	1	1	1			1	
W8703	DET, MWSS (RW) , MWSG, MAW/NALMEB	1	1	1			1	

APPENDIX B

SCHEDULE OF EVENTS

UNEXPLODED ORDANCE STANDOFF DISRUPTER MK 40 MOD 0 (UXO SD

Event	Event Date
Draft ULSS Posted For Review	2 nd QTR FY03
Production/Procurement Decision	2 nd QTR FY03
Final ULSS Signed	3 rd QTR FY03
Instruction Training Package	3 rd QTR FY03
Initial Issue of UXO SD	3 rd QTR FY03
NETT First Instruction	3 rd QTR FY03
Initial Operational Capability	3 rd QTR FY03
Full Operational Capability	4 th QTR FY03