

FIRING/NONFIRING DATA *Log 3-20-11*

For use of this form see USAIC Regulation 350-19; the proponent agency is DPTMS

TO: Chief,
Range Division,
Directorate of Plans, Training, Mobilization and Security
Fort Benning, GA 31905

Date: 09MAR11
Range: ORION
Title: DES Construction / Use (RB1R26)
Problem No:

THRU: TNB, DOT

FROM: S-3, 4TH RANGER TRAINING BATTALION

SECTION I, TYPE OF TRAINING

a. Live Fire b. Non-live Fire CP/Controller Coordinates: GA 19457885 Darby PI/Camp Darby

SECTION II, DEMOLITIONS/GRENADERS/MINES/PYROTECHNICS

Coordinates	Type	Model/DODAC	Size of Charges
ORION	CORD,DET PETN NEW/FT	M456	1 Each
ORION	CAP, BLAST NON-ELEC 7.5FT SHOCK TUBE XM/M14 MDI	MN06	7.5 Feet
ORION	IGNITER, TIME BLAST FUSE XM/M81	MN08	1 Each

SECTION III, WEAPONS/AMMUNITION REQUESTED

Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
N/A	N/A	N/A	N/A	N/A

SECTION IV, LIVE FIRE EXERCISES Attach the following:

- Scenario of training to be conducted:
- Sketch of area:
- Risk Assessment:
- Attach FB Form 350-19-2-E-R if Mortar or artillery is being fired:

SECTION V, NON-LIVE FIRE TRAINING

- Training area(s) to be occupied:**
- Scenario of training to be conducted:
 - Sketch of area(s) to be occupied:
 - Risk Assessment:

Name/rank of requesting officer:
Bryan D. Johnson, SFC, 4TH RTB Resource NCOIC

Name/rank of Major Unit S3/Commander:
Mark J. Wade, MAJ, IN, 4TH RTB XO

SECTION VI, FOR RANGE DIVISION USE

DATE: *4 Apr 11*

TO: 4TH Ranger Training Battalion
10850 Schneider Rd.
Fort Benning, GA 31905

FROM: Range Division,
Directorate of Plans, Training,
Mobilization and Security
Fort Benning, GA 31905

- a. Roadblocks to be closed:
- b. Road(s) to be closed/road barrier locations:
- c. Remarks:
- d. This approval expires: *3 Apr 13*

Chief, Range Division
Directorate of Plans, Training, Mobilization and Security

Bryan D Johnson

DEPARTMENT OF THE ARMY
4th Ranger Training Battalion
Ranger Training Brigade
Fort Benning Georgia 31905

ATSH-RBD-O (350)

09 MAR 11

MEMORANDUM FOR RECORD

SUBJECT: Concept for Enhanced Demolitions Training (RB1R26)

1. The following is the concept for the 4th Ranger Training Battalion's Enhanced Demolitions Training.
2. The 4th RTBn will conduct Enhanced Demolitions Training IAW FM 5-250 and ST 5-250-1 on Day 4 of our normal POI Cycle. The time for conducting this training will be IAW the 4th RTBn Training Schedule and coordinated for through DOT on POI Training. During the training, the Ranger students will receive a class on the construction and initiation of the Demolitions Effects Simulator (DES) and will execute a practical exercise on employing the DES. The DES will consist of no more than 6 feet of Det-Cord (M456), no less than 1 minute of time fuse and 2 non-electric blasting caps, included with (MN06) M14 System, and 2 fuse igniters (MN08) M81; sand packed in a cardboard box will simulate the explosive. Upon completion of this training Ranger Students are certified to execute the initiation of the DES in support of graded ambush patrols by using the charge to destroy enemy equipment with this charge. A Ranger Instructor, E-6 or above, will always be in control and supervision of the ignition of the DES by the Ranger Student.
3. Before the charge is set off during the training, all Ranger students will move 50 meters away from the Demo-site to a safe location. The Ranger Instructor will ensure the correct ignition of the fuse and move immediately 50 meters (DES SDZ) away making sure no one walks up on the charge. Once the charge has been detonated, the Ranger Instructor will move to the demo-site to ensure the proper detonation of all charges. The remaining Ranger Students will continue to do this until all charges have been detonated. Once training has been completed, the Ranger Instructor and students will check the area for debris.
4. All Ranger Instructors receive a certification class on the construction and initiation of the DES prior to teaching Enhanced Demolitions (RB1R26) and walking the ambush patrols. The Ranger Instructor and Ranger Students will have eye protection, Army Combat Helmet (ACH), and Gloves will be utilized when handling the DES. Only Ranger Instructors will handle misfires and will ensure all personnel are outside of the danger area (50-meters for DES). Misfire Procedures will be handled in accordance with FM 5-250 by the Ranger Instructor.
5. An FLA with Medical personnel will be on site, Rogers Aid Station will be operational to receive critical emergencies and if the injury can not be treated at Rogers Aid Station. The injured person will be transported to MACH.
6. All personnel handling demolitions will be certified and receive safety briefings prior to execution of the training. Only Ranger Instructors will handle misfires and will ensure all personnel are outside of the danger area (50-meters for DES). Misfire Procedures will be handled in accordance with FM 5-250 by the Ranger Instructor.

ATSH-RBD-O (350)

SUBJECT: Concept for Enhanced Demolitions Training (RB1R26)

7. Communication Requirements: Range OIC/RSO will immediately place range on check fire upon loss of communication and remain on check fire until communication is re-established.
8. When an incident occurs resulting in an injury an immediate report will be made by the OIC/RSO of the unit training to the Range Control Radio Room. See MCOE Regulation 350-19 Chapter 9-3.
9. Demolition Effects Simulators (DES) charges are explosives which use detonating cord, blasting caps, MDI, cardboard, and sand or chalk to simulate other explosives. Extreme care must be exercised when using DES. Use of the DES is described in TC 5-250. DES is an explosive, and all safety guidance contained in the pamphlet and FM 5-250 must be followed.
10. Minimum Safe Distance will be referenced per DA PAM 385-63.
11. POC is the undersigned or SFC Johnson at 544-6693.



MARK J. WADE
MAJ, IN
Executive Officer



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE
35 RIDGWAY LOOP
FORT BENNING, GEORGIA 31905-4500

REPLY TO
ATTENTION OF

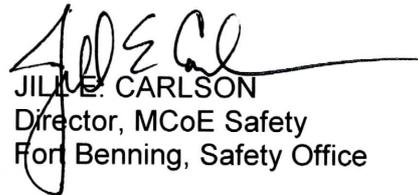
ATZB-SO (385)

31 March 2011

MEMORANDUM FOR Director, G-3, Maneuver Center of Excellence, Fort Benning, GA 31905.

SUBJECT: Demolition Enhanced System (DES) Training (RB1R26).

1. References: Demolition Enhanced System (DES) Training (RB1R26) Course Range Scenario, MCoE Fort Benning, GA Range and Terrain Regulation 350-19, AR 385-10, and CRMW.
2. Concur without comment.
3. Point of contact is Mr. Kestner J. Edens, MCoE/Fort Benning Safety Office, Comm. (706) 545-0742, Govt. Cell. (706) 604-6885, jr.edens@us.army.mil


JULIE E. CARLSON
Director, MCoE Safety
Fort Benning, Safety Office

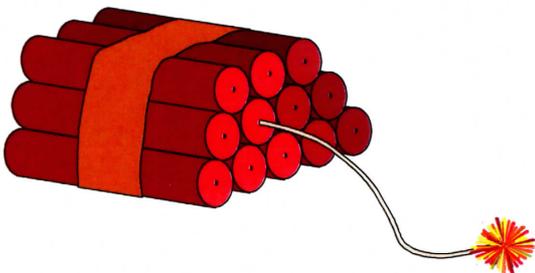


ENHANCED *DEMOLITIONS* *TRAINING*

PI Brief

RANGER Class – 05-11

Date 3 MAR 11





ENHANCED DEMO

PI BRIEF

- Bn & Co PIs

Bn PI	SSG HOLT
A Co PI	SSG GUENTHER
B Co PI/API	SFC RICHARDS
C Co PI	SFC WHIPPERT



ENHANCED DEMO

PI BRIEF

- Situation

- Weather: Temperature slowly warming to mid 50s. Rain showers developing throughout the day. 0% chance of precipitation
- Current Conditions: Partly Cloudy
 - Current Temperatures: 45
 - HI 74 LOW 51
 - Real feel: 43
 - Current Cold Category: 5



ENHANCED DEMO

PI BRIEF

- Situation (cont)

Weather Impact on Training: Severe weather such as Storms and Lightning may adjust or cause training to be canceled.

– Inclement Weather Plan: Upon approach of severe storms or any lightning, the PI will notify the battalion commander and adjust the training as necessary.



ENHANCED DEMO

PI BRIEF

- Mission
 - **Action**: Construct and Initiate a Demolitions Effect Simulator charge (DES)
 - **Conditions**: Given sand, cardboard template, tape, M-81s, M-14 time fuse, 6 ft. of Det. Cord, and a period of instruction on the DES charge
 - **Standard**: Construct a DES IAW FM 5-250, and ST 5-250-1



ENHANCED DEMO

PI BRIEF

- Execution.
 - Commander's Intent.
(AT END OF BRIEFING)
 - Concept of the operation
 - Sequence of events:
 - Give Safety Brief
 - BN PI will give block of instruction on how to build, carry and employ the charge
 - Students will then construct their charges under the supervision of their Company PIs



ENHANCED DEMO

PI BRIEF

- SPOT Reports
 - Major (-) for any safety violation committed by Ranger student



ENHANCED DEMO

PI BRIEF

- Medical Considerations
 - Medics with 1 FLA will be located at Orion LZ
 - Medics will have 1 MRK radio and any other equipment needed to accommodate any emergency
 - 1 medic will be located at the ready line while the students are downrange.



ENHANCED DEMO

PI BRIEF

- Medical Considerations (cont)
 - All life threatening injuries(Life, Limb or Eyesight) will AIR/**GROUND** MEDEVAC from Orion PZ thru Bn API.
 - API w/ Medics will set up & run the PZ
 - All non-life threatening injuries will be reported to Bn PI and Medics and ground evacuate by FLA or treat at Camp Darby Aid Station.



ENHANCED DEMO

PI BRIEF

- COORDINATING INSTRUCTIONS
 - Student Uniform
 - ACU top and bottom
 - Sleeves will be rolled down
 - Tan T-shirt.
 - ACH will be worn
 - 2 QT Canteen/Camelback
 - No FLC
 - Earplugs
 - Eye Pro
 - Gloves*
 - Snivel*



ENHANCED DEMO

PI BRIEF

- COORDINATING INSTRUCTIONS (cont)
 - Cadre Uniform

- **Winter uniform- ACU top and bottoms with tan belt, jungle boots, tan T-Shirt, patrol cap, helmet, eye pro, ear pro**



ENHANCED DEMO

PI BRIEF

- COORDINATING INSTRUCTIONS (cont)
 - BN PI will ensure there are enough charges for each Company. There will be no more than four students per charge
 - Students will need a knife and tape
 - Company PI's ensure your RI's are demo certified and that company demo PI's bring 25 company cardboard cut outs
 - RIs police up M81s



ENHANCED DEMO

PI BRIEF

- COORDINATING INSTRUCTIONS (cont)

- Time Schedule

- 0730 PI brief
- 0800 Movement to Orion LZ
- 0830 Demo Class
- 0845 Construct DES
- 0930 First Company on firing line
OOM: (Trail) C Co, (Lead) A Co
and (Middle) B Co
- 1300 Completion Time
- 1330 Clean up



ENHANCED DEMO

PI BRIEF

- Command & Signal
 - Location of PI
 - Training Area/Downrange
 - Location of Company Commander
 - Training Area
 - Commo
 - Bn PI/API will have MRK'S on BN net.
 - BN PI and API will have 9 line MEDEVAC format
 - Land Line for Range Control - 545-3479/3474



ENHANCED DEMO

PI BRIEF

- Command & Signal
MEDEVAC FREQUENCIES
- MRK PRI - E911 OPS
- MRK ALT - RANGE CONTROL
- FM PRI - 49.650
- FM ALT - 33.100
- RANGE CONTROL LAND LINE 545-3474 / 3479.



ENHANCED DEMO

PI BRIEF

- Safety
 - RI's
 - Instructors have received post demo certification training and have current cards on them.
 - Instructors will supervise priming and initiating of all demolitions.
 - Instructors will ensure all charges have been detonated prior to moving any soldiers down range.
 - Only RIs will handle misfires.
 - Any New Instructors? See me after the brief.



ENHANCED DEMO

PI BRIEF

- Safety(cont.)
- M81's are attached downrange.
- British Junction is tied downrange

NO EXCEPTIONS!
THERE'S ALWAYS ONE!



ENHANCED DEMO

PI BRIEF

- Student Safety Brief
 - Execute initiation of DES step by step in the manner that the RI tells them.
 - Students will move away from the blast line to the trench and put their heads down after initiation.
 - Students will not handle any misfires.



ENHANCED DEMO

PI BRIEF

- **FORCE PROTECTION**
 - Hazards certain to arise
None
 - Hazards that may arise/ Mitigation
 - Blast Injury/Injury from flying debris
 - Safety brief, RI supervision, utilizing the trench
 - Improper/Failure to properly detonate demolitions - RI's will handle misfires and ensure students are outside of danger area - 50 meters.

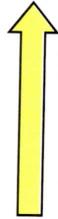


ENHANCED DEMO

PI BRIEF

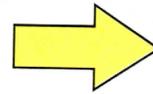
- **FORCE PROTECTION**
 - Hazards that may arise/ Mitigation
 - Injury from Premature detonation – Student safety brief and RI supervision while moving to firing line & detonation of charge.

DUAL INITIATION
SYSTEM

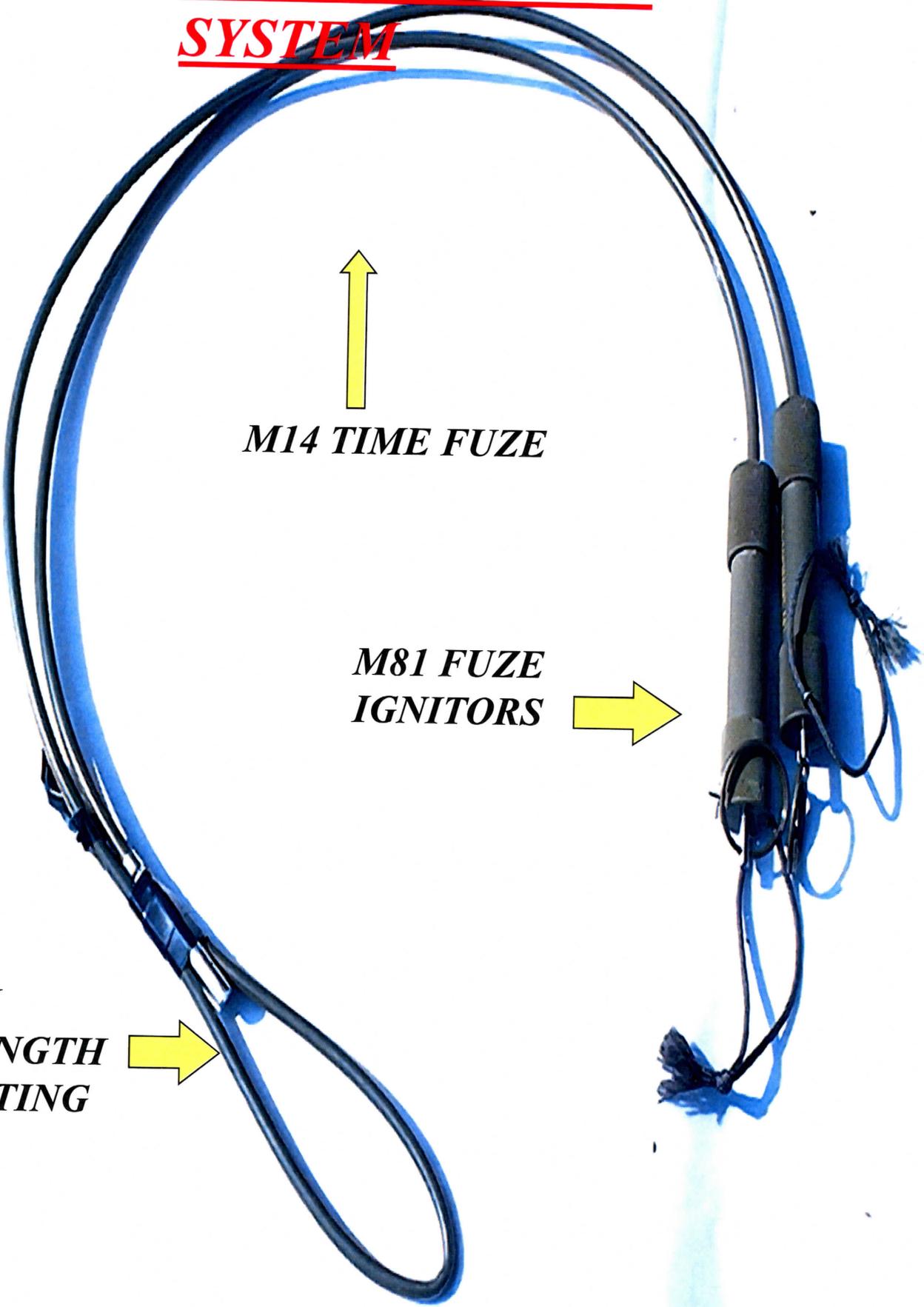
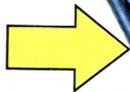


M14 TIME FUZE

***M81 FUZE
IGNITORS***



***HIGH
STRENGTH
BLASTING
CAP***



BRITISH
JUNCTION

*M81 FUZE
IGNITORS*

*M14 TIME
FUZE*

*DET
CORD*

*HIGH
STRENGTH
BLASTING*

JUNCTION



DUAL INITIATED DES
CHARGE

CHARGE

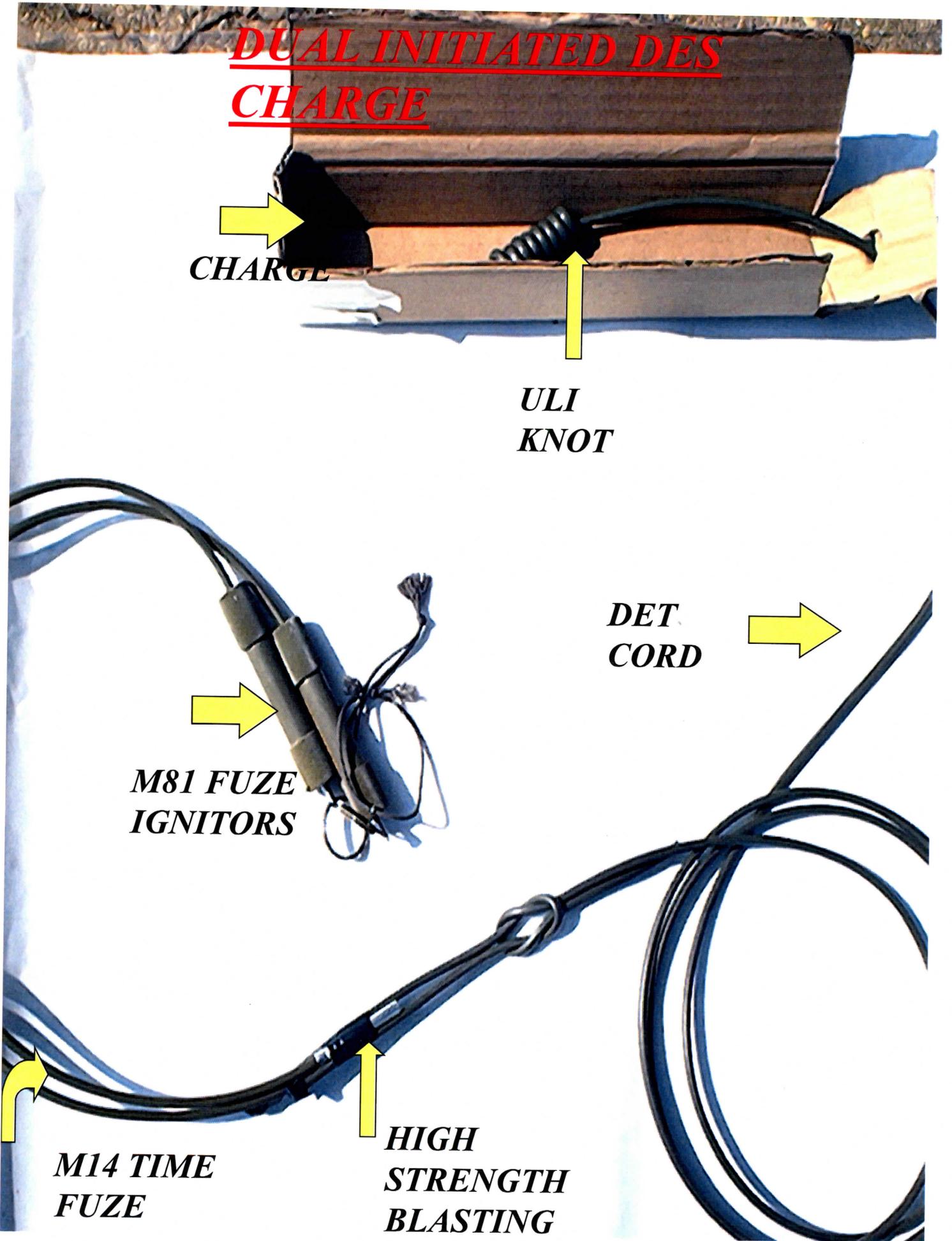
ULI
KNOT

M81 FUZE
IGNITORS

DET.
CORD

M14 TIME
FUZE

HIGH
STRENGTH
BLASTING



4TH RTB DAILY RISK ASSESSMENT

PROBLEM #EVENT 071R0013 DEMO

DATE: 3 FEB 2011

2. TRAINING EXECUTED IN LAST 24 HRS:

Road march

PI ASSESSMENT OF CLASS CONDITION:

*STUDENTS ARE
MOTIVATED TO
TRAIN.*

1. HAZARDS THAT MAY ARISE:

CONTROL MEASURES (MITIGATE RISK)

A. <i>BLAST INJURY</i>	<i>RI'S SUPERVISION, STUD BRIEF</i>
B. <i>HEARING</i>	<i>EAR PROTECTION</i>
C. <i>EYE SIGHT</i>	<i>EYE PROTECTION</i>
D.	

3. SOLDIER CONDITION: A. REST IN LAST 24 HRS:

HOURS	5+	3-5	2-3	1-2	0-1
TACTICAL	1	2	3	4	5
GARRISON	0	1	2	3	4

B. ENDURANCE:

3 MEALS / 10 QTS	2 MEALS / 6 QTS
0	1

C. DISTANCE MOVED:

LAST 24 HRS	<4 KM	1
	4-6 KM	2
	>6	3

4. MISSION COMPLEXITY:

HAHO / HALO / SCUBA	SL AEN / FRIES / SPIES OPNS	WATER OPNS	DEMOLITIONS / LIVE FIRE	HELO OPNS	RECON AMBUSH CONVOY	LAND NAV COURSE	CONF / OBS COURSE	RAP WEEK
12	10	10	10	4	4	4	3	1

5. SUPERVISION:

RI TO STUDENT RATIO	1:1-18	0
	19-115	1
	116-125	2
	126-135	3
	136-145	4

OVERALL ANALYSIS OF CONDITIONS MOST LIKELY TO CHANGE, OR MOST DANGEROUS, AND ACTIONS RI'S SHOULD TAKE TO MITIGATE RISK:

The greatest risk during training is students prematurely initiating charge. RIs, with current demo cards on hand, will closely monitor students as they construct and employ their charges. RIs also need to monitor students for possible cold weather injuries. The students uniform will be modified LAW the Cold Category.

6. WEATHER: A. COLD WEATHER:

COLD CAT	TEMP w/WIND CHILL	CLEAR / DRY	OVERCAST / DRIZZLE	FOG/ RAIN/ SNOW
CAT IX	BELOW -10	5	6	7
CAT VIII	-10 - 4	4	5	6
CAT VII	5 - 19	3	4	5
CAT VI	20 - 34	2	3	4
CAT V	35 - 50	1	2	3

B. HOT WEATHER:

HEAT CAT 0	0
HEAT CAT 1	2
HEAT CAT 2	3
HEAT CAT 3	4
HEAT CAT 4	5
HEAT CAT 5	6

C. ILLUMINATION:

20% OR LESS	4
21-35%	3
36-60%	2
60% +	1
DAYLIGHT	0

D. ROAD CONDITIONS:

GREEN	0
YELLOW	2
RED	4
BLACK	6

7. MEDEVAC STATUS: GROUND DISTANCE

A. CLOSEST MEDICAL FACILITIES:

(ROGERS, DARBY, MACH)

>12 KM	8-12 KM	<8 KM
3	2	1

B. CLOSEST PZ:

<1 KM	1-2 KM	2-3 KM	3-4 KM
0	1	2	3

RISK VALUE:

3A+	3B+	3C+	4+	5+	6A+	6B+	6C+	6D+	7A+	7B=
2	0	1	10	0	3	0	0	0	1	0

TOTAL RISK VALUE

17

Reviewed all applicable RMWS:

Initials

MJR

PREPARED BY:

SSG Holt

APPROVED BY:

MAJ Kampf

POINTS	RISK	DECISION LEVEL
0 - 15	LOW	COMPANY PI
15 - 24	MODERATE	COMPANY CDR
25 & ABOVE	HIGH	BATTALION CDR



ENHANCED DEMO

PI BRIEF

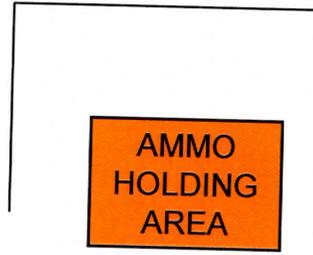
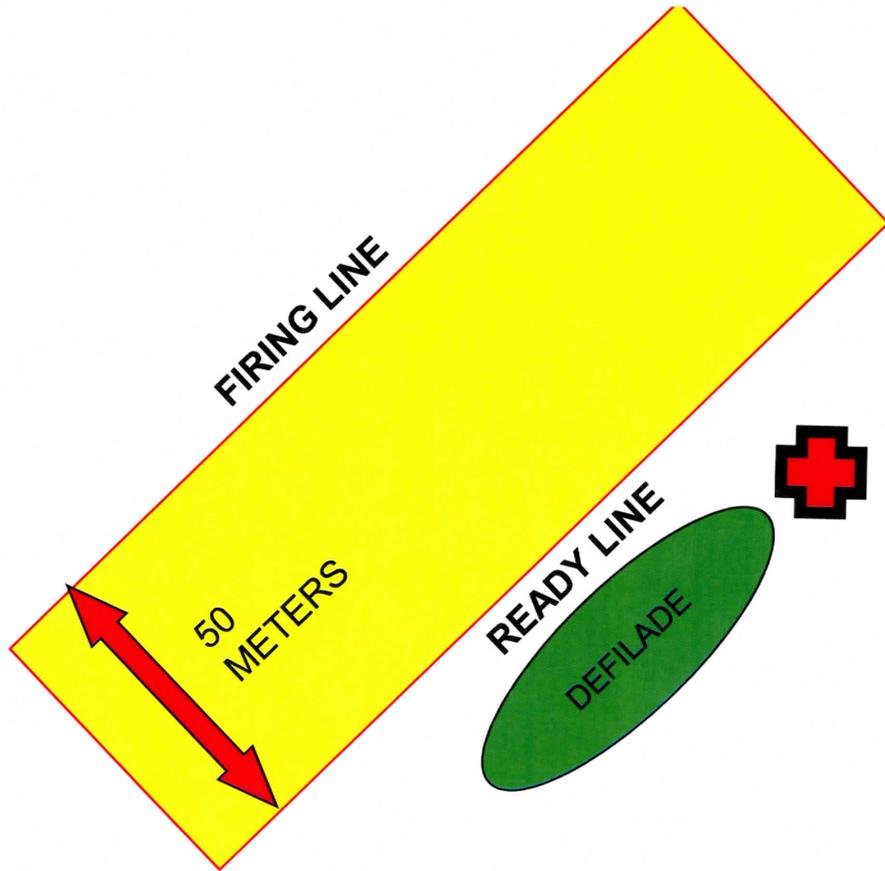
- NEXT TRAINING EVENT:
- 20 Boards



ENHANCED DEMO
PI BRIEF

Battalion Commander

Comments



COMPOSITE RISK MANAGEMENT WORKSHEET

For use of this form, see FM5-19; the proponent agency is TRADOC

1. MSN/TASK DEMOLITION EFFECTS SIMULATOR (DES)	2a. DTG BEGIN 010800 JUN 2010	2b. DTG END UNTIL RESCINDED	3. DATE PREPARED (YYYYMMDD) 2010/05/25
--	---	---------------------------------------	--

4. PREPARED BY:		
a. LAST NAME WIEHE	b. RANK GS-12	c. POSITION BDE SAFETY MANAGER

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Prepare, Carry and Detonate DES	1. Handling DES	High	1. Instructors certified IAW FBGA regs (Safety Reg 385-9) for use of explosive, demolition explosive simulators and pyrotechnics for RTB DES training. 2. Inspect DES for serviceability IAW FM 5-250. 3. Students will carry two components, the charge and the firing/ignition system (5 th & 6 th Bn). 4 th Bn RI will carry M81 fuse igniter. All components will be segregated and no two components will be on the same person.	Moderate	1. FM 5-250, Demolitions 2. RICP Certification 3. RTB BSOP 4. RTBn 350-1 5. Safety Reg 385-9	Direct Supervision	YES

Additional space for entries in Items 5 through 11 is provided on page 2.

13. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED (Check One)

LOW
 MODERATE
 HIGH
 EXTREMELY HIGH


JEREMY B. MILLER
 LTC, IN
 Commanding


JOHN W. KING
 COL, IN
 Commanding

14. RISK DECISION AUTHORITY

a. LAST NAME OWENS	b. RANK COL(P)	c. DUTY POSITION COMMANDANT, USAIS	d. SIGNATURE 
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ITEMS 5 THROUGH 12 CONTINUED:

5. SUBTASK	6. HAZARDS	7. INITIAL RISK LEVEL	8. CONTROLS	9. RESIDUAL RISK LEVEL	10. HOW TO IMPLEMENT	11. HOW TO SUPERVISE (WHO)	12. WAS CONTROL EFFECTIVE?
Prepare, Carry and Detonate DES	2. Injury From Blast or Flying Debris	High	1. RIs brief OPFOR on location and timing of DES detonation. 2. RIs train students on the construction and use of DES. During construction and emplacement of the DES, all PPE will be worn (ballistic eyewear and helmet). 3. RIs supervise emplacement of DES and ensure that the location is safe. 4. RIs, students and OPFOR will be at least 50 meters from blast.	Moderate	1. FM 5-250, Demolitions 2. RICP Certification 3. RTBn RI Guide Book	Direct Supervision	YES
	3. Injury From Premature Detonation	High	1. 4 th Bn RI carries M81 and issues to student on the objective just prior to detonation. 2. RIs supervise final construction of DES charge and ensure that time fuse is not less than 1 minute in length. 3. Under no circumstances will excess time fuse be burned in the patrol base. Excess time fuse (after being cut to length) will be accounted for, consolidated and turned back in to the RI for proper disposal IAW RTBn Ammo SOPs.	Moderate	1. FM 5-250, Demolitions 2. RICP Certification 3. RTBn RI Guide Book 4. RTBn Ammo SOP	Direct Supervision	
	4. Failure to Properly Detonate DES.	High	1. Only RIs handle misfires and ensure all personnel stay at least 50 meters away. 2. RIs will ensure students dual prime DES and inspect charge prior to detonation.	Moderate	1. FM 5-250, Demolitions 2. RICP Certification 3. RTBn RI Guide Book	Direct Supervision	

ADMINISTRATIVE NOTES

1. Issue.

- a. The RI Walker will initially receive all components of the DES system. Time fuse will not be precut to less than 1 minute.
- b. The RI Walker will inspect the charge, time fuse/blasting cap and M81 fuse igniter during TLPs prior to the students moving out on patrol.
- c. **(5th & 6th Bn only)** RI issues demo (charge & firing/ignition system) to student. Students will maintain possession of the charge and firing/ignition systems (2 components) and they will be segregated from each other.
- d. **(4th Bn only)** RI issues demo (charge & firing/ignition system) to student. RI maintains control of the M81 fuse igniter until Ranger Students are ready to attach firing/ignition system to the DES charge during "Actions on the Objective". Students will maintain possession of the charge and firing/ignition systems (minus M81 fuse igniter) and they will be segregated from each other.
- e. The RI will supervise the attachment of the DES charge and firing/ignition systems to the DES on the Objective.

2. Construction. Note: Charges are constructed at the discretion of the Battalion and under close RI supervision.

- a. Ranger Students will construct the DES charge and ignition system to standard under the supervision of the instructors. The RI will inspect each charge and ignition system for quality assurance.
- b. The RI will enforce safety procedures and both RI and Students will wear the proper PPE while working with all components of the DES.
- c. RIs will control and collect excess demolition material for turn-in using normal ammunition procedures.
- d. If a DES charge has been constructed AND it was not used in a tactical mission during training, the DES will be marked with the date and who constructed the charge.
- e. Once the firing system is constructed, the charge and firing/ignition system will be segregated by Ranger Student (4th RTBn RIs maintain M81).

3. Attaching Firing System to DES Charge (Actions on the Objective).

- a. The Student Leader calls for his Demo Team and they move to his location.
- b. The RI determines that a safe location is used to detonate the DES Charge.
- c. Ballistic eye protection is worn by the RI supervising and the Students attaching the firing/ignition system to the DES charge.
- d. Student Leadership goes through their withdrawal plan (RI will count Rangers withdrawing off the OBJ to ensure there are no students still on the LOA).
- e. Under the supervision of the RI, the Students will tie a square knot to attach the DES charge and the firing/ignition system and place the completed charge in the designated location. (RI uses white light to observe)
- f. RI will inspect time fuse to ensure that no less than 1 minute burn time is on the time fuse.
- g. The Demo Team will move back to their positions on the line.
- h. The Student removes the Safety Wire with Lanyard and pulls the M81 fuse igniter one at a time.
- i. Once both pieces of time fuse are burning the student places them on the ground and withdraws off the OBJ.

4. Misfire Procedures.

- a. Yell "Misfire" to let everyone in the vicinity of the charge know that you have a misfire.
- b. Wait 30 minutes before investigating the misfire. Maintain a safe distance of 50 meters.
- c. Only RIs will handle misfires.
- d. RIs maintain control of the site.
- e. After 30 minutes RI will approach the charge to identify the problem.
- f. RI can destroy the charge with another firing/ignition system or recover the charge by separating the firing/ignition system from the charge.
- g. 6th RTBn will use EOD to handle all misfires

5. Accountability.

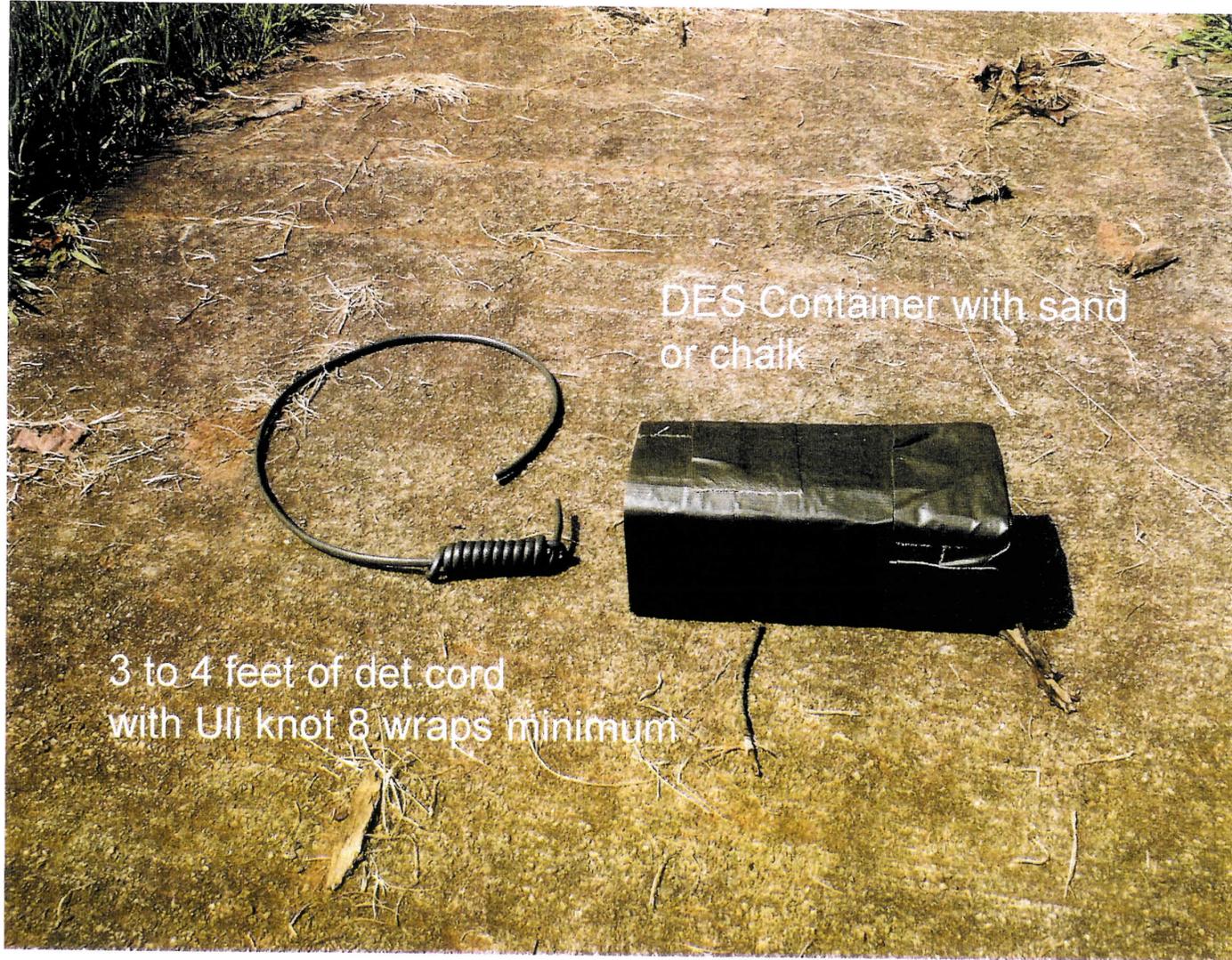
- a. DES charges will be treated as a sensitive item and be subject to 100% daily inventory during times of: RI Change Over (RICO), after actions on the objective and student change of leadership positions.
- b. No excess ordinance (time fuse, blasting caps, det cord) will be kept within the student patrols.
- c. Unused (not misfired) DESs will be accounted for and turned in.
- d. If unused DES charges remain with the patrol, no new charges will be issued until they are expended. DES accountability will occur IAW established Battalion ammunition procedures.

DES Procedures



2

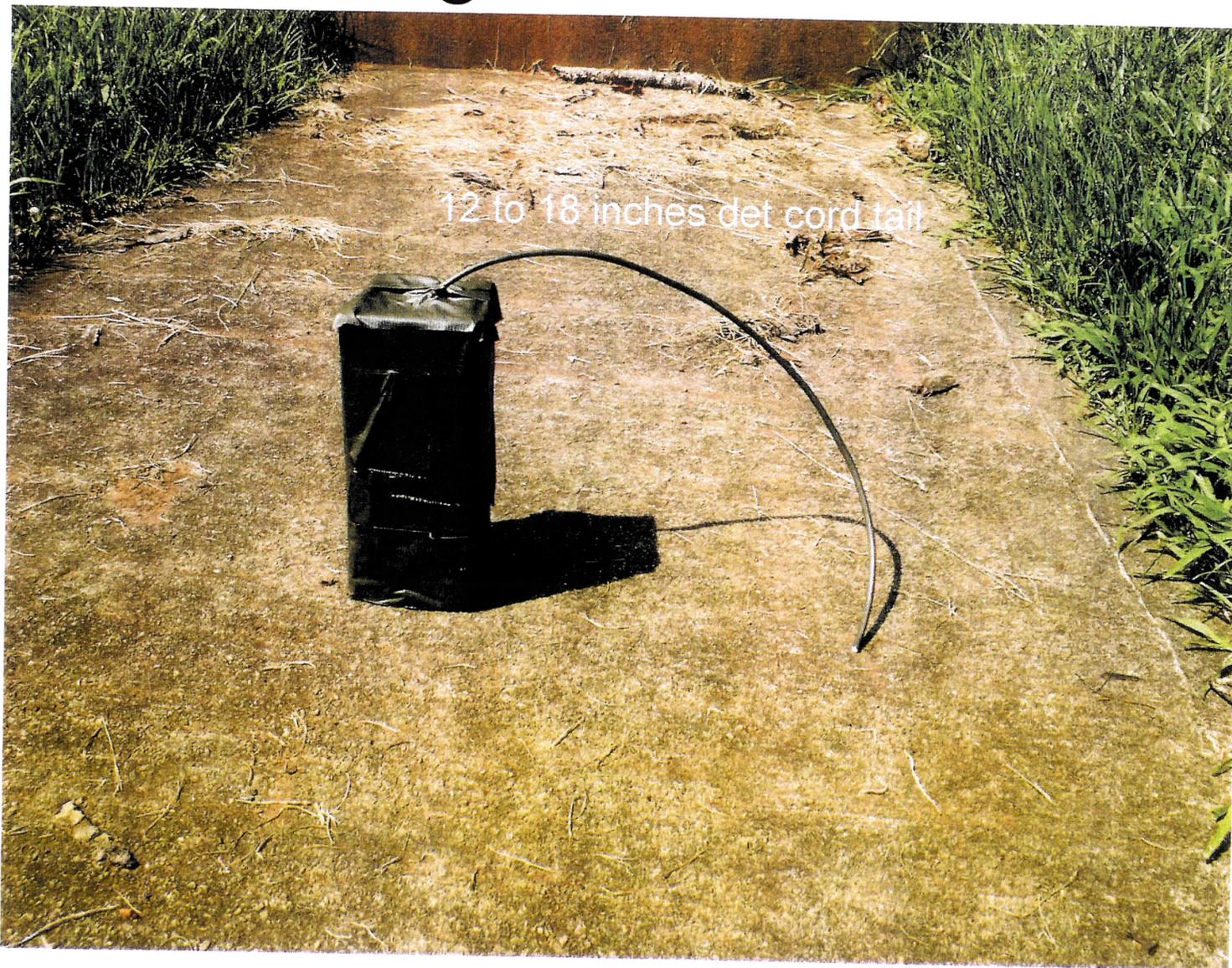
Charge Construction



DES Container with sand
or chalk

3 to 4 feet of det cord
with Uli knot 8 wraps minimum

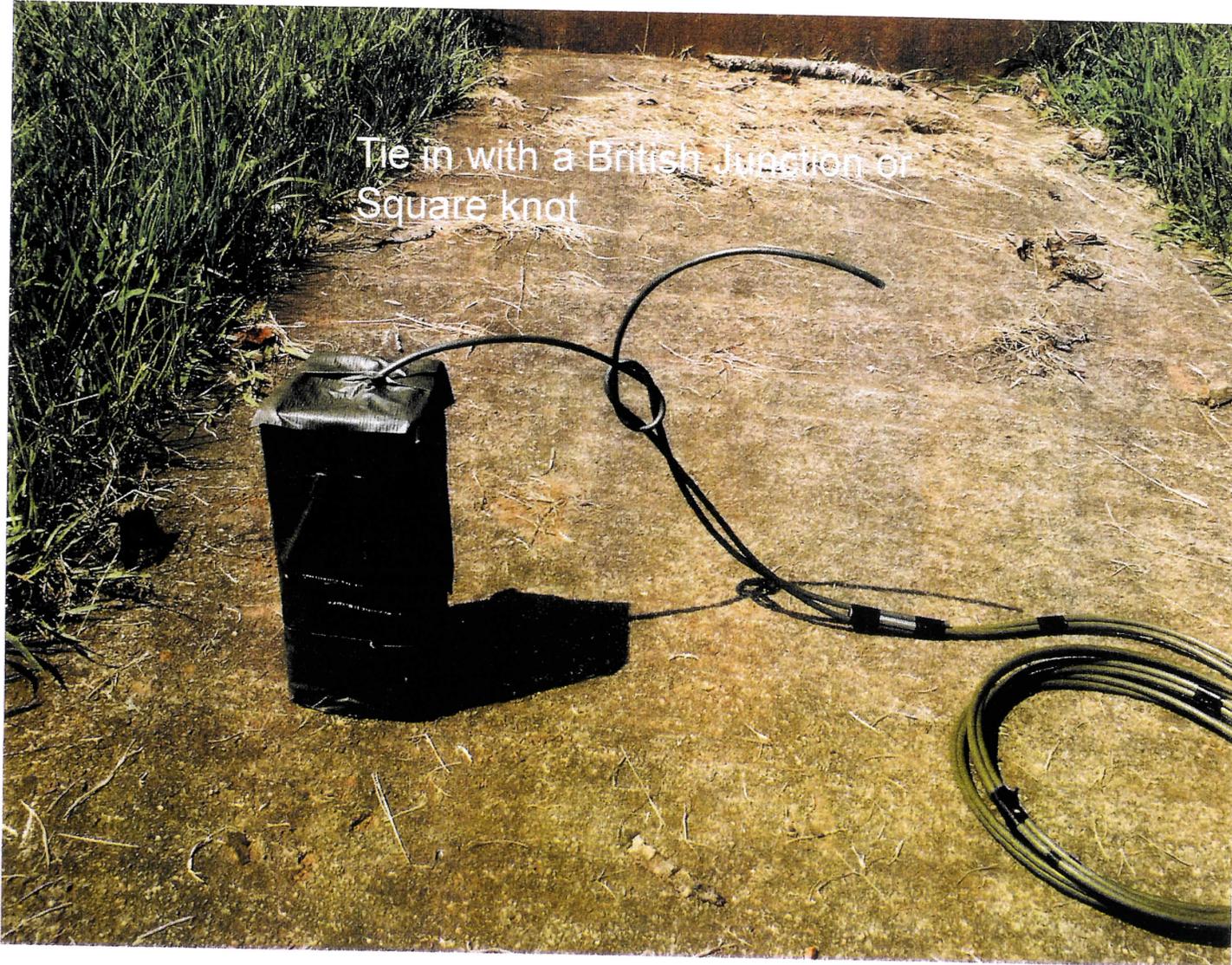
Charge Construction



Firing System Construction



Tie-In Procedures



Carrying Procedures

- 1. Ranger Instructor carry the firing system
- 2. Students carry DES charge
- 3. Students carry demolition kit

Note: Firing system is placed in the rucksack
In safe location to avoid pressure from equipment.

Placement of Charge

- 1. The Ranger Instructor identify the location of the DES and briefs OPFOR.
- 2. Everyone will be at least 50 meters from the charge.
- 3. The charge will be marked with a red chemlite.
- 4. RIs supervise emplacement of DES.
- 5. Students detonate DES under direct supervision from the RI.

Detonating the Charge

- Ranger student pulls one M-81 at a time.
- Never pull both M-81s at the same time
- Once you visibly see the time fuse burning move to a safe location.

DES Misfire Procedures

1. Yell "Misfire" let everyone in the vicinity of the charge that you have a misfire.
2. Wait 30 minutes before investigating the misfire. Maintain a safe distance of 50 meters.
3. Only Ranger Instructors handle misfires.
4. Maintain control of the site.
5. After 30 minutes RI will approach the charge to identify the problem.
6. RI can destroy the charge with another firing system or recover the charge by separating the firing system from the charge.



RECORD OF ENVIRONMENTAL CONSIDERATION (REC)



EMD Number: 124406

Project#: NONE

Project Title: Enhanced Demolition Training 071R0013

Description of proposed action:

Students and Cadre will be conducting enhanced Demo training using Det-cord and DES. Soldiers will conduct training by constructing boxes of sand and chalk and detonating it with Det-cord. This training event will be conducted once a class. The purpose of this 144-R is to ensure that 4th RTBn adheres to the environmental considerations of Fort Benning.

Project Location:

H1, H2, H4, H5

Amount, Description, Location of Disturbance/Digging:

N/A

Number/Types of Vehicles:

12-GSA, 1-M977, 1-M149

Number of Personnel:

300

Type of Ammunition:

Det-cord, Blasting
Caps, Time fuse, M21
sim. Live

Number/Types of Trees:

NONE

Size of Project Area: N/A

Duration of Action: Start: 10/1/2010 Stop: 9/30/2011

Proponent:

706-544-6693

Organization/Unit: 4th Ranger Training Battalion

DECISION: Concur with conditions

This Action is adequately covered in the Existing EA titled: 'Ongoing Mission and siting Activities, USAIC, FT. Benning, GA.'

(NA): Training involving LIVE FIRE and tracked vehicles has NO CATEX -- "Ongoing Mission and Siting Activities, USAIC, Ft. Benning, GA."

REC APPROVED THROUGH 30, SEPTEMBER, 2011

Hazardous Materials/Waste

Conditions:

Ted Williams (706 545 7579), 9/9/2010

Any wastes generated must be evaluated for their hazardous characteristics and disposed of in accordance with all Federal, State and Fort Benning Hazardous Waste Regulations.

Appropriate precautions must be taken to prevent hazardous material spills. Adequate quantities of spill response supplies must be on hand while work is being performed. If a spill occurs use notification procedures as outlined in the Fort Benning Hazardous Waste Management Plan.

Contain and clean up any spill according to guidance provided by the Environmental Programs Management Branch. Contact POC for additional guidance for proper waste management.

Natural Resources - RCW

Conditions:

Michael Barron (706-544-7080), 9/1/2010

The use of demolitions is prohibited within a red-cockaded woodpecker cluster. Nor should this demolition result in any damage to any trees in the area. See attached conditions. Note locations of red-cockaded woodpeckers and gopher tortoises on attached maps. Training restrictions apply. Unit commanders must make sure that all troops know the locations of restricted areas and understand these training restrictions. This is imperative since night training may occur. Boundaries are often hard to see at night, but this is no excuse for violations to occur. Two hour time restriction is for 2 hours once every 24 hour period. Note where digging may not occur. All trenches, fighting positions, etc must be filled in prior to leaving an area. There must be no cutting down or intentional destruction of any pine trees throughout the requested area(s).

Noise

Conditions:

Ellis Leeder (706 545 7576), 9/1/2010

This is normal training that must be conducted annually. If there are any complaints received, the Environmental Management Division will investigate by determining if the noise was detected by noise detection monitors, and then recommending noise mitigation actions to the appropriate personnel. Please follow the Garrison guidelines to noise management and hours of firing operations. In accordance with the Army's policy on environmental noise management, all efforts shall be made to minimize noise annoyances to the highest extent practicable without interfering with the proposed mission. If any assistance is needed please feel free to contact Ellis Leeder at 706.545.7576 or email ellis.leeder@us.army.mil

CWA - Training

Conditions:

Jesse Taylor (706 545 0276), 9/1/2010

Environmental Review: Caution within training areas and motor pools should be taken to protect all nearby waterways (including perennial, intermittent streams and wetlands); as well as ground surfaces and any other sensitive areas in the vicinity of the training areas. Potential spills/releases from this activity that may occur before and/or during the FTX include: 1. Discharge and/or improperly disposal of oil or hazardous substances into or upon land, water, or into ground water areas from storage, handling and/or transportation of hazardous materials/waste; 2. Vehicle/equipment/generators leaks; 3. Fuel loading/unloading/refueling operations; 4. Field mess facilities/equipment/operations, and/or 5. Ammunitions /explosives (as applicable, before and/or during the FTX).

General SPCC Requirements: Ensure all hazardous materials are properly storage to prevent spill/discharges, to meet safety requirements for storage, and that containers are not exposed to the weather. Have adequate spill response supplies available during exercise for any spills that may likely occur. Use drip pans under vehicles and provide secondary containment for any fueling activities and hazardous material/waste storage. Locate all refueling operations and storage of hazardous materials/waste away from waterways and sensitive areas. See attached section on prevention procedures and CHECKlist (Figure 6.9.1) to be used during training exercise to comply with SPCC plan requirements. Ensure all wastewater from field mess equipment/operations particularly those involving oil/grease are collected and dispose properly. Do not discharge any wastewater into storm drains or dispose of oil/grease waste directly into land.

General ISCP Requirements: In the event of a spill/discharge -- notify Range Control by radio or call 544-6291, and they will notify E-911 for Fire Department/HAZMAT Team assistance and/or notification of the EMD office (Spill Beeper 706-317-6584). As appropriate, and if personnel are trained -- REACT to minimize spill damages. Submit a spill report to the EPMB Spill Program Manager (use Spill Response Report attached). All spills reaching navigable water must be reported immediately. The unit is responsible for the final cleanup of any spill during this exercise. Coordination with this office is required for clearance of the site.

Signature 

John E Brown
NEPA Program Manager

Date 11 SEP 10

Signature 

Christopher E. Hamilton, PhD
EPMB Chief

Date 11 Sept 10

RECORD OF ENVIRONMENTAL CONSIDERATION (FB FORM 144R) CONTINUED....

RECORD NUMBER: 124406

1. Backfill all fighting positions before leaving the training area.
2. There are gopher tortoises in the area. Some burrows have been marked by a white PVC pipe or pink engineer's flags. Digging and all vehicles must be kept at least 50 feet away from gopher tortoise burrows, whether burrows are marked or unmarked. See attached sheet for more information regarding the gopher tortoise. There are sensitive areas that are marked with sensitive area signs. There is no digging or vehicle movement allowed in these areas.
3. There is 1 Red-cockaded woodpecker (RCW) cluster located in training compartment H05 at centerpoint GLs 18062-78774. Two white bands mark cavity (nest) trees. The cluster boundaries extend approximately 200 feet from the cavity trees and are marked by signs indicating the area is an RCW cluster
 - a. **Activities in cluster boundaries are limited to 2 hours with the following activities allowed:** Hasty defense-light infantry-hand digging, foot traffic, wheeled-vehicle traffic (must stay 50 feet from marked trees), vehicle maintenance, 7.62-mm and lower blank firing, artillery/hand grenade simulators, Hoffman type devices, smoke/haze operations-generators or pots (smoke can drift into, but source must be outside boundary), star cluster/parachute flare, cutting of hardwoods for camouflage (do not cut pines).
 - b. **The following activities are not allowed in the cluster boundary:** No other digging, establishment of command post, assembly area operations, established CS/CSS sites, live fire, noise generators, incendiary devices (including trip flares), CS/Riot gas, HC smoke, tank ditches, deliberate individual fighting positions, crew served fighting positions, vehicle fighting positions, force reduction positions, vehicle survivability postings.
 - c. Within ½ mile of a cluster, there is no mechanical digging within 20 feet of a mature pine tree (8 inches diameter at breast height or greater)
4. Report all wildfires to Range Control ASAP.

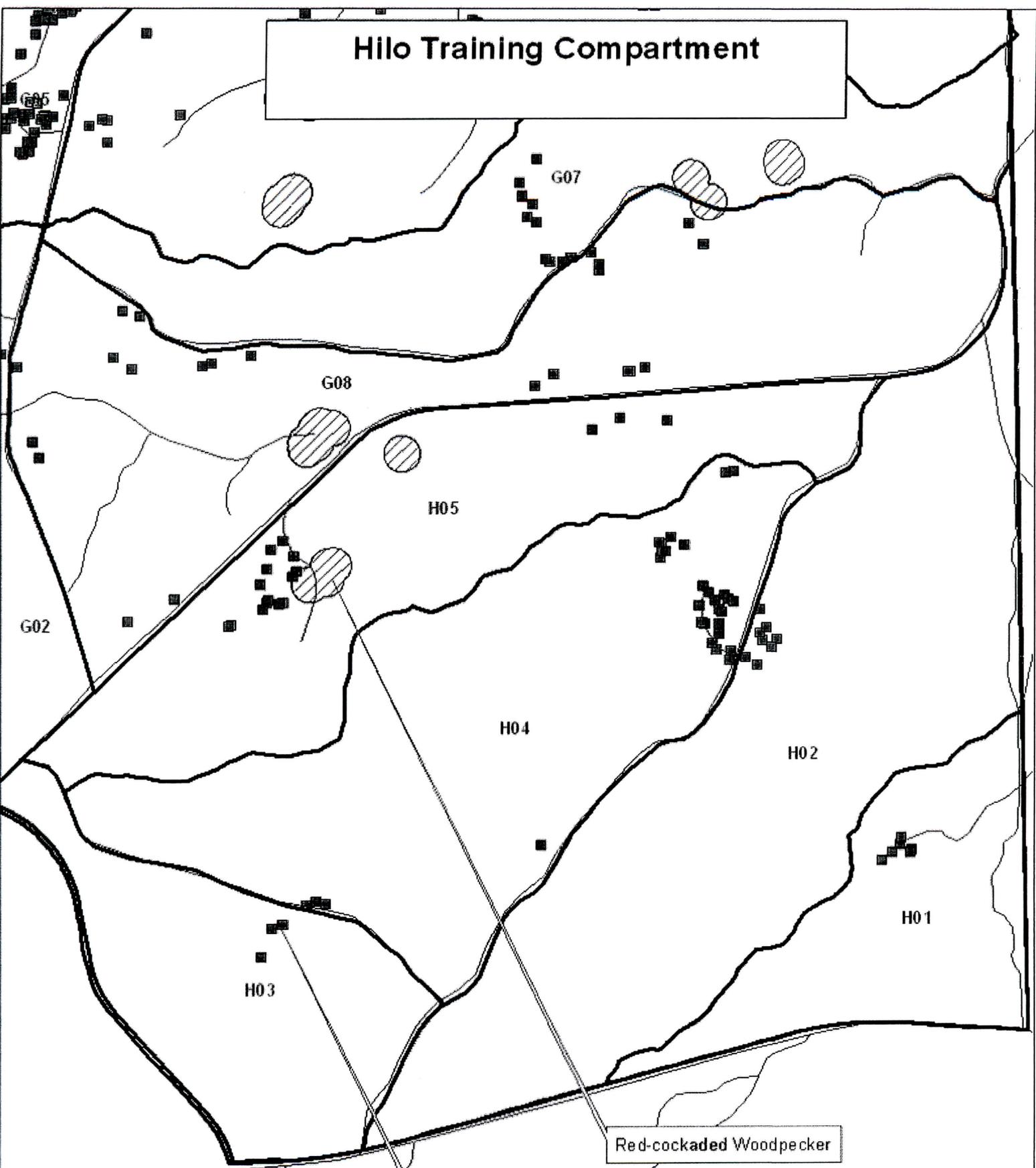
MICHAEL BARRON
Wildlife Biologist, CB
544-7080/7319

TRAINING ACTIVITY WITHIN 200' BUFFER ZONE	
Maneuver and Bivouac:	
Hasty defense, Light Infantry, Hand digging only, 2 hrs max	yes
Foot Transit	yes
Wheel/Track Vehicle Transit	yes (1)
Cutting Hardwood Camouflage	yes
Vehicle Maintenance, 2 hrs max	yes
Hasty defense, Mechanized Infantry/Armor	no
Deliberate Defense, Light Infantry	no
Deliberate Defense, Mechanized Infantry/Armor	no
Established Command Post, Light Infantry	no
Assembly Area Operations, Light Infantry, Mech Infantry/Armor	no
Established CS/CSS Sites	no
Weapons Firing:	
7.62mm and Below Blank Firing	yes
.50 Cal Blank Firing	yes
Artillery Firing Position	no
MLRS Firing Position	no
All Others	no
Noise:	
Artillery/Hand Grenade Simulators	yes
Hoffman Type Devices	yes
Generators	no
Pyrotechnics/Smoke:	
Smoke, Haze Operations, Generators or Pots	yes (2)
Smoke Grenades	yes
Star Cluster/Parachute Flares	yes
Incendiary Device to Include Trip Flares	no
CS/Riot Gas	no
HC smoke of Any Type	no
Digging:	
Hasty Individual Fighting Positions, Hand Digging Only	yes
Tank Ditches	no
Deliberate Individual Fighting Positions	no
Crew-served Weapons Fighting Positions	no
Vehicle Fighting Positions	no
other survivability/Force Reduction positions	no
Vehicle Survivability Postings	no

Note: Yes means that the activity may be conducted within 200 feet of a marked cavity tree

- (1) Vehicles (wheel and track) will not get closer than 50 feet of a marked cavity tree unless on an existing road or trail
- (2) Smoke generators and smoke pots will not be set up within 200 feet of a marked cavity tree, but the smoke may drift inside the 200 foot buffer

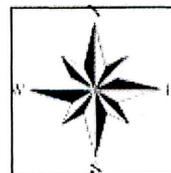
Hilo Training Compartment



Legend

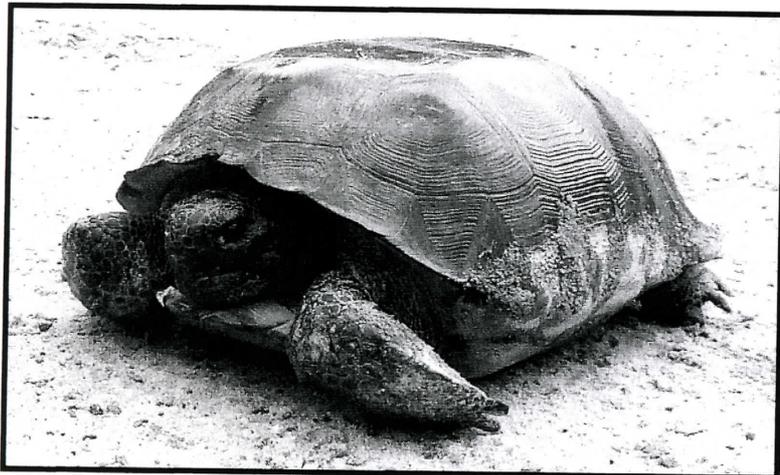
- Patton Range Water Supply Clearing Limits
- compartment_area
- Impact Areas

0 0.05 0.1 Miles



GOPHER TORTOISE - GEORGIA'S OFFICIAL STATE REPTILE

The Gopher Tortoise (GT) is a "keystone species" because of its value to other animals. Over 300 species of amphibians, reptiles, insects, and mammals move in with the GT, using its burrow for hiding, nesting, or overwintering.



The GT is one of only three land tortoises left in North America, and it is the only one east of the Mississippi River. Due to habitat loss, the GT has declined over most of its range and is federally-listed as a species of concern.

Digging and vehicular traffic are the only two training activities destructive to the GT and its habitat: these activities are prohibited within 50 feet of tortoise burrows, whether the burrow is marked or unmarked. Many burrows are unmarked, but they are easily identified. Tortoise colonies near tracked vehicle areas are marked by "Sensitive Area" signs.



FIELD TRAINING EXERCISES AND DEPLOYMENT
GENERAL SPCC CHECKLIST
Figure 6.9.1

Units should continually keep HM/HW areas clean and orderly by applying the principals of Monitoring and Housekeeping. Vehicle Maintenance and Fueling Points, HW Collection Points and HM Storage & Supply Areas may not be set up at your filed training area and/or deployment destination.

BEFORE you deploy, plan to pack drip pans, rags, plastic, dry sweep, absorbent, and pallets to prevent drips, spills, and leaks from seeping into the ground and contaminating soil and water resources.

Plan to build your areas to prevent HM accidents before they occur. An easy way to remember what to check, is to remember your CHECK list:

Containment:

- ___ Ensure that secondary containment is used and in good condition.
- ___ Empty water within secondary containment on a regular basis. If water is contaminated, dispose of it IAW the Unit Hazardous Waste Management Plan.

HM/HW locations:

- ___ Make sure the locations of your HM/HW are well chosen. Stay away from waterways, drainage, sensitive areas, living areas, bunkers, ammunition storage, fence lines and/or dining facilities. Place them near the areas where hazardous materials are used.
- ___ Put up warning signs and keep them clean and orderly.

Environmental Documentation:

- ___ Maintain MSDSs for each hazardous material and update Unit/Activity SOPs and Spill Response Plans regularly.

Containers:

- ___ Check condition of containers and keep containers of incompatible materials in proper order.

Kits:

- ___ Place Spill Kits, First Aid Kits, and Emergency Response Kits in the vicinity of the HM/HW areas.
- ___ Spill Kits should also be available on vehicles transporting hazardous material/waste.

Last Update: August 14, 2006

SPILL RESPONSE RECORD

PHASE I - IMMEDIATE ACTIONS FOR EVALUTING AND REPORTING SPILLS:

IMMEDIATELY REPORT ALL SPILLS TO YOUR SUPERVISOR AND CALL 911

****BE PREPARED TO PROVIDE THE FOLLOWING INFORMATION TO 911 OPERATOR:**
During Duty Hours also Call Mr. Felix Seda, EPMB Spill Manager at 545-9879

1. DATE/TIME OF SPILL: _____
 2. LOCATION: _____
 3. MATERIAL SPILLED (include NSN and ingredients, if able): _____
 4. HAZARD: FLAMMABLE _____ TOXIC _____ CORROSIVE _____
OXIDIZER _____ REACTIVE _____ UNKNOWN _____
OTHER (specify) _____
 5. CAUSE OF SPILL: _____
 6. DESCRIPTION OF SPILL QUANTITY, SIZE AND TYPE OF AREA AFFECTED:
 - a. Quantity Released and Size of Spill Area: _____
 - b. Soil: _____
 - c. Pavement: _____
 - d. Vegetation: _____
 - e. Storm or Sewer Drain: _____
 - f. Name of Body of Water (River, Creek, Pond, Lake, Drainage Ditch): _____
 7. HAS RELEASE BEEN STOPPED? _____
 8. HAS RELEASE BEEN CONTAINED? _____
 9. DID RELEASE CROSS INSTALLATION BOUNDARIES? (IF YES, DESCRIBE LOCATION) _____
 10. TYPE AND EXTENT OF INJURIES, IF ANY: _____
- **Provide a copy of this form to DPW EPMB Spill Program Manager or FAX to 545-4209**
- PHASE II - POST-SPILL RESPONSE AND CLEAN UP ACTIONS:**
11. DESCRIBE CLEAN-UP METHOD AND CONTAINMENT PROCEDURES: _____
 12. NAME OF CONTRACTOR INVOLVED IN CLEAN-UP: _____
 13. ESTIMATED AMOUNT OF SPILL RESIDUE AND CONTAMINATED MATERIAL REMOVED: _____

Last Update: August 14, 2006

FORT BENNING ENVIRONMENTAL REGULATIONS SUMMARY

RED-COCKADED WOODPECKER (RCW): Cavity trees are identified by two white bands. Cluster boundaries extend 200 feet around each cavity tree, and are delineated by diamond-shaped signs. **WITHIN a cluster:**

- Personnel MAY NOT stay for more than 2 hours; NO BIVOUACS.
- The only digging allowed is BY HAND for hasty defense light infantry fighting positions. ALL other digging is prohibited.
- Within one half mile of a cluster, NO MECHANICAL DIGGING may be done within 20 feet of any mature pine tree (8 inch diameter or greater).
- Off-road vehicles MAY NOT come within 50' of any cavity tree.
- Use only .50cal and 7.62mm (or smaller) blank ammo; NO LIVE FIRE.
- CS gas, HC smoke, and noise generators MAY NOT be used.
- Incendiary devices (including trip flares) MAY NOT be used.
- Only hardwood may be cut for camouflage; CUT NO PINE.

GOPHER TORTOISE: Inhabits burrows in high sandy areas. Some burrows are marked by white 1" PVC pipe topped with reflective tape. Digging and vehicular traffic must be kept more than 50 feet away from burrows.

----- CUT HERE -----

ENVIRONMENTAL INCIDENT REPORT FORM

For your protection, company commanders are asked to document any environmental incidents by completing this card and forwarding it to the Chief, Environmental Management Division, Building 6, Room 307, or call 545-2180, within 24 hours of incident. Check off incident and take corrective actions.

- bivouacking in RCW cluster (Relocate bivouac site.)
- off-road driving / parking within 50' of RCW cavity tree (Relocate.)
- digging in RCW cluster [except individual hasty fighting positions] (Refill holes.)
- scarring or felling of trees in RCW cluster (Contact EMD Conservation Branch through Range Control.)
- digging or driving in Sensitive Area (Relocate, DO NOT refill holes.)
- wildfire started (Begin suppression and contact Range Control.)
- POL spill greater than 20 gallons on land or any quantity on water (Immediately contact Range Control and begin spill control - **REACT**.)
- POL spill less than 20 gallons on land (Begin spill control - **REACT**; contact Range Control and submit a Spill Report Form to EMD within 24 hours.)