



DEPARTMENT OF THE ARMY
SOUTH ATLANTIC DIVISION, CORPS OF ENGINEERS
ROOM 9M15, 60 FORSYTH ST., S.W.
ATLANTA, GEORGIA 30303-8801

REPLY TO
ATTENTION OF

CESAD-MT-M (415-10e)

23 March 2001

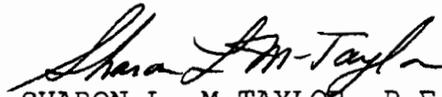
MEMORANDUM FOR COMMANDER, HUNTSVILLE CENTER, CORPS OF ENGINEERS,
P.O. BOX 1600, HUNTSVILLE, AL 35807-4301

SUBJECT: Defense Environmental Restoration Program for Formerly
Used Defense Sites (DERP-FUDS) Revised Risk Assessment Code (RAC)
for Project Number I04FL040501, Pinycastle Jeep Range

1. Reference enclosed memorandum, CESAJ-PD-EE, dated
13 March 2001, subject: Revised Risk Assessment Code (RAC)
for Site/Project No. I04FL040501, Pinycastle Jeep Range.
2. Please review the enclosed revised RAC work sheet for the
subject Property and provide your recommendation for OE project
action to CESAD-MT-HS.
3. Point of contact concerning this matter is Sharon Taylor,
South Atlantic Division, DERP-FUDS Program Manager, CESAD-MT-HS,
(404) 562-5212.

FOR THE DIRECTOR OF MILITARY TECHNICAL SERVICES:

Encls


SHARON L. M-TAYLOR, P.E.
South Atlantic Division
DERP-FUDS Program Manager

CF (w/encl):

COMMANDER, HUNTSVILLE CENTER, CORPS OF ENGINEERS,
ATTN: CEHNC-OE-DC/DOUGLAS/PIKE, P.O. BOX 1600,
HUNTSVILLE, AL, 35807-4301

✓ COMMANDER, JACKSONVILLE DISTRICT, ATTN: CESAJ-DP-S/BRIDGERS

200.1e

I04FL040501_01.08_0005





DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P. O. BOX 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

CESAJ-PD-EE (200-1c)

13 March 2001

MEMORANDUM FOR Commander, South Atlantic Division,
ATTN: Sharon Taylor, CESAD-MT-M

SUBJECT: DERP-FUDS Revised Risk Assessment Code (RAC) for
Site/Project No. I04FL040501, Pinecastle Jeep Range

1. Enclosed is the revised RAC for the Subject project. The RAC for the site has been recalculated based on changing conditions and an in-depth re-analysis completed during the Advanced Army Range Survey (AARS). Standard bombing configurations were superimposed over the known areas of cratering during the process of the AARS. These configurations represent areas where 95% to 99% of the bombs dropped on a target should have landed. Inclusion of these standards configurations in the RAC procedure, rather than just the observed area of cratering, places the area of concern much closer to populated locations. Development from the surrounding communities is encroaching on this site. Current property zoning plans would allow intense development of the site itself. The Revised RAC is being forwarded for your approval and final disposition. The original INPR was approved on 9 May 1994.
2. If there are any questions, please contact Mr. Robert Bridgers, Project Manager at 904-232-3085 or Mr. Ivan Acosta, Technical Manager at 904-232-1693.

FOR THE COMMANDER:

Encl


JAMES C. DUCK
Chief, Planning Division

CF (w/encl.):
CESAJ-DP-S (Bridgers)
CEHNC-OE

sent out 3-14-01

CESAJ-PD-EE (200-1c)

13 March 2001

MEMORANDUM FOR Commander, South Atlantic Division,
ATTN: Sharon Taylor, CESAD-MT-M

SUBJECT: DERP-FUDS Revised Risk Assessment Code (RAC) for
Site/Project No. I04FL040501, Pinecastle Jeep Range

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FOR THE COMMANDER:



Encl

JAMES C. DUCK
Chief, Planning Division

CF (w/encl.):
CESAJ-DP-S (Bridgers)
CEHNC-OE


BRIDGERS/CESAJ-DP-S
Costa/CESAJ-PD-EE/1693/als 3-13-01
McAdams/CESAJ-PD-EE
Smith/CEESAJ-PD-E
Duck/CESAJ-PD

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RISK ASSESSMENT PROCEDURE FOR
 ORDNANCE AND EXPLOSIVE (OE) SITE

Site Name: **Pinecastle Jeep Range** Rater's Name: Ivan Acosta
 Site Location: Orlando, Florida; Orange County Phone No.: (904) 232-1693
 DERP Project# I04FL0405401 Organization: CESAJ-PP-EE

Date Completed:	01 March 2001	RAC Score:	1
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OEW RISK ASSESSMENT:

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (USAESCH-OE) to prioritize the remedial action(s) at Formerly Used Defense Sites (FUDS). The risk assessment should be based upon best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) detachments actions, and field observations, interviews, and measurements. This information is used to assess the risk involved based upon the potential OE hazards identified at the site. The risk assessment is composed of two factors, hazard severity and hazard probability. Personnel involved in visits to potential OE sites should view the USAESCH-OE videotape entitled "A Life Threatening Encounter: OEW."

Part I. Hazard Severity. Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel exposure to various types and quantities of unexploded ordnance items.

TYPE OF ORDNANCE

(Circle all values that apply)

A. Conventional Ordnance and Ammunition	VALUE
Medium/Large Caliber (20mm and larger)	10
Bombs, Explosive	10
Grenades, Hand and Rifle, Explosive	10
Landmines, Explosive	10
Rockets, Guided Missiles, Explosive	10
Detonators, Blasting Caps, Fuzes, Boosters, Bursters	6
Bombs, Practice (w/spotting charges)	6
Grenades, Practice (w/spotting charges)	4
Landmines, Practice (w/spotting charges)	4
Small Arms, Complete Round (.22 cal - .50 cal)	1
Small Arms, Expended	0
Practice ordnance (w/o spotting charges)	0
Conventional Ordnance and Ammunition (Select the largest single value)	<u>10</u>

What evidence do you have regarding conventional EXO? **Bombs and rockets were used in field demonstrations and tactical exercises. Machine gun and small arms ranges were also used on this site.**

B. Pyrotechnics (For munitions not described above)	VALUE
Munitions (Container) containing White Phosphorus (WP) or other Pyrophoric Material (i.e., Spontaneously Flammable)	10
Munitions Containing A Flame or Incendiary Material (i.e., Napalm, Triethylaluminum Metal Incendiaries)	6

Flares, Signals, Simulators, Screening Smokes (other than WP)	4
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Pyrotechnics (Select the largest single value) 4

What evidence do you have regarding pyrotechnics? **Various tactical exercises were carried out utilizing using munitions that would be encountered in combat missions.**

C. Bulk High Explosives (Not an integral part of conventional ordnance; uncontainerized.)	VALUE
Primary or Initiating Explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition Charges	10
Secondary Explosives (PETN, Compositions A, B, C Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military Dynamite	6
Less Sensitive Explosives (Ammonium Nitrate, Explosive D, etc.)	3
High Explosives <u>(Select the largest single value)</u>	<u>0</u>

What evidence do you have regarding bulk explosives? **None**

D. Bulk Propellants (Not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized)	VALUE
Solid or Liquid Propellants	6
Propellants	<u>0</u>

What evidence do you have regarding bulk propellants? **None**

E. Chemical Warfare Materiel and Radiological Weapons	VALUE
Toxic Chemical Agents (Choking, Nerve, Blood, Blister)	25
War Gas Identification sets	20
Radiological	15
Riot Control and Miscellaneous (Vomiting, Tear)	5
Chemical and Radiological <u>(Select the largest single value)</u>	<u>0</u>
What evidence do you have regarding chemical/radiological OEW? None	

TOTAL HAZARD SEVERITY VALUE

(Sum of the Largest Values for A through E--Maximum of 61) 14
Apply this value to Table 1 to determine Hazard Severity Category.

TABLE 1
HAZARD SEVERITY*

<u>Description</u>	<u>Category</u>	<u>Hazard Severity Value</u>
CATASTROPHIC	I	21 and greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE		0

* APPLY HAZARD SEVERITY CATEGORY TO TABLE 3.

** IF HAZARD SEVERITY IS 0, YOU DO NOT NEED TO COMPLETE PART II. PROCEED TO PART III AND USE A RAC SCORE OF 5 TO DETERMINE YOUR APPROPRIATE ACTION.

Part II. Hazard Probability. The probability that a hazard has been or will be created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used DOD site.

AREA, EXTENT, ACCESSIBILITY OF OEW HAZARD
(Circle all values that apply)

A. Location of OEW Hazards	VALUE
On the surface	5
Within Tanks, Pipes, Vessels or Other confined locations	4
Inside walls, ceilings, or other parts of Buildings and Structures	3

Subsurface	2
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Location (Select the single largest value) 2

What evidence do you have regarding location of OEW? **Bomb cratering is evident on 1945 air photos, but is not visible on 1994 photos.**

B. Distance to nearest inhabited locations or structures likely to be at risk from OEW hazard (roads, playgrounds, and buildings).	VALUE
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Less than 1250 feet	5
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1250 feet to 0.5 miles 4

0.5 miles to 1.0 miles 3

1.0 miles to 2.0 miles 2

Over 2 miles 1

Distance (Select the single largest value) 5

What are the nearest inhabited structures? **A residential subdivision has been built immediately north of the former Jeep Range Track. Other inhabited structures are one mile away to the west along Narcoossee Road; Highway 417 is about one mile east of the area of cratering. Analysis of recent street maps show areas of known cratering to be about 1000 feet from residential areas.**

C. Numbers of buildings within a 2-mile radius measured from the OEW hazard area, not the installation boundary.

VALUE

26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
Number of Buildings (Select the single largest value)	<u>5</u>

Narrative. Homes in subdivision and along Narcoossee Road.

D. Types of Buildings (within a 2 mile radius)

VALUE

Educational, Child Care, Residential, Hospitals, Hotels, Commercial, Shopping Centers	5
Industrial, Warehouse, etc.	4
Agricultural, Forestry, etc.	3
Detention, Correctional	2
No Buildings	0
Types of Buildings (Select the largest single value)	<u>5</u>

Describe the types of buildings in the area. Private residences.

E. Accessibility to site refers to access by humans to ordnance and explosive wastes. Use the following guidance:

BARRIER	VALUE
No barrier or security system	5
Barrier is incomplete (e.g. in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier, (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the facility; or An artificial or natural barrier (e.g., a fence combined with a cliff), which completely surrounds the facility; and a means to control entry, at all times, through the gates, or other entrances to the facility (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the facility).	0
Accessibility (<u>Select the single largest value</u>)	<u>5</u>
Describe the site accessibility. Various parts of the site are inside a fenced off cattle grazing area or are swampy-type terrain. Others have no fencing.	

F. Site Dynamics - This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion by beaches or streams, increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.

	VALUE
Expected	5
None Anticipated	0
Site Dynamics (<u>Select largest value</u>)	<u>5</u>
Describe the site dynamics. <u>Analysis of the current land use maps indicates that portions of the site close to the cratered areas are zoned for possible residential or industrial use. Development is encroaching around most of the perimeter.</u> Much of the site has been zoned for either institutional use or to be reserved for conservation and wetland areas.	

TOTAL HAZARD PROBABILITY VALUE

(Sum of Largest Values for A through F--Maximum of 30)

27

Apply this value to Hazard Probability Table 2 to determine Hazard Probability Level.

TABLE 2
HAZARD PROBABILITY

<u>Description</u>	<u>Level</u>	<u>Hazard Probability Value</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

*** Apply Hazard Probability Level to Table 3.**

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table 3. Enter with the results of the hazard probability and hazard severity values.

TABLE 3

Probability Level	FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
Severity Category:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

RAC 1	Expedite INPR, recommending further action by CEHND - Immediately call CEHND-OE-ES--commercial (205) 895-1582.
RAC 2	High priority on completion of INPR - Recommend further action by CEHND.
RAC 3	Complete INPR - Recommend further action by CEHND.
RAC 4	Complete INPR - Recommend further action by CEHND.
RAC 5	Usually indicates that no further action (NOFA) is necessary. Submit NOFA and RAC to CEHND.

Part IV. Narrative. Summarize the documented evidence that supports this Risk assessment. If no documented evidence was available, explain all the assumptions that you made.

Historical documentation indicates that the Army used the site during World War II primarily as a demonstration and possible tactics area. Demonstrations may have included high explosive bombs and rockets. Aerial photography from 1945 indicates possible cratering and some strafing targets in the western part of the range. No significant ground scarring was observed on 1945 air photos in the eastern part of the range. Documentation states that half of the range was cleared of ordnance but does not state which portion.