



**FORMER LOWRY BOMBING AND  
GUNNERY RANGE  
ARAPAHOE COUNTY, COLORADO**



**RESTORATION ADVISORY BOARD MEETING**

**May 17, 2006**

**U.S. Army Corps of Engineers – Omaha District  
Colorado Department of Public Health and Environment**

**DISCUSSION TOPICS**

- **Fieldwork update**
- **Project prioritization**
- **Summary**

**FIELDWORK UPDATE**  
**Current Team Distribution**

- **Mortar Range – 1 geophysics team**
- **Rocket Range – 6 munitions response teams**

**FIELDWORK UPDATE**  
**Bombing Target 2**

- **Range Master Phase II Demonstration**
- **Environmental Security Technology Certification Program (ESTCP) development and demonstration project**
- **Designed for remote excavation of heavily contaminated UXO sites**
- **Designed to excavate and screen the top 6 to 12 inches of soil**

**FIELDWORK UPDATE  
Bombing Target 2**

- **Demonstration planned for 5 grids (3 acres) within Bombing Target 2**
- **Five day demonstration scheduled for Summer 2006**

**FIELDWORK UPDATE  
Bombing Target 3**

- **15 grids completed since last RAB**
- **No live items found to date**
- **Summary of items recovered since last RAB:**

MUNITION	QUANTITY
OE Scrap	3,635 (pounds)
Small Arms	65
Bomb M74 10 Lb. Incendiary	17
Rocket 2.25"	5
Bomb MK23 3 Lb. Practice	28
Bomb M38 100 Lb. Practice	272
Fuze Bomb M152	1
Booster Cup	1
Bomb MK1 50 Lb. Practice	1

## FIELDWORK UPDATE Bombing Target 4

- **2 grids completed since last RAB**
  - ✓ 12 additional grids characterized
- **5 live items found to date**
- **Summary of types of items found:**

- ✓ 3lb and 100lb Practice Bombs
- ✓ Fuze Bomb Tail
- ✓ Projectile 20mm
- ✓ Small Arms
- ✓ Spotting Charge

## FIELDWORK UPDATE Bombing Target 4

- **2 demolition shots performed since last RAB meeting**

- ✓ Projectile 20mm HEI (5)

- **Summary of items recovered since last RAB meeting:**

MUNITION	QUANTITY
OE Scrap	4,824 (pounds)
Small Arms	142
Projectile 20mm	81
Bomb M38 100 Lb. Practice	469
Fuze Bomb Tail	12
Spotting Charge M38	44
Bomb MK23 3 Lb. Practice	14

## FIELDWORK UPDATE Mortar Range

- 1 grid completed since last RAB meeting
- 2 live items found to date
- Summary of types of items found:

- ✓ Incendiary Bombs (10lb)
- ✓ 3lb and 100lb Practice Bombs
- ✓ M52 Mortar Fuze
- ✓ 60mm Mortar (HE and Illumination)
- ✓ Projectile (20mm & 37mm)
- ✓ Small Arms
- ✓ M38 Spotting Charge

## FIELDWORK UPDATE Mortar Range

- 2 demolition shots performed since last RAB meeting

- ✓ 60mm Mortar (1)
- ✓ Ballistite (1)

MUNITION	QUANTITY
OE Scrap	188 (pounds)
Small Arms	57
Projectile 20mm	1
Mortar 60mm HE	1
Fuze Mortar M52	3

- Summary of items recovered since last RAB meeting:

## FIELDWORK UPDATE Mortar Range

- **“Map and Dig” munitions response utilizing digital geophysical mapping**
  - ✓ Low density grids
  - ✓ Hot rock discrimination
  - ✓ 124 grids

## FIELDWORK UPDATE Rocket Range

- **28 grids completed since last RAB meeting**
- **63 live items found to date**
- **Summary of types of items found:**

- ✓ 3lb and 100lb Practice Bombs
- ✓ Electric Squib
- ✓ Misc. Fuzes
- ✓ Igniter
- ✓ 81mm Mortar HE
- ✓ 20mm & 75mm
- ✓ 2.25” Rocket
- ✓ 2.75” and 3.5” Rocket Motor
- ✓ Primer Detonator
- ✓ 30cal & 50cal
- ✓ War Head Rocket
- ✓ 500lb GP Bomb

## FIELDWORK UPDATE Rocket Range

- **16 demolition shots performed since last RAB meeting**
  - ✓ Primer Detonator (1)
  - ✓ ½ Lb. Ballistite (1)
  - ✓ Projectile 57mm HEAT (3)
  - ✓ Bomb M50 4 Lb. Incendiary (6)
  - ✓ MK23 (13)
  - ✓ 3.5" Rocket HEAT (1)

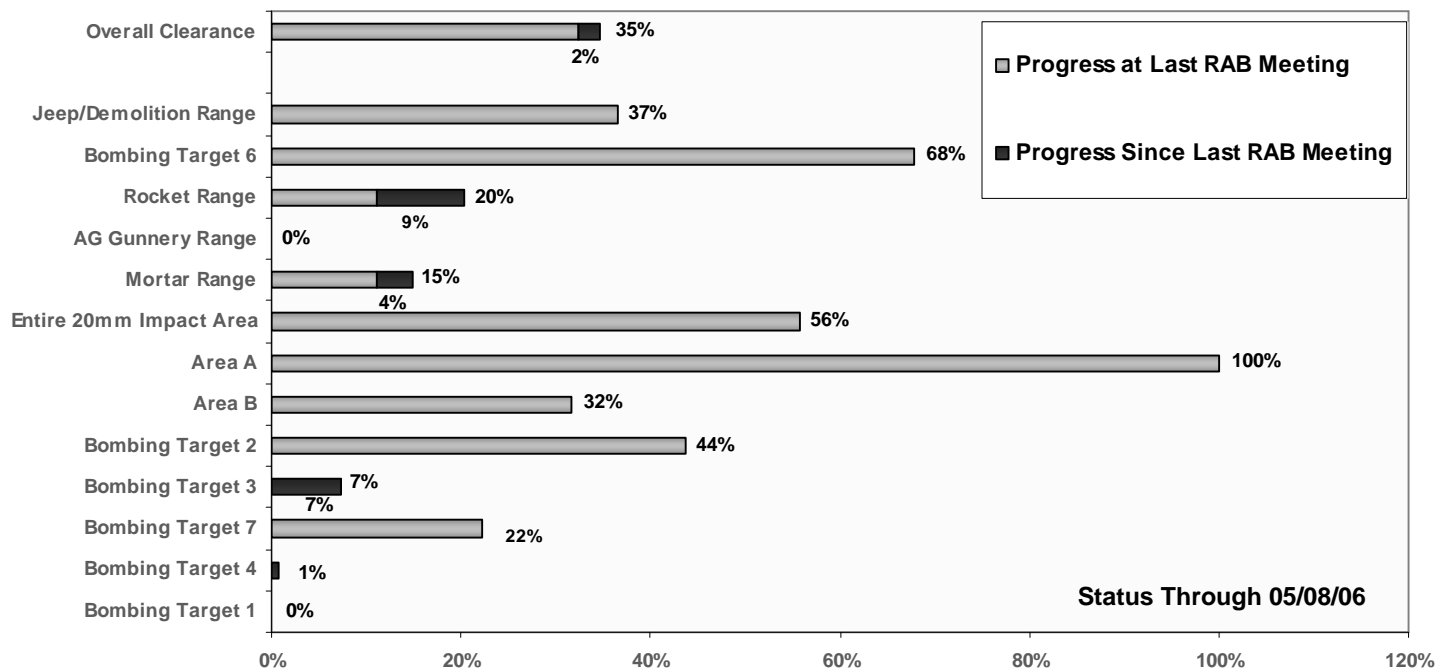
MUNITION	QUANTITY
OE Scrap	5,660 (pounds)
Small Arms	16,823
Projectile 20mm	4,777
Bomb MK23 3 Lb. Practice	175
Rocket 2.25	101
Rocket 2.75	6
Fuze Rocket M149	1
Projectile 57mm HEAT M307	3
Bomb M50 4 Lb. Incendiary	59
Igniter M23 w/Fuze	1
Fuze Rocket	1
Spotting Charge M38	2
Igniter Time Fuze M2	2
Projectile 37mm HE	1

- **Summary of items recovered since last RAB meeting:**

## FIELDWORK UPDATE Jeep/Demolition Range

- **All activities have been temporarily suspended due to the CAIS vial discovery in September 2005**
- **RCWM Risk/Probability Assessment**
  - ✓ Corps and CDPHE agree RCWM risk is extremely low
  - ✓ Instituted processes and procedures to ensure worker safety
  - ✓ Recommend resumption of conventional munitions response activities
  - ✓ Omaha Corps Commander has signed off on assessment
- **Conventional UXO operations are expected to resume within the next month**

## FIELDWORK UPDATE Estimated Percent Complete



## FIELDWORK UPDATE Bombing Target 5

### ▪ Status

- ✓ 573 acres surface cleared
- ✓ 622 acres geophysically mapped
- ✓ 500 map & dig acres completed
  - over 31,000 anomalies dug
- ✓ 50 mag & dig acres completed within central target area
  - 44,263 anomalies dug
- ✓ 237 live items found to date

### ▪ Summary of types of items found:

- ✓ 100lb Practice Bombs
- ✓ 3lb Practice Bombs
- ✓ 100lb Mk1 Demolition Bombs
- ✓ 20mm (1)
- ✓ SCAR (3)
- ✓ 50cal (multiple)

## **FIELDWORK UPDATE Bombing Target 5**

- **47 demolition shots performed**
  - ✓ MK 1 - 100lb Demolition Bombs (47)
  - ✓ 20mm (1)
  - ✓ M38 - 100lb Practice Bomb  
Igniters and Spotting Charges (74)
  - ✓ MK 23 - 3lb Practice Bombs (115)
  
- **56,244 pounds of munitions debris removed from the site**

## **FIELDWORK UPDATE Bombing Target 5**

- **Schedule**
  - ✓ Complete geophysical mapping – May 15, 2006
  - ✓ Complete intrusive investigations – May 31, 2006
  - ✓ Complete verification activity – June 15, 2006

**THE END**

- **Your next RAB meeting is scheduled for July 19, 2006 (6:00-8:30pm) at the Aurora Public Library.**