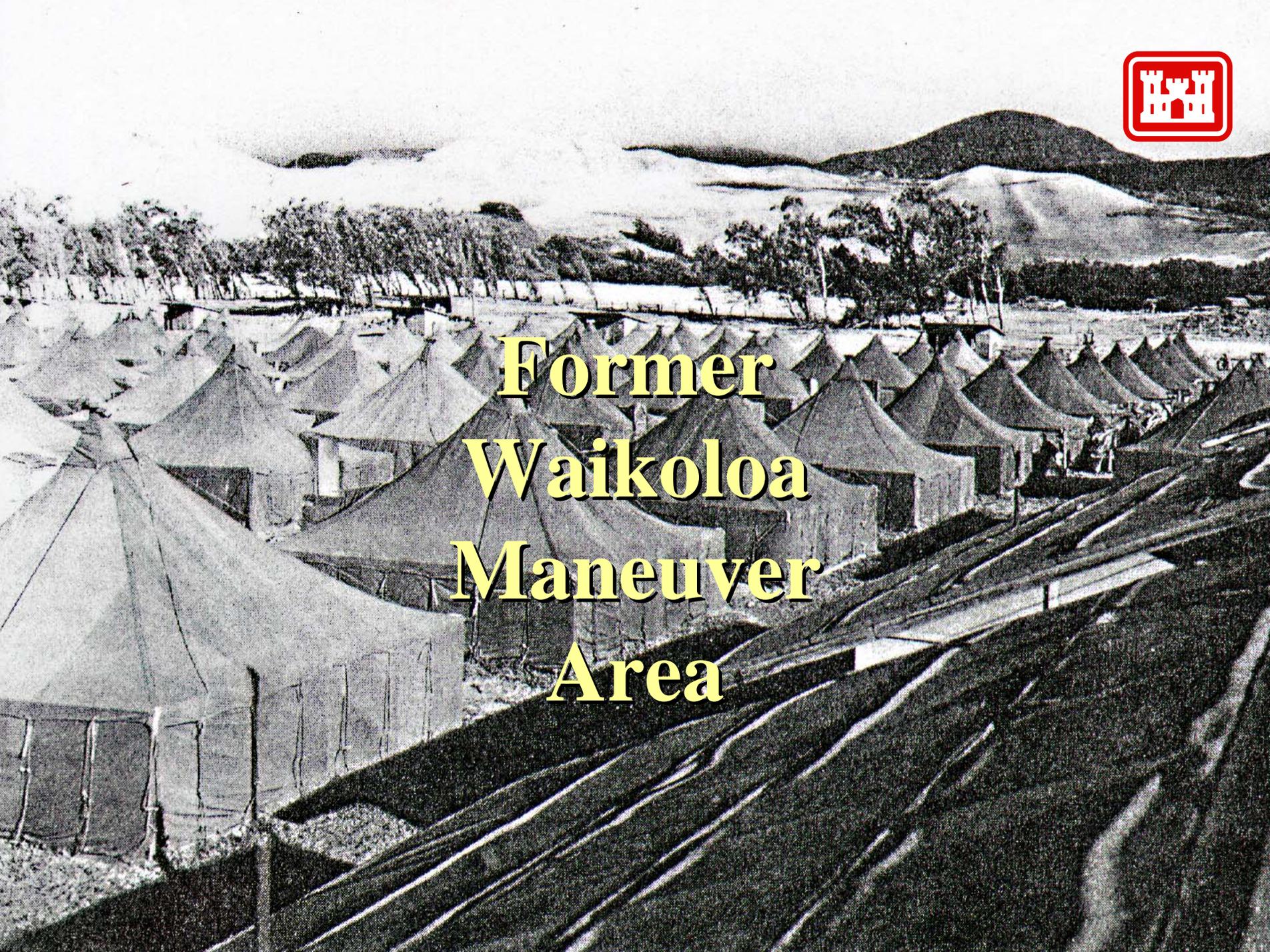




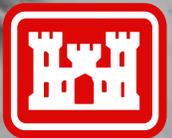
**Former
Waikoloa
Maneuver
Area**



Former Waikoloa Maneuver Area

Background

- Encompasses over 137,000 acres
- Served as a training camp for 50,000 men in the 2nd and 5th Marine Divisions and the V Amphibious Corps
- Site used as artillery firing range and troop maneuvers
- DoD activities terminated in June 1946



Property Summary

- Entire property encompasses over 137,000 acres
- EE/CA Phases I, II, and III identified over 50,000 acres as having moderate-to-high potential risk to human health and safety and the environment
- Area one of most rapidly developing regions within the State of Hawaii
- Land use has shifted from unoccupied/ranching at time of military use to residential/commercial/resort focus at present

MEC Clearance Project

- Data as of 13 January 2006
- Fieldwork started in late 2003
- Over 4,600 acres cleared
- 930+ MEC items identified and disposed
- 26+ tons munitions debris (MD) cleared
- 3+ tons of non-MD scrap disposed

Munitions and Explosives of Concern (MEC)

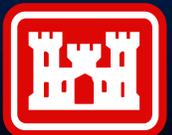
- ½ pound TNT blocks
- 105mm projectiles (HE, HE AT w/M62 BD fuze, and WP)
- 155mm projectiles HE
- 2.36-inch rockets (HE AT, w/o warhead, and warhead HE AT)
- 37mm projectiles HE
- 4.2-inch mortars
- 4.5-inch barrage rockets
- 60mm mortars (HE and illumination)
- 75mm projectiles (AP, HE, HE low order, and shrapnel)
- 81mm mortars (low order, HE, and WP)
- Boosters, fuze boosters, and fuze components
- Grenade fuzes



Munitions and Explosives of Concern (MEC)

continued

- **M1 Landmines (firing devices, HE, and pieces)**
- **M15 burster and M15 WP grenades**
- **M18 smoke grenades**
- **M46 PD fuzes**
- **M48 (fuzes and with booster and safety pin)**
- **M524 boosted fuze**
- **M54 fuzes**
- **M9 rifle grenade HE**
- **MK II Grenades HE**
- **Rifle grenade, illumination**
- **Tracers (75mm APT)**



Munitions and Explosives of Concern (MEC), continued

- Japanese 81mm mortars, type 100
- Japanese mortars, 2-inch
- Japanese mortars, type 89
- Japanese hand grenades, type 97
- Japanese hand grenades, type 99
- Japanese projectile fuzes, type 99



Construction Support

- **Occupational safety awareness video**
- **Explosive ordnance briefing**
- **Should not be confused with ordnance removal**
- **Includes surface clearance prior to construction and subsurface sampling (geophysical)**
- **Construction monitoring (if necessary)**



Institutional Controls

■ Educational programs

- Community awareness meetings
- Display cases
- Informational material
- Safety awareness video
- Internet

■ Engineering controls

- Warning signs
- Security patrols

■ Legal mechanisms

- Restrictive covenants (deed restrictions)
- On-site public administrative record

■ Restoration Advisory Board (RAB)

■ Training program for local residents (UXO Tech I)

Other Project Actions

- **Continued high Hawaii Congressional interest**
 - Information solicited for Sens. Inouye and Akaka
 - Information paper/progress report for Rep. Case
- **FUDS district program and DA funds committed to start development of property-wide eGIS**
- **eGIS effort includes district, Huntsville Center, ERDC-CRREL, and MEC clearance contractor (ATI)**
- **Community MEC training effort scheduled to be completed during May-June 2006 (5-week classroom session on Island of Hawaii and 1-week field exercises at American Technology Inc.-University of Tennessee facility at Oak Ridge, TN)**

Project Coordination with Other MMRP Research Efforts

- Coordination and consultation with the Research Center-University of Hawaii, NAVSEA, and Native Hawaiian organizations in development and testing of GPR MEC detecting systems
- Coordination and consultation with University of Hawaii and USARPAC in ordnance corrosion study
- Coordination with Hawaii and Maui Community College to develop a degree-based ordnance studies program
- Various testing efforts associated with the MEC clearance effort including blast compression studies and effectiveness of new open-front barricades