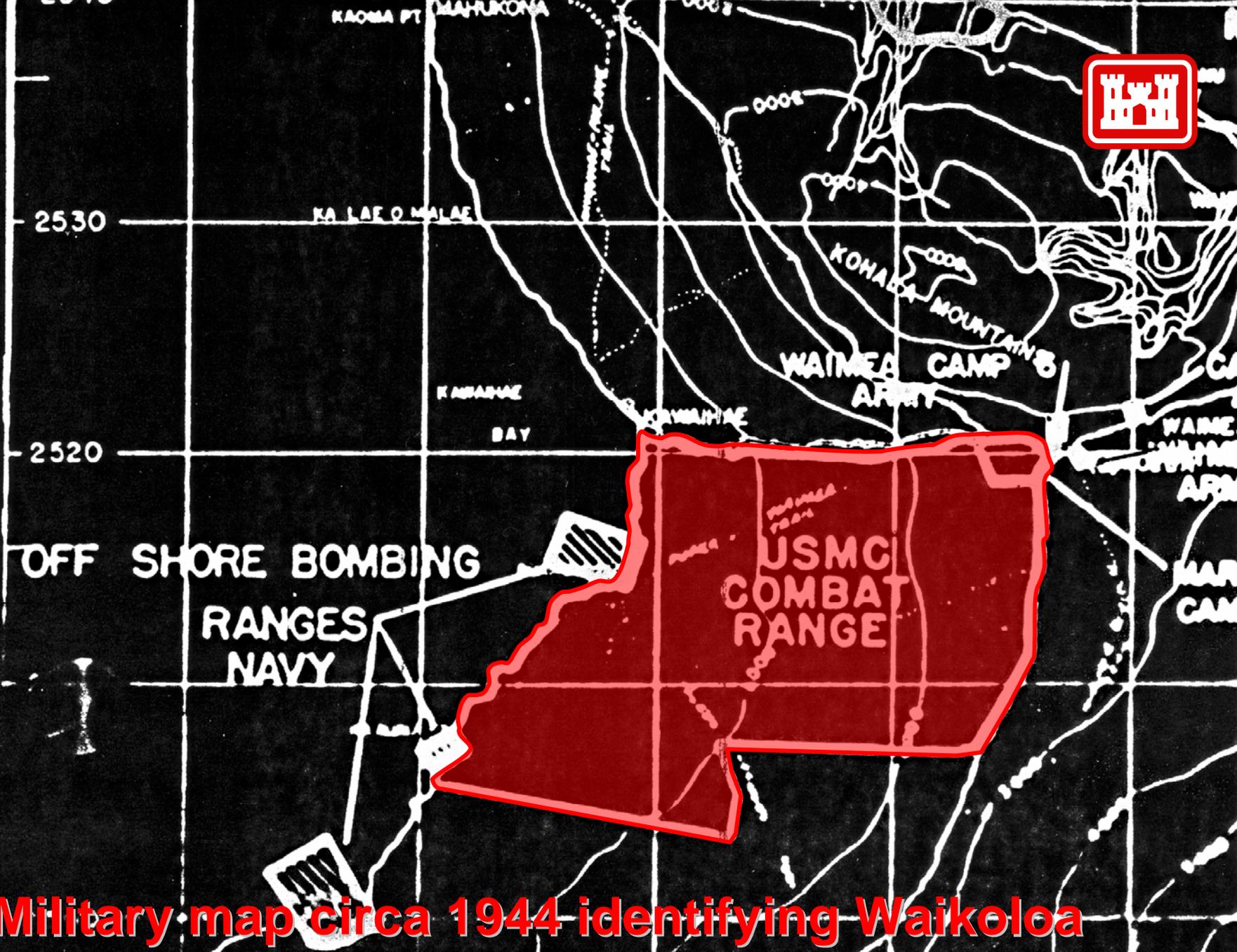


**Former  
Waikoloa  
Maneuver  
Area**



**Military map circa 1944 identifying Waikoloa Maneuver Area as USMC COMBAT RANGE.**

# Former Waikoloa Maneuver Area

## Background

- Encompasses over 120,000 acres
- Served as a training camp for 50,000 men in the Second and Fifth Marine Divisions and the V Amphibious Corps
- Site used as artillery firing range and troop maneuvers
- DoD activities terminated in June 1946



# Former Waikoloa Maneuver Area

## Review of Project Actions

- **Inventory Project Report - 1993**
- **Phase I Engineering Evaluation/Cost Analysis (EE/CA) - 1997-1999**
- **Phase II EE/CA - 1999-2002**
- **Time Critical Removal Action - 2001**
- **Phase III EE/CA - 2003-2005**
- **Ordnance Clearance Indefinite Quantity Contract (IDIQ) - 2002-2007**
- **Task Order Number 0001, Mar 03 (\$10M)**
- **Task Order Number 0002, Mar 04 (\$9.6M)**



# Former Waikoloa Maneuver Area

## Project Cost to Complete (CTC)

### FY04 CTC

- Derived through FUDSMIS
- CTC of c. \$765 million
- Cost/acre from ordnance clearance IDIQ, Task Order Number 0001
- Assumed ordnance clearance of 48,000+ acres
- Negotiated cost of clearance c. \$15,700/acre

### Current Developments

- IDIQ, Task Order Number 0002, ordnance clearance/acre decreased to c. \$12,500
- Decrease due to project efficiencies in geophysical anomaly discrimination, field methods innovations, and use of new technology
- Efforts continuing to lessen the cost/acre

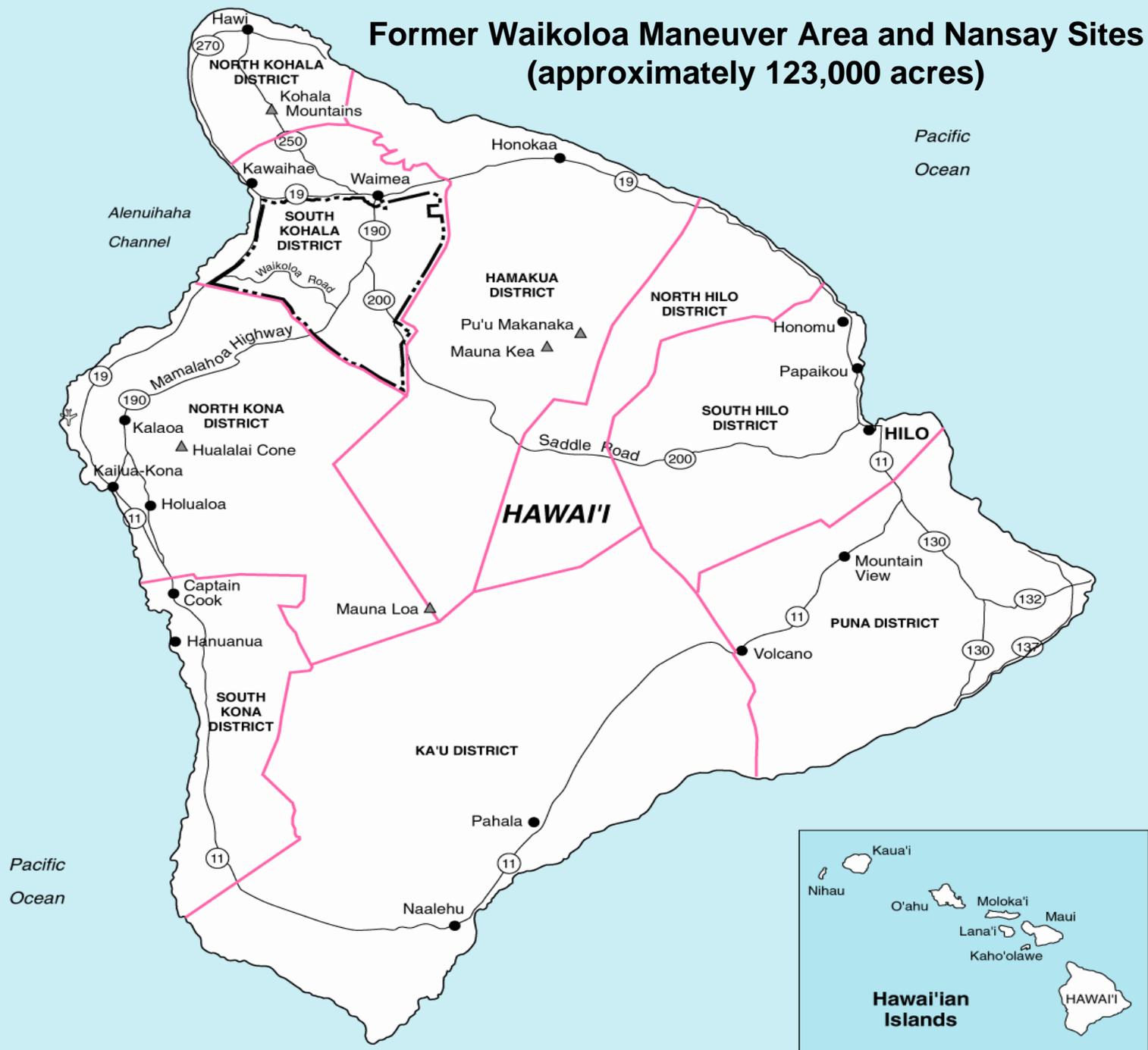


# Former Waikoloa Maneuver Area

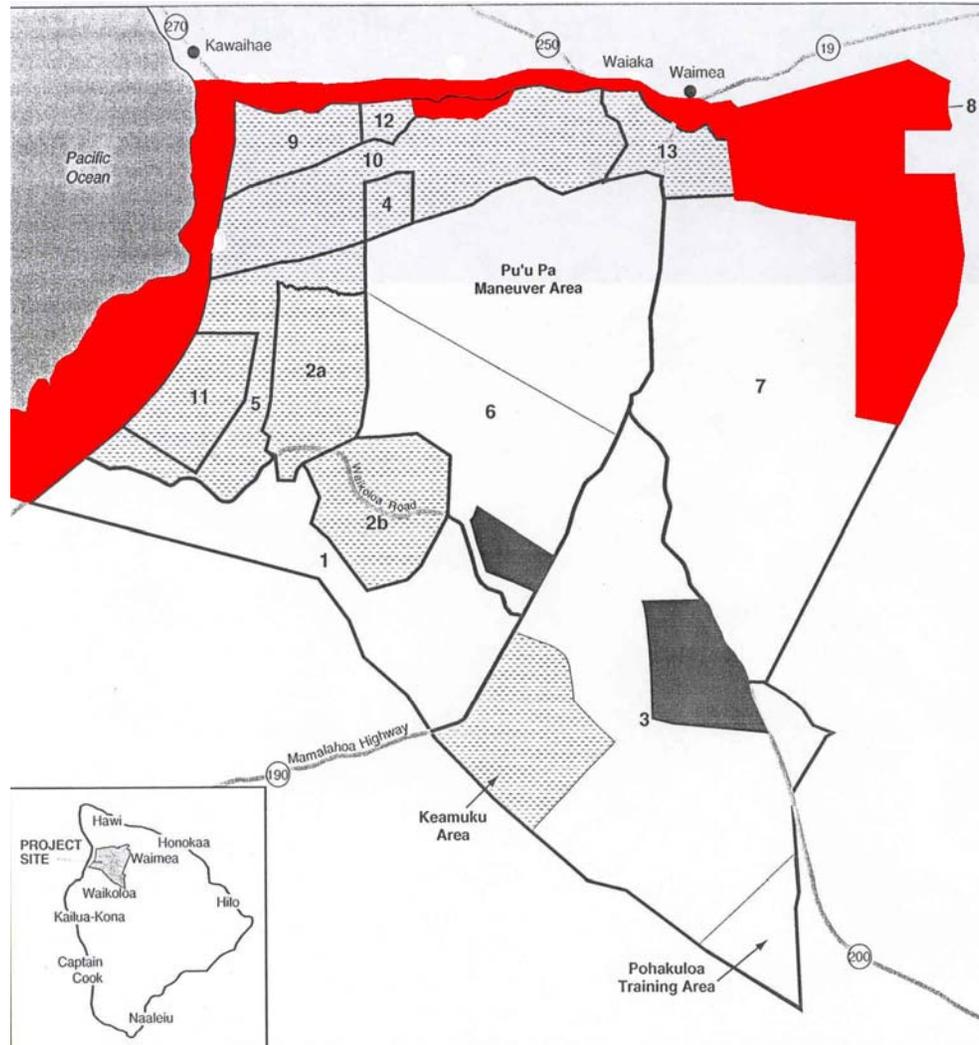
- Phase I - Parker School (RA)
- Phase II - Waikoloa Village (RA)
- Phase III – Rest of the area including oceanside of Queen Kaahumanu Highway and north of Kawaihae Road and Hawaiian Home Lands (EE/CA) - Field work completed Jul 1004
- Ordnance Clearance, Task Order #01- 680 acres, Lalamilo, Waimea & Waikoloa, completed 916 acres
- Ordnance Clearance, Task Order #02-930+ acres, Ouli, Waimea & Waikoloa for 1100 acres



# Former Waikoloa Maneuver Area and Nansay Sites (approximately 123,000 acres)



# WAIKOLOA – EE/CA PHASE III



# **Munitions & Explosives of Concern (MEC)**

## **Types of MEC found**

- **22-caliber to 50-caliber small arms**
- **4.2 –inch mortar shells**
- **60mm and 81mm HE mortar shells**
- **75mm, 105mm, and 155mm HE artillery shells**
- **2.36-inch, 2.75-inch, and 3.5-inch rockets**
- **4.5-inch barrage rockets**
- **37mm anti-tank projectiles**
- **60mm illumination rounds**



# **Munitions & Explosives of Concern (MEC)**

## **Types of MEC found (cont.)**

- **Practice land mines**
- **Rifle and hand grenades**
- **Mark (MK) 2 hand grenades**
- **Japanese hand grenades**
- **Japanese 25mm and 47mm anti-tank rounds**



# Ordnance Clearance, Waikoloa Village Area

- Task Order Number 0001
  - Negotiated 340 acres for clearance
  - Project efficiencies allowed for additional 133.5 acres for clearance
- No public evacuations necessary
  - Minimized adverse impact to community
  - Cost savings
- Task Order Number 0002, 362 acres



# Ordnance Clearance Waimea-Lalamilo-O'uli Areas

- Task Order Number 0001
  - Negotiated clearance for 340 acres
  - Additional 60 acres clearance from project efficiencies
- No public evacuations thus far
  - Highway closures highly likely
  - Cost savings
- Task Order Number 0002, 673 acres



# 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)



# Innovations/Developments

- Use and application of recently developed geophysical detecting instruments
- Development of finer subsurface anomalies discrimination methods
- Refinement and adaptation of program management procedures to unique environment
- Active participation of local communities
- Results have been:
  - Increased acreage for clearance
  - Avoidance of public evacuations/road closures
  - More comprehensive support for local development
- Use of approved open front blast barricades



# Institutional Controls

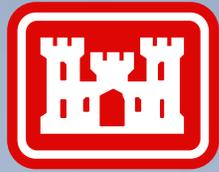
- **Educational programs**
  - Community awareness meetings
  - Display cases
  - Informational material
  - Safety awareness video
- **Internet**
- **Engineering controls**
  - Warning signs
  - Security patrols
- **Legal mechanisms**
  - Restrictive covenants (deed restrictions)
  - On-site public administrative record
- **Restoration Advisory Board (RAB)**



# Recent Munitions Discoveries

- Hand grenade near Parker Ranch Museum by child (May 04)
- 60mm, 75mm HE rounds at construction site, Waimea (May 04)
- Hand grenade on stream bank in center of Waimea (Apr 04)
- 2.36 in. rocket, 81mm HE rounds near homes in Lalamilo (Apr 04)
- Hand grenades and 60-75mm HE rounds near power plant, Waimea (Apr 04)
- 105mm HE round within “pocket” park, Waikoloa Village (Mar 04)
- 105mm and 155mm HE rounds near homes, north portion of Waikoloa Village (Mar-Apr 04)





# Community Outreach

- Parker Ranch
- Waimea Community Association
- Department of Hawai'ian Homelands
- Police Departments
- Fire Departments
- RAB Briefings
- Navy Seabees
- Local Newspapers
- Demolition Notifications







Nearest residence 400 meters away

Live 155mm























**Any questions ??**

