



Report to

STAKEHOLDERS

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Program *carefully* cleans up the past

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Report to Stakeholders is a publication of the Air Force Civil Engineer Center, Installation Support Team at Edwards Air Force Base (AFCEC/CZOW). Its purpose is to inform and educate the public, base workers and residents about continuing environmental efforts on base. It currently has a circulation of 4,500, including about 1,300 subscribers.

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Any comments or questions about the contents of the Report to Stakeholders may be directed to: Gary Hatch, 412 TW/PA, 305 E. Popson Ave., Edwards AFB, CA 93524, (661) 277-4127.

E-mail: 412tw.pae@us.af.mil



412th Test Wing Commander
Brig. Gen. Carl Schaefer
Edwards Remedial Project Manager
Paul Schiff

STAKEHOLDERS STAFF

EDITOR
Patti Kumazawa

CONTRIBUTOR
Leilani Richardson

WHAT'S ON THE COVER?

CAREFUL EXCAVATION—
An unexploded ordnance technician carefully hand-digs around a 100-pound bomb that was verified to be live. Because of its vertical position in the subsurface, the onsite crew decided to detonate the bomb in place.

Munitions investigation avoids historic battleship target

As part of a cleanup investigation, Edwards Air Force Base, Calif., restoration experts have found and destroyed live munitions in the subsurface of a bombing site used by the Army Air Corps in the 1930s and 1940s.

Results from the investigation will help the Air Force determine what types of cleanup alternatives will best address the munitions site known as AL504, located near Leuhman Ridge.

“We uncovered and detonated ten 100-pound bombs as part of our investigation into AL504,” said Paul Schiff, who manages the Military Munitions Response Program at Edwards AFB. “We predict the subsurface contains more munitions because our investigation only covered 13 percent of the site.”

The 13 percent excluded a target shaped like a battleship at AL504 because of its historical significance. The battleship target was originally 600 feet long by 100 feet wide and outlined with a 3- to 5-foot wide chalk line. It represented a full-size battleship from the 1930s.

“We believe the battleship target is a part of East Camp, which was established in the 1930s as a bombing and gunnery range,” said base archeologist Roscoe Loetzerich. “The Air Force is currently pursuing the evaluation of East Camp and the battleship target as a historic district for potential listing on the National Register of Historic Places.”

According to digital geophysical mapping – which identifies metallic objects beneath the subsurface as anomalies – the most significant concentration of anomalies at AL504 is in close proximity to the battleship target outline, with concentrations decreasing moving away from this area.

“We identified more than 6,000 anomalies in the subsurface of AL504 that required intrusive investigation,” Schiff said. “By carefully excavating each item, we were able to determine if the item was live or not. Most of the 6,000 anomalies were small fragments or shrapnel.

“We also excavated 300-pound practice bombs, none of which were live,” he said. “In



FIRE IN THE HOLE!—Unexploded ordnance technicians detonate a live munition found underground near an on-base bombing target used in the 1930s.



SHIP IN THE DESERT—A still image taken from a 1936 news reel shows the battleship-shaped outline of a 1930s era target Edwards experts believe was located next to Site AL504.

(Source: “Bullseye Bombing,” Pathe Gazette [British Pathe], 1936)

addition, we found subsurface pieces thicker than the 300-pound carcasses, which – when you consider thicker pieces were also collected during the site’s surface clearance in 2012 and the presence of large surface craters near the target – confirms our hypothesis that bigger bombs were dropped at AL504.”

Armed with the knowledge that AL504 was used as a live bombing target, safety precautions were a top priority, addressing both human health and the environment. In addition to unexploded ordnance technicians following an Explosive Safety Plan approved by the Department of Defense’s Explosive Safety Board, biologists and archeological monitors were onsite during the investigation.

“They were able to perform these required investigations while protecting the base’s natural resources, especially the desert tortoise, which is protected under the Endangered Species Act,” said Wesley King, a natural resource planner at Edwards AFB. “This meant extensive pre-surveying of project areas, escorting and monitoring project equipment into the field, tracking desert tortoise burrows and activity, and establishing activity-free zones around these areas where necessary.”

For senior unexploded ordnance supervisor Dave Hannan following safety precautions was nothing new. “We used guided excavation techniques to determine what was live and followed established procedures for detonating those bombs,” he said. “Altogether, we found about 11,500 items – including the 10 live bombs – and removed 52,000 pounds of munitions debris from the site. Based on my experience with other munitions sites, I’d say what we found is standard for a well-used target area.”

Although the process for detonating the live bombs was common procedure, the detonations themselves required a lot of coordination and planning. “Demolition operations were

conducted every day that a suspected live item was found,” said technical project lead Marie Swiech-Laflamme. “Nothing was left unsecured overnight. This meant working cooperatively with several on-base organizations, including Airspace Management, Security Forces, Explosive Ordnance Disposal, the Air Force Research Laboratory Detachment 7, Precision Impact Range Area, Civil Engineering, Federal Aviation Administration, and Space Positioning Optical Radar and Tracking.”

Three other MMRP areas underwent the same investigative process as AL504 – two off-base sites on the northern and southern boundaries of the base, AL505-2 and AL505-4, and former South Base gun range AL501A. However, no munitions or explosives of concern were found. The results of the cleanup investigation will be published in a final Remedial Investigation/Feasibility Study Report in July 2017. Decision-makers will use this report to determine appropriate cleanup actions for these sites.

Two other MMRP areas located off-base near the base boundary – AL505-3 and AL505-5 – underwent Site Inspection surveys, which will be addressed in a final Supplemental Comprehensive Site Evaluation Phase II Report, due out in February 2017.

News reel footage of what Loetzerich thinks may be practice bombing at AL504 in 1936 can be viewed online at https://youtu.be/clMJVubRX_g. To learn more about the National Register evaluation of East Camp and the battleship target as a historic district, contact Roscoe Loetzerich at (661) 277-1413. More information about the MMRP can be found in the October 2010 and July 2012 issues of Report to Stakeholders.

Public representatives updated on base’s cleanup program

The Edwards Air Force Base, Calif., Restoration Advisory Board met in Rosamond May 19 to learn about the progress of the base’s cleanup program over the past 6 months. The deferral of a formal dispute involving the South Air Force Research Laboratory, Detachment 7 Explanation of Significant Differences document is expected to last until early 2017, allowing the state of California time to establish a new toxicity value for perchloroethene. In addition, the Air Force and regulatory agencies are still collaborating to resolve 8 out of 11 disputed items on the AFRL Arroyos Record of Decision formal dispute. The remaining three disputed items will be elevated to a Dispute Resolution Committee.

Board members also congratulated new remedial project manager, Paul Schiff, who has stepped up to manage the base’s overall cleanup program. Sophia Merk, a visiting RAB member from the Naval Air Weapons Station China Lake, Calif., commented that the China Lake RAB is closely watching the outcome of the formal disputes at Edwards AFB. Members were also informed of two public representative vacancies for on-base communities North Base and South Base.

The next RAB meeting will be held in North Edwards on Nov. 17.

Where to find more INFORMATION



Published data and documents relating to Environmental Management are available for public review at three information repositories. They are updated when new documents are released. Here is a list of our current information repositories:

Edwards Air Force Base Library

5 W. Yeager Blvd.
Edwards AFB, California
(661) 275-2665
www.edwardsfss.com/wordpress/library

Kern County Public Library

Wanda Kirk Branch
3611 Rosamond Blvd.
Rosamond, California
(661) 256-3236
www.kerncountylibrary.org/rosamond-branch/

Los Angeles County Public Library

601 W. Lancaster Blvd.
Lancaster, California
(661) 948-5029
www.colapublib.org/libs/lancaster/

For questions about documents in the repositories, you may contact Gary Hatch, Public Affairs Media Operations and Plans, at (661) 277-4127 or by e-mail at 412tw.pae@us.af.mil.

For general information about Edwards or other documents of public interest, you may visit our Web page at: www.edwards.af.mil/library/environment and like our Facebook page—Edwards Air Force Base Environmental Management.

Restoration Advisory Board Information

The Restoration Advisory Board (RAB) is made up of appointed representatives from communities on and around Edwards Air Force Base, regulators from federal and state agencies and base officials. The board's purpose is to provide a forum for two-way communication between the public and those responsible for environmental cleanup at the base.

The board meets semiannually, rotating meeting locations among communities surrounding the base. The public is welcome to attend. Those who have questions or concerns about cleanup activities at Edwards

may contact any RAB member or Gary Hatch, Public Affairs Media Operations and Plans, at (661) 277-4127.

The RAB also has its own Facebook site: www.facebook.com/RAB.Edwards. "Like" us on Facebook today!

NEXT BOARD MEETING

Nov. 17, 2016
5:30 p.m.
North Edwards, Calif.

RAB Members

OFF-BASE COMMUNITIES

Boron
Philip Thompson (760) 559-5344 Cell
toolamb@hotmail.com
ALTERNATE: Ericka Buckreis (760) 762-6423
buckreis111@gmail.com

California City
Ed Fuller (661) 209-0160 Cell
fullerdreams@gmail.com

Lancaster
Jocelyn Swain (661) 723-6249 Work
jswain@cityoflancasterca.org
ALTERNATE: Marvin Crist (661) 723-6019 Work
mcrist@cityoflancasterca.org

Mojave
Victor Yaw (661) 824-2886 Home
vicyaw@yahoo.com (661) 275-4296 Work

North Edwards
Bruce Davies (760) 769-4104 Home
bruce.h.davies@boeing.com (661) 275-7671 Work

Rosamond
William Gaddis (661) 965-7771 Home
william.gaddis@us.af.mil (661) 277-3387 Work

Rosamond (continued)
ALTERNATE: Leslie Uhazy (661) 256-8209 Home
luhazy@avc.edu (661) 722-6417 Work

ON-BASE COMMUNITIES
Housing
Amber Sweeney (937) 542-1544 Cell
amberjoy77@gmail.com

Main Base Test Wing
Otto Zahn (661) 277-3174 Work
otto.zahn@jsf.com

NASA Armstrong
Kerri Stewart (661) 276-7453 Work
kerri.l.stewart@nasa.gov

North Base
Vacant—If you work at North Base, you may apply to be a public representative.

South Base
Vacant—If you work at South Base, you may apply to be a public representative.

Air Force Research Laboratory
Joe Mabry (661) 275-5857 Work
joseph.mabry@us.af.mil

Remedial Project Managers

California Department of Toxic Substances Control
Kevin Depies (916) 255-6547 Work
kevin.depies@dtsc.ca.gov

Bruce Lewis (916) 255-6648 Work
bruce.lewis@dtsc.ca.gov

Edwards AFB
Paul Schiff (661) 277-1469 Work
paul.schiff@us.af.mil

Lahontan Regional Water Quality Control Board
Christina Guerra (760) 241-7333 Work
christina.guerra@waterboards.ca.gov

Alonzo Poach (760) 241-7365 Work
alonzo.poach@waterboards.ca.gov

U.S. Environmental Protection Agency
Kevin Mayer (415) 972-3176 Work
mayer.kevin@epa.gov



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